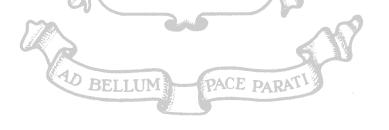
OPTIMAL STRUCTURE FOR THE INFANTRY UNITS OF THE NATIONAL ARMY OF THE REPUBLIC OF MOLDOVA

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

IANAC DELI, MAJ, NATIONAL ARMY OF THE REPUBLIC OF MOLDOVA Licentiate Degree, Moldova State University, Chisinau, 2008 Master's, Moldova State University of Physical Education and Sport, Chisinau, 2017



Fort Leavenworth, Kansas 2019

Approved for public release; distribution is unlimited. United States Fair Use determination or copyright permission has been obtained for the use of pictures, maps, graphics, and any other works incorporated into the manuscript. This author may be protected by more restrictions in their home countries, in which case further publication or sale of copyrighted images is not permissible.

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this 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 Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

| 1. REPORT DATE (DD-MM-YYYY) | 2. REPORT TYPE | 3. DATES COVERED (From - To) | | |
|---|--|------------------------------|--|--|
| 14-06-2019 | -06-2019 Master's Thesis | | | |
| 4. TITLE AND SUBTITLE | 5a. CONTRACT NUMBER | | | |
| | | | | |
| Optimal Structure for the Inf | antry Units of the National Army of | 5b. GRANT NUMBER | | |
| the Republic of Moldova | | | | |
| 1 | | 5c. PROGRAM ELEMENT NUMBER | | |
| C AUTHOR(S) | | Ed DDO IECT NUMBER | | |
| 6. AUTHOR(S) | | 5d. PROJECT NUMBER | | |
| MAJ Ianac Deli | | 5e. TASK NUMBER | | |
| 11.11.10 1.01.10 2.01.1 | | | | |
| | | 5f. WORK UNIT NUMBER | | |
| 7. PERFORMING ORGANIZATION NA | AME(S) AND ADDRESS(ES) | 8. PERFORMING ORG REPORT | | |
| U.S. Army Command and Gene | NUMBER | | | |
| ATTN: ATZL-SWD-GD | | | | |
| Fort Leavenworth, KS 66027-23 | 301 | | | |
| 9. SPONSORING / MONITORING AGE | 10. SPONSOR/MONITOR'S ACRONYM(S) | | | |
| | 11. SPONSOR/MONITOR'S REPORT NUMBER(S) | | | |
| 12. DISTRIBUTION / AVAILABILITY STATEMENT | | | | |

Approved for Public Release; Distribution is Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

In 2018, the Republic of Moldova's new National Defense Strategy was signed by the President and ratified by the government. The Strategy stipulates new threats and a new set of objectives that the National Army must accomplish. In contrast to the strategic requirements, the current structure of units in the National Army is predominantly based on old Soviet structures and does not possess the capabilities needed to accomplish its tasks. Finally, considering the continuously evolving operational environment and threats in the region, the existing structure of the Army infantry units (battalion size elements) do not provide the necessary capabilities to accomplish the Army's constitutional mission of protecting the state's sovereignty and its territorial borders. Nor does the structure exist to continue peacekeeping operations in the Transnistrian Region, to support civil authorities in case of emergency or natural disasters, or even to participate in multinational peacekeeping operations being fully interoperable with its strategic partners. This research provides an overview of relevant strategic documents of the Republic of Moldova, a combined arms concept, and an example of the Slovenian Armed Forces. The goal of this research is to provide the optimal structure of an infantry unit (battalion size element) in current conditions considering the existing limited financial capabilities of the Moldova's Defence Institution. The results should lay the foundation for the transformation that has already started in the National Army. The research provides solutions for augmenting the existing light and motorized infantry capabilities with some enablers that would facilitate the interoperability with strategic partners. With an organization based on the presented recommendation, the National Army would be more efficient in accomplishing its primary missions and tasks as directed by the existing strategic documents.

15. SUBJECT TERMS

National Army of the Republic of Moldova, Battalion size element, Transfromation, Combined Arms Concept, Doctrine

| 16. SECURITY CLASSIFICATION OF: | | 17. LIMITATION 18. NUMBER OF ABSTRACT OF PAGES | | 19a. NAME OF RESPONSIBLE PERSON | |
|---------------------------------|-------------|--|-----|---------------------------------|---------------------------------------|
| a. REPORT | b. ABSTRACT | c. THIS PAGE | | | 19b. PHONE NUMBER (include area code) |
| (U) | (U) | (U) | (U) | 129 | |

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std. Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

| Name of Can | didate: Ianac Deli | |
|----------------|--|--|
| Thesis Title: | Optimal Structure for the Infanta Republic of Moldova | ry Units of the National Army of the |
| Approved by | : | |
| Gregory J. Co | ook, M.A. | _, Thesis Committee Chair |
| Kenneth E. L | ong, D.M. | _, Member |
| Gregory P. B | edrosian, MLS | _, Member |
| Accepted this | s 14th day of June 2019 by: | |
| Robert F. Bar | ımann, Ph.D. | _, Director, Graduate Degree Programs |
| necessarily re | present the views of the U.S. Arm | are those of the student author and do not by Command and General Staff College of this study should include the foregoing |

ABSTRACT

OPTIMAL STRUCTURE FOR THE INFANTRY UNITS OF THE NATIONAL ARMY OF THE REPUBLIC OF MOLDOVA, by MAJ Ianac Deli, 129 pages.

In 2018, the Republic of Moldova's new National Defense Strategy was signed by the President and ratified by the government. The Strategy stipulates new threats and a new set of objectives that the National Army must accomplish. In contrast to the strategic requirements, the current structure of units in the National Army is predominantly based on old Soviet structures and does not possess the capabilities needed to accomplish its tasks. Finally, considering the continuously evolving operational environment and threats in the region, the existing structure of the Army infantry units (battalion size elements) do not provide the necessary capabilities to accomplish the Army's constitutional mission of protecting the state's sovereignty and its territorial borders. Nor does the structure exist to continue peacekeeping operations in the Transnistrian Region, to support civil authorities in case of emergency or natural disasters, or even to participate in multinational peacekeeping operations being fully interoperable with its strategic partners.

This research provides an overview of relevant strategic documents of the Republic of Moldova, a combined arms concept, and an example of the Slovenian Armed Forces. The goal of this research is to provide the optimal structure of an infantry unit (battalion size element) in current conditions considering the existing limited financial capabilities of the Moldova's Defence Institution.

The results should lay the foundation for the transformation that has already started in the National Army. The research provides solutions for augmenting the existing light and motorized infantry capabilities with some enablers that would facilitate the interoperability with strategic partners. With an organization based on the presented recommendation, the National Army would be more efficient in accomplishing its primary missions and tasks as directed by the existing strategic documents.

ACKNOWLEDGMENTS

In this particular section I would like to mention the contribution of many different people that made it possible to accomplish this interesting project and not only found time for that but also guided me masterfully to obtain the desired end state. At first, my deepest respect and appreciation goes to my MMAS committee. My committee chair, Mr. Gregory Cook, who wisely directed my research, always had his door opened for my ideas, constantly provided professional guidance, expert insight, and a lot of proofreading. My committee members Dr. Kenneth Long and Mr. Gregory Bedrosian for finding time between multiple school activities and provide me their expertise, review my work, and give me an excellent feedback. In particular Dr. Kenneth Long who provided essential counseling and inspiring viewpoints guiding me through his methodology and making sure I did not miss any essential points vital for my research.

And of course, I cannot conclude this section without mentioning the support of my family, my wife Marcela, my daughter Carolina, and my son Marcel. Therefore, I want to recognize their tremendous contribution to the success of this project by being patient and supportive thru out this entire journey. Thank you all very much for being there for me and allowing me to finalize my thesis. I love you all.

TABLE OF CONTENTS

| Page |
|--|
| MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE iii |
| ABSTRACTiv |
| ACKNOWLEDGMENTSv |
| TABLE OF CONTENTSvi |
| ACRONYMSviii |
| ILLUSTRATIONSx |
| TABLESxi |
| CHAPTER 1 INTRODUCTION |
| Background and Overview |
| CHAPTER 3 RESEARCH METHODOLOGY40 |
| Purpose of the Research 40 General Information 41 Research Methodology 43 Chapter Summary 47 CHAPTER 4 ANALYSIS 48 |
| Introduction |

| National Security Strategy and National Defense Strategy requirements? | 50 |
|--|-----|
| What was the framework prescribed by the Slovenian strategic documents for | |
| determining the size of the basic combat unit? | |
| What measures should be implemented to solve identified shortfalls and how | |
| be integrated into the modernization programs? | • |
| DOTMLPF Analysis and Solution Identification | |
| Doctrine | |
| Organization | 66 |
| Training | |
| Leadership and Education | |
| Army Force Development Process | 77 |
| Evaluation of the R1: Initial Personal Recommendation | 81 |
| Comparison of Light Infantry Versus Motorized Infantry Organization | 89 |
| Mobility | |
| Firepower | |
| Protection | 90 |
| R2: Informed Position | 91 |
| Chapter Summary | 95 |
| CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS | 97 |
| Decision Makers Analysis and Recommended Solution | 97 |
| Recommendations for the Chief of the General Staff of the National Army of | |
| of Moldova | 104 |
| Recommendations for Further Study | 107 |
| Personal Learning Reflections | |
| BIBLIOGRAPHY | 112 |

ACRONYMS

ADRP Army Doctrine Reference Publication

APC Armored Personnel Carrier

ATP Army Techniques Publication

BN Battalion

BCT Brigade Combat Team

CAB Combined Arms Battalion

CBA Capability Based Assessment

CBRN Chemical, Biological, Radiological, Nuclear

CGSC Command and General Staff College

CGSOC Command and General Staff Officer Course

DOTMLPF-P Doctrine, Organization, Training, Materiel, Leadership, Personnel,

Facilities, Policy

DoD Department of Defense

EU European Union

FAA Functional Area Analysis

FM Field Manual

FNA Functional Needs Analysis

FSA Functional Solutions Analysis

HQ Headquarters

HMMWV High Mobility Multipurpose Wheeled Vehicles

KFOR Kosovo Force

MDA Republic of Moldova

MDMP Military Decision Making Process

NATO North Atlantic Treaty Organization

NCO Noncommissioned Officer

NDS National Defense Strategy

NSC National Security Concept

NSS National Security Strategy

OCC Operational Capabilities Concept

PfP Partnership for Peace

PK Peacekeeping

PKO Peacekeeping Operations

PME Professional Military Education

R1 Initial Personal Recommendation

R2 Informed Position

R3 Recommended Solution

SAF Slovenian Armed Forces

STANAG Standardization Agreements

TOE Tables of Equipment

TRADOC Training and Doctrine Command

UN United Nations

URS Unit Reference Sheet

U.S. United States

ILLUSTRATIONS

| | Page |
|---|------|
| Figure 1. R1: Initial Personal Recommendation | 17 |
| Figure 2. Combined Arms Battalion | 31 |
| Figure 3. Author's Approach to the Research | 43 |
| Figure 4. R2: Revised Recommendation | 94 |

TABLES

| | Pag | e |
|----------|--|---|
| Table 1. | Budget Allocations for the Ministry of Defense, 2010-2017 | 3 |
| Table 2. | Common Features for the Republic of Moldova and the Republic of Slovenia | 6 |
| Table 3. | Action Plan for the R3 Implementation | 2 |

CHAPTER 1

INTRODUCTION

Background and Overview

The Republic of Moldova (Moldova) is an independent and sovereign state located in Eastern Europe and is land locked between Romania on the west and Ukraine on the east. Moldova obtained its independence from the former Soviet Union on August 27, 1991 and following the proclamation of the country's independence on September 3, 1991, the National Army of the Republic of Moldova was formed. The next year, Moldova had to fight for its sovereignty and territorial integrity against the separatist movements within its eastern regions. On July 1, 1992, the cease fire agreement regarding the Transnistria Region was signed after months of intensive fighting. At that time, the self-proclaimed Transnistria Moldovan Republic was formed and its existence is still a point of concern for Moldova's current government. The nature of the conflict indicated that Moldova needed an Army to fight for its sovereignty, for its people, and for its territorial integrity. The operational environment and the character of the fight proved that the existence of a small, mobile, and combined arms capability-based army would be sufficient to defend the country. In addition, the army would be capable of repelling any foreign aggression and protect Moldova's interests in the region. Article 57 of the constitution articulates the core missions of the National Army of the Republic of Moldova and states the Armed Forces of the country are responsible for the national

¹ Timpul.md, "Top 30 events that marked the foreign policy of the Republic of Moldova," 25 May 2014, accessed 28 September 2018, https://www.timpul.md/articol/top-30-evenimente-care-au-marcat-politica-externa-a-republicii-moldova-59434.html.

defense, border protection, and law enforcement activities, when the situation requires, and within the legal framework provided by the respective entities.² Because Moldova had been heavily dependent on the Former Soviet Union for support, it had to learn to become self-reliant and provide the quality of life its citizens were expecting. Through this process another mission for the National Army was identified, as stated in the National Defense Strategy of 2016, Point 2.2 General and Specified Objective, the National Army should contribute to international peace, security, and stability.³

Since its formation in 1991, the National Army of the Republic of Moldova has accomplished several reformation processes, all oriented towards maintaining a high level of military readiness through continuous realistic training. None of the transformation processes achieved its desired end state, mostly because the country went through continuous economic down fall, and the Ministry of Defense was allocated a low budget. Considering the work of LTC R. Burduja, the budget of the National Army is 0.33 percent of the Gross Domestic Product (GDP), which makes the Republic of Moldova the country that spends the smallest percentage of budgetary resources for defense purposes of countries in Europe. The situation did not change from 2014 to 2018, and the table below illustrates the point.

² Republic of Moldova, *Constitution of the Republic of Moldova*, in *Official Gazette*, no. 78 (27 August 1994): article 140.

³ Republic of Moldova, Ministry of Defense (MOD), *National Defence Strategy* (Chisinau, Moldova: MOD, 2 May 2018), accessed 28 September 2018, http://www.army.md/img/userfiles/doconline/sna.

⁴ Radu Burduja, "Transforming for Multinational Operations: A Study of the National Army of Moldova" (Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2014), 58.

| Table 1. Budget Allocations for the Ministry of Defense, 2010-2017 | | | | | | | | |
|--|----------|----------|----------|----------|--------|----------|----------|----------|
| The National Army of the Republic of Moldova Budget Allocations | | | | | | | 8 | |
| Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| % of GDP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 |
| MDA lei | 205054.6 | 223879.6 | 249653.7 | 303394.7 | 372794 | 408623.3 | 538276.6 | 553875.2 |

Source: Created by author using Republic of Moldova, Ministry of Defense, "Distribution of the budget of the National Army of Moldova (2010 to 2017)," 25 October 2018, accessed 28 October 2018, http://www.army.md/?lng=2&action=show&cat=147; The World Bank, "Military expenditure (% of DGP): Moldova," accessed 28 October 2018, http://databank.worldbank.org/data/reports.aspx?source=2&series=MS.MIL.XPND.GD.ZS&country=DEU,MDA.

The Republic of Moldova recently approved the National Defense Strategy established new objectives for the National Army such as: 1) Ensure the state's sovereignty, independence, and unity; 2) Assure stable and sustainable development of the state; 3) European integration; 4) Territorial reintegration; 5) Well-being and prosperity of the citizens; and, 6) Participate in providing international security.⁵

Considering the threats that Moldova is facing internally, and in the region, it is important to mention that increased allocation of funds is vital to obtain the successful transformation of the Army to a modern and capable defense institution.

The Army has never had a sufficient budget allocation, therefore, the government needs to change that tendency and set priorities to obtain permanent ready forces able to

⁵ Moldova MOD, *National Defence Strategy*, 3.

execute its constitutional attributes, respond to any crisis situation, and contribute to international peace and security.

It is important to mention that initially the National Army experienced some tumultuous times, mainly due to its continuous inability to retain its professional core officers and NCOs. Inability to retain its personnel, especially a few military cadres trained overseas, created a gap in military knowledge and experience. The conscript soldiers were looking for leaders able to provide them with directions and assist them in becoming effective defenders of their country, and the only available leaders were the junior officers coming from the school environment with no experience from Moldova's Military Academy. There were not enough qualified personnel to fill some of the senior military positions at the Army General Staff level to develop guidance for the units and assist the Chief of General Staff to plan and lead the Army.

To ameliorate the existing deplorable situation, the Ministry of Defense initiated numerous bilateral efforts with neighboring states first (Romania and Ukraine) and then many others (U.S.A, Germany, Latvia, Lithuania, Greece, China) to solve the military education problem. The situation started to improve, especially after Moldova established its relations with NATO in 1992, when Moldova joined the North Atlantic Cooperation Council, and deepened those relations when Moldova joined the Partnership for Peace (PfP) program in 1994. The North Atlantic Cooperation Council was succeeded in 1997 by the Euro-Atlantic Partnership Council, which brings together all Allies and partner countries in the Euro-Atlantic area. The focus on support for reform has increased

progressively since 2006, when the country agreed to its first two-year Individual Partnership Action Plan.⁶

All of the above contributed to an increase in the professional level of expertise of separate individuals, and the Army institution as a whole. Nevertheless, a long list of challenges still exists in the Army, and any doctrinal approach to solve them has not been identified yet. First of all, different individuals were trained by different standards and none of them were put together to create a doctrine common to all Army units.

Methodologies used by senior officers educated in Moldova versus the methodologies brought by officers from overseas created another issue. Finally, the existence of STANAGs, operational experiences, and access to modern education did not facilitate the creation of the institution such as TRADOC and did not prioritize the needs for the educational process. As a result, often the knowledge and experiences gained abroad, were dispersed at the tactical level, benefiting some separate units and not the entire Army as an integral institution.

To have a better understanding of the necessity for change the author will use the Slovenian Armed Forces transformation example as a base line and reference throughout the entire study. The reason for choosing the Slovenian Armed Forces is quite simple, there was a recent study conducted by Slovenian officer, MAJ Jure Himelrajh, in 2017 that provides valuable insights of the situation in the Slovenian military and detailed analysis of the factors that drove to the needed changes. In addition, the Republic of

⁶ North Atlantic Treaty Organization, "Relations with the Republic of Moldova," last updated 12 October 2018, accessed 28 September 2018, https://www.nato.int/cps/en/natohq/topics_49727.htm.

Moldova and Republic of Slovenia have multiple features that are common to both countries. The main difference though is that Republic of Slovenia overcame all early obstacles to become an EU and NATO member, but Moldova did not. All the common features are presented in the table below.

Table 2. Common Features for the Republic of Moldova and the Republic of Slovenia

| Features | Republic of Moldova | Republic of Slovenia | | | |
|---------------------------------------|--|--|--|--|--|
| Area and population | 33,851 square km, 3,5 mln | 20, 273 square km, 2,07 mln | | | |
| Independence date | August 27, 1991 | June 26, 1991 | | | |
| Early conflict | Between May and July 1992, Moldovan and Trans-Dniestrian forces fought a brief but bloody series of engagements | 10-day campaign against federal Yugoslav forces from June to July 1991 | | | |
| Peacekeeping mission | Troops on peacekeeping missions within territory along Trans-Dniestrian Region | Troops on peacekeeping missions within territory that was once part of Yugoslavia | | | |
| European Union relationship | In November 2014, European Parliament overwhelmingly approved the E.UMoldova Association Agreement | Member of the EU from May 1, 2004 | | | |
| Armed forces numbers | 6,500 personnel | 7,250 personnel | | | |
| Development of the Armed Forces | As a part of a plan to increase cooperation with NATO, the Moldovan Armed Forces will be restructured to NATO standards | Since independence, the military has attempted to transform itself from a territorial defense force to a streamlined army with small, well-armed and independent units that are rapidly deployable | | | |
| Conscription | Compulsory military service of 12 months (planned to end in 2022) | Conscription was abolished in October 2003 | | | |

Source: Created by author using Military Periscope, "Moldova Overview," 30 December 2018, accessed 8 January 2019, https://www-militaryperiscope-com.lumen.cgsccarl.com/armedforces/eurasian-republics/moldova/overview; Military Periscope, "Slovenia Overview," 30 December 2018, accessed 8 January 2019, https://www-militaryperiscope-com.lumen.cgsccarl.com/armedforces/north-atlantic-treaty-organization-nato/slovenia/overview.

Purpose and Significance of the Study

Considering current threats and objectives identified in the National Defense

Strategy, there is no doubt that something needs to be changed to obtain the desired end state. The existing theories should be implemented by the stakeholders responsible for security. The current situation provides some reasons to believe that even though the newly signed National Defense Strategy was ratified by the government, the government is not really concerned with its implementation when it creates a disconnect between the strategic and tactical levels.

The Minister of Defense continuously emphasizes a capability based transformation of the Army, stipulating that the human dimension is the most important element that the Army possess and must preserve. There are still many challenges that the Ministry of Defense faces as the main state defender. Issues multiply because there is no up-to-date capstone doctrine, the existence of old equipment (vehicles and weapon systems that remained from the Soviet Times,) and an inability or reluctance to implement documented changes for the institution as a whole. This is due to the lack of financial sources or resistance to the new realities that determine the current operational environment. Finally, considering the continuously evolving operational environment and under budgeted institution, changes are still required. A good starting point could be a

⁷ Valentina Ursu, "Eugen Sturza: Non-membership of a military bloc such as NATO cannot guarantee the security of a country," interview with Eugen Sturza, Radio Free Europe/Radio Liberty, 07 November 2017, accessed 30 September 2018, https://www.europalibera.org/a/interviu-noul-ministru-al-apararii-eugen-sturza/28840760.html; Svetlana Maftei, "Eugen Sturza wants a professional army without soldiers within," Deschide.md, 8 November 2017, https://deschide.md/ro/stiri/politic/20968/Eugen-Sturza-vrea-o-armat%C4%83-profesionist%C4%83-f%C4%83-militari-%C3%AEn-termen.htm.

detailed capabilities based analysis that would consider functional areas, functional needs, and functional solutions analysis. The capabilities based analysis will provide a practical implication of the study because it will point at current issues the Army is facing and will recommend some possible solutions. As a result, the newly designed structure of an infantry unit that will maintain the basic combined arms capabilities, will be proposed for integration into the National Army of Moldova. Upon completion, this research can serve as a base line for the future transformation and modernization of the National Army of Moldova.

Primary and Secondary Research Questions

Considering the previously mentioned factors, especially the evolving threat, new Army objectives, and the transformation plan, it is important to understand that the National Army of Moldova must change accordingly, based on needed capabilities for the successful execution of all given tasks. The debated question in Moldova is, can the National Army, facing the existing operational challenges and insufficient budget, execute its constitutional attributes?

To help understand the situation and assume a certain position, the primary research question is: What is the optimal structure for the infantry units of the National Army of the Republic of Moldova?

To provide a complete answer, a set of secondary research questions must be answered:

1. What are the critical capabilities that the National Army must develop to support the National Security Strategy (NSS) and National Defense Strategy (NDS) requirements?

- 2. What was the framework prescribed by the Slovenian strategic documents for determining the size of a basic combat unit?
- 3. What measures should be implemented to solve identified shortfalls and how can they be integrated into the modernization programs?

Definitions of Key Terms

Operational Environment – A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. Also called OE.⁸

<u>Peacekeeping Operations</u> – Military operations undertaken with the consent of all major parties to a dispute, designed to monitor and facilitate implementation of an agreement (cease fire, truce, or other such agreement) and support diplomatic efforts to reach a long-term political settlement.⁹

<u>Civil Support Activities</u> – military support to civil authorities for domestic emergencies, and for designated law enforcement and other activities. Also called CS.¹⁰

⁸ Headquarters, Department of the Army, Army Doctrine Reference Publication 1-02, *Terms and Military Symbols* (Washington, DC: US Government Printing Office, 16 November 2016), 1-70.

⁹ Chairman, Joint Chiefs of Staff, Joint Publication 3-07.3, *Peace Operations* (Washington, DC, Government Printing Office, 01 August 2012), viii.

¹⁰ Definitions, "Civil Support," accessed 28 October 2018, https://www.definitions.net/definition/civil%20support.

Proclamation – the action of proclaiming: the state of being proclaimed, to declare or declare to be solemnly, officially, or formally proclaim a country a republic...¹¹ The republic of Moldova deals since 1992 with the self-proclaimed Transnistrian Region (so called Prednestrovian Moldavian Republic), a situation that creates internal tension in different domains. As part of the ceasefire agreement after the armed conflict in 1992, a three-party (Russian Federation, the Republic of Moldova, and Transnistria) agreed upon establishment of a Joint Control Commission that will supervises the security arrangements in the demilitarized zone. As a result, that turned in Russian Federation Forces presence in the country as a part of Peacekeeping Operation.

Neutrality concept – the quality or state of being neutral especially: refusal to take part in a war between other powers. ¹² The Republic of Moldova proclaimed its permanent neutrality in the Constitution, Article 11, according to which the Republic of Moldova does not accept foreign forces to be stationed on its territory.

Assumptions

Conducting this research, the following assumptions have been made:

 The internal unresolved situation with respect to the Transnistria Region of the Republic of Moldova will maintain the same status, that of an unresolved "frozen" conflict.

¹¹ Merriam-Webster, "Proclaimed," accessed October 28, 2018. https://www.merriam-webster.com/dictionary/proclaimed.

¹² Merriam-Webster, "Neutrality," accessed October 28, 2018. https://www.merriam-webster.com/dictionary/neutrality.

- 2. The hybrid threat currently posed to the Republic of Moldova by the Russian Federation will continue to be in effect for at least 10 more years.
- 3. For the next 10 years, neither the European Union nor the U.S. or NATO will significantly impede a potential hybrid threat against the Republic of Moldova by the Russian Federation.
- 4.A process to determine a basic combat unit can be derived through a study of the last proposed transformation of the Slovenian Armed Forces.
- 5.Combined Arms framework is universal throughout the militaries and its basic definitions can be applied as well.
- 6. The National Army units will not be deployed to major combat operations in the near future in large formations, therefore their main focus will be the execution of its constitutional purpose to defend the Republic of Moldova boundaries with its own capabilities in case of an external military aggression. This assumption is supported by the fact the budget allocation for the Army will not increase significantly to allow a significant contribution to international security.

Limitations

The first set of limitations is referred to as the National Army's internal issues.

The most significant limitation is the lack of national literature with regard to the National Army of the Republic of Moldova and its vision for the future. The lack of midrange and long-range plans with their strategic indicators and the dissonance between Military Doctrine and the National Defense Strategy are also significant, the dissonance is due to the difference in their timeframes. The first was signed in 1996 and the second

in 2018, both documents provide different objectives, identify different threats, and describe different operational environments. It is important to mention that the National Defense Strategy provides a plan for modernization of the army that includes the financial aspect as well.

Another set of limitations is the lack of classified material that pertains to readiness, status of materiel, and the National Army's commitment to its strategic partners. In addition, the government of the Republic of Moldova's commitment to the development of the modern army is not captured anywhere apart from some public media statements, and there was never a plan to support the last National Defense Strategy in terms of time and budget allocations.

The last set of limitations is the significant difference between the National Army and the Slovenian Armed Forces, including their size, resources, organization, and capabilities. The largest unit in the Slovenian Armed Forces is a fully operational combined arms brigade-size unit. In contrast to the National Army, the Slovenian Armed Forces have maritime and air components. Even though these components are not considered services but rather branches of the armed forces, the Slovenian Armed Forces can still conduct some type of joint operations. However, the National Army lacks that ability, due to the fact that the Republic of Moldova's Armed Forces do not encompass a large air component and are completely lacking any maritime capabilities.

Finally, this study, does not use any information that is prohibited for public disclosure. It is also focused on the objectives set in the recent National Defense Strategy, which are oriented towards a medium and long term timeframe. The study identifies the transformation of the infantry units of the National Army that must be accomplished in

order to obtain a maximum efficiency from the modernization process and to create a solid platform for the follow-on transformation path.

Delimitations

The research is not focused on recapturing the entire transformation of the Slovenian Armed Forces. However, a thorough analyses of the conditions that led up to the transformation and the decision to designate a battalion-size element as the Slovenian Armed Forces basic combat unit must be executed to understand the state of the Slovenian military as a whole. Furthermore, the study's intent is to provide some solutions to the infantry units of the National Army, without changing its entire task-organization. This structure will facilitate the execution of all domestic tasks, prescribed by the Constitution and the National Defense Strategy and will also help to develop needed interoperability skills to contribute to global security.

According to the National Defense Strategy, that supports the Constitution of the Republic of Moldova, the main national interest and objective that all national resources should be oriented, without any hesitation and even increased if needed, is to assure the state's sovereignty, independence, and unity.¹³. National resources will be used to strengthen, develop and upgrade the capacity of the national defense system to provide an adequate response to threats and risks that intend to undermine national security and defense..¹⁴ However, the research does not deal with the Republic of Moldova's issues

¹³ Moldova MOD, *National Defence Strategy*, 3.

¹⁴ Ibid., 10.

regarding its territorial integrity and omits any connections with respect to the Transnistria Region.

The methodology used to complete this study will be based upon the DOTMLPF-P (doctrine, organization, training, materiel, leadership, personnel, facilities and policy) construct that will also require a professional case study on the subject. In this particular case, as the base line, the Slovenian Armed Forces case will be considered. In addition, a capabilities based assessment will be evaluated only across the D-O-T-L compartments. The reason is the above mentioned compartments are the drivers of top-line requirements in the judgement of the force management personnel..¹⁵

This particular thesis is an applied professional case study research with a professional judgment implication from providing recommendations, identifying ways and recommending the solution. The research methodology will be explained further in chapter 3. This section reflects the position of the author at his starting point and provides some of the initial personal recommendations (R1) for the structure of the infantry units of the National Army of the Republic of Moldova. At the beginning, the author applied a reasonable professional judgement to the existing professional body of knowledge in order to describe and illustrate the R1.

The author utilizes his 15 years of professional experience, including his deployments; knowledge on the subject, including his courses and multiple multinational training events; and his planning abilities obtained during his experience in key positions

¹⁵ Dr. Kenneth E. Long, discussion with author, Ft Leavenworth, KS, 19 October 2018.

at the independent battalion level, such as battalion executive officer and battalion commander.

Currently, there is no evidence about the size of the element that the National Army is willing to deploy to any theater of operations. However, recent activities can predict a minimum of a company-size, and at maximum a battalion-size, element. The Moldovan contingent presence in Kosovo as part of the multinational peacekeeping operation, Kosovo Forces (KFOR), and evaluation of the company-size elements through the NATO Operational Capability Concept, are some of the above mentioned activities. Currently the infantry company, the mortar company, and the EOD team of the 22nd Peacekeeping Battalion have been evaluated. In addition, the National Defense Strategy approval provides the basis for mid and long-term solutions to equip and reorganize the Army in order to have a ready force, able to respond to any internal or external threats and to protect the state sovereignty. That, and the fact that the National Army has only three "operational" brigades, that are manned at around 50-65% strength eliminates a brigade size organization as a potential basic unit due to the fact that the current organization cannot support itself. Furthermore, experience shows that an army needs at least three similar, fully operational, and full strength units to sustain a regular extended deployment of a single unit. 16

Next, the actual structure of the infantry brigades does not include a combined arms concept at a level of company-size elements. An infantry company does not have organic indirect fire capabilities or combat multipliers; is not capable of conducting

¹⁶ Long discussion with author.

combined arms operations or operating independently; and is not capable of sustaining itself, not even with the help of its mother unit. Therefore, considering all above mentioned elements and insufficient funding of the National Army, a battalion-sized unit is the most suitable solution that will provide the necessary capabilities to accomplish Army tasks. It will also set the conditions for follow-on development and growth in a brigade-size element when the country improves its financial situation and the modernization of the Army is a priority. Therefore, the author selected an augmented U.S. Army infantry battalion, prescribed by Field Manual 3-21.20, *The Infantry Battalion*, as the R1: initial personal recommendation. This organization was selected for its simplicity and its minimal requirements with respect to material and equipment when compared to other organizations. From the command and control perspective, it will create conditions for an effective command of a small, well equipped and permanently ready force, and will facilitate the transition to further operational or strategic levels of war.

The author augmented the basic infantry battalion with sustainment and engineer companies, an unmanned aerial system element; and two more sniper teams, one sniper team per company. The purpose is to establish a unit capable of independent execution of any given tactical or civil support tasks.

¹⁷ Headquarters, Department of the Army, Field Manual 3-21.20, *The Infantry Battalion* (Washington, DC: Government Printing Office, December 2006), 1-3.

INITIAL RECOMMENDATION 630 HHC HQ STAFF

Figure 1. R1: Initial Personal Recommendation

Source: Created by author using Headquarters, Department of the Army, Army Doctrine Reference Publication 1-02, *Terms and Military Symbols* (Washington, DC: US Government Printing Office, 16 November 2016), 4-1 – 5-1.

CHAPTER 2

LITERATURE REVIEW

Introduction

The purpose of this study is to suggest a transformation of the infantry units of the National Army of the Republic of Moldova, considering the requirements and capabilities outlined in the National Security Documents. This study will also support Army efforts to increase its credibility among the population and provide interoperable forces to contribute to the local, regional, and global security.

To conduct an appropriate evaluation of the existing situation, the study will conduct research in areas such as: existing National Security Documents requirements, analysis of the conditions that influenced the brigade-centric force transition process, and capabilities required for an infantry unit to be able to operate independently and accomplish its mission. Sufficient resources exist (books, journals, monographs) that cover force management and force development process to provide information on multiple countries' decisions to change their military structures toward the brigade-centric force. There are also sufficient sources describing the steps a military institution should perform to develop capable forces to cover existing capabilities gaps. However, all of the above-mentioned processes are closely tied to the government's strong financial support to the militaries, an aspect that is very difficult in regard to the Republic of Moldova.

Therefore, this thesis will be focused more on the doctrinal approach used by the U.S. Army, to succeed in accomplishing a qualitative analysis. This chapter is divided in in three distinct parts: review of the National Security Documents and Doctrine,

conditions that influenced the decision within the Slovenian Armed Force to focus on the battalion-size element as the basic combat unit, and capabilities required for an infantry unit to be able to perform its missions being involved in security operations inside or outside the country or being involved in crises relief operations to support local national authorities.

National Strategic Documents

The Constitution of the Republic of Moldova is the supreme law of the country and was adopted on 29 July 1994. The Constitution protects all minorities and their democratic rights in regard to their language, ethnicity, and customs. The Constitution also implies that the Republic of Moldova, in case of external military aggression, must defend its boundaries with its own capabilities. It is imperative to point to a few articles related to the subject such as: Article 8, 11, and 57 of the Constitution. Article 8 of the Constitution states that the Republic of Moldova must respect the provisions of the United Nations Charter and signed treaties with international organizations, and the Republic of Moldova shall base its relations with other states on the unanimously recognized principles and norms of international law. A new international treaty that does not agree with the provisions of the Constitution will be signed only after the revision of the Constitution. Article 11 of the Constitution states that the Republic of Moldova proclaims its neutrality and does not admit disposition of military troops of other states on its territory. The Constitution also states that the Parliament is responsible for the

¹⁸ Republic of Moldova, Constitution of the Republic of Moldova.

¹⁹ Ibid.

approval of military strategic documents. Finally, in accordance with Article 57 of the Constitution, Armed Forces of the Republic of Moldova are responsible for the national defense, border security, and law enforcement within the existing legal framework.²⁰

The National Security Concept (NSC) of the Republic of Moldova, adopted on 29 June 1995 and modified on 22 May 2008, represents the national security priorities of the country. It provides basic national security guidelines, indicates security vulnerabilities and threats, and stipulates the military will be used only for defensive purposes. In the NSC the Armed Forces of RM are viewed only as a means to repel any type of external aggression. ²¹ At the same time, the NSC is seriously focused on the diplomatic means of national power through the European integration and international cooperation to provide national security. Finally, the NSC does not provide any directives towards the selection of the means necessary to preserve the national security.

The National Security Strategy (NSS) was approved by the Parliament of the Republic of Moldova on 15 July 2011. It identifies the national security objectives (ends) and the ways and means needed to achieve them. ²² The strategy does not foresee any substantial threats of foreign aggression towards the RM even though it considers that existing instabilities across the whole of Europe might directly affect the security of all

²⁰ Republic of Moldova, Constitution of the Republic of Moldova.

²¹ Parliament of the Republic of Moldova, *National Security Concept of the Republic of Moldova* (Chisinau, Moldova: Parliament of the Republic of Moldova, June 1995), 5.

²² Parliament of the Republic of Moldova, *National Security Strategy of the Republic of Moldova*, in *Official Gazette*, no. 170-175 (14 October 2011): article no. 499, accessed 09 February 2019, http://lex.justice.md/md/340510, 2.

European countries. Nevertheless, its main objectives are to maintain the national security, security sector reform, and to address the acute necessity of the National Army's modernization. As with the NSC, the NSS does not stipulate any means for executing this reform, either through modernization steps or through allocation of funds to conduct the security sector reform.

The strategy relies heavily on the international community for continuous cooperation, participation, and support in peacekeeping and humanitarian assistance missions. The international actors such as the United Nations (UN), European Union (EU), Organization for Security and Co-operation in Europe (OSCE), and North Atlantic Treaty Organization (NATO) are mentioned numerous times throughout the entire document. Finally, the NSS provides the base line and guidance for the National Defense Strategy (NDS.) The NDS is a policy document that provides the basis for national defense planning and provides necessary guidance for different state institutions to provide their input to the national defense. The last NDS was signed by the President of the Republic of Moldova on 2 May 2018, in coordination with the Ministry of Defense. In accordance with the Point Number 6 of the NDS, the following constitute national interests:

- 1. assuring state's sovereignty, independence, and unity;
- 2. assuring stable and sustainable development of the state;
- 3. European integration;
- 4. territorial reintegration;
- 5. wellbeing and prosperity of the citizens;

6. participating in providing international security.²³

The NDS expressed its concern regarding the actual security environment, which is continuously changing and contains more complex threats, starting in Europe and finishing in the Middle East. ²⁴ All of those changes require a significant governmental effort to consolidate all means and provide necessary support to modernize the existing national security and defense systems.

Furthermore, the NDS identified some of the threats and risk-creating factors to the national security such as: the substantial military potential in the Transnistrian Region; the Russian Federation military presence in the Transnistrian Region; instruments of informational propaganda; attacks on critical infrastructure of the Republic of Moldova; cyber-attacks, instability, and conflict in Ukraine; economical provocation, and emergency situations caused by natural disasters.

The NDS established the following objectives:

- 1. Strengthen, develop, and upgrade the capacity of the national defense system to provide adequate response to threats and risks that intend to undermine the national security and defense;
- 2. Adapt the legal framework to ensure the efficient functioning of the national defense system through an inter-institutional approach and in accordance with the integrated defense planning;

²³ Moldova MOD, *National Defence Strategy*, 3.

²⁴ Ibid., 4.

3. Developing the capabilities needed to meet the commitments made with reference to the international security and stability, as well as on peace consolidation.²⁵

All national objectives are expected to be achieved through a concentration of national efforts in the following directions: (1) development of military capabilities; (2) development of an efficient mobilization mechanism; (3) parliamentary control; (4) adequate legal framework; (5) strategic communication; (6) consolidation of the national defense capabilities towards an eventual hybrid threat; (7) improvement of the crisis response capabilities; (8) providing security to the existing critical infrastructure; (9) effective border control; (10) standard implementation for the cyber defense capabilities; (11) RM credibility consolidation towards its external partners; (12) military education improvement; and, (13) development of a cooperative relationship with intergovernmental or regional organizations. ²⁶ In addition, all national efforts in support to the defense domain will be oriented to exploit all available resources, especially the human, financial, and materiel ones. ²⁷

The Military Doctrine of the Republic of Moldova is the last important document related to the security concept of the country and was adopted on 14 July 1996. The doctrine is mainly focused on the Republic of Moldova's Armed Forces ability to defend the sovereignty and territorial integrity of the state. Considering the neutrality of the

²⁵ Moldova MOD, National Defence Strategy, 10.

²⁶ Ibid., 11-15.

²⁷ Ibid., 16.

country, defense capabilities are the main form of combat for which the Armed Forces should be trained and prepared. The Military Doctrine also considers international military cooperation as the main political and military tool needed to be developed to overcome all existing regional threats. ²⁸ It is important to reiterate the fact that the Military Doctrine has not been amended since 1995 and its provision do not match the current environment and ambitions of the Government of the Republic of Moldova.

Combined Arms

We have gotten into the fashion of talking of cavalry tactics, artillery tactics, and infantry tactics... There is but one art, and that is the tactics of the combined arms. The tactics ... composed of the three arms is subject to the same established principles ... of a mixed force in which foot soldiers bulk largely.

—Major Gerald Gilbert, quoted in J. M. House, *Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization*

As per *ADP 3-0*, combined arms maneuver is the application of the elements of combat power in unified action to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantages over the enemy to seize and exploit the initiative. And while the author is focusing on providing the optimal structure for the battalion size element, the following discussion will be oriented towards the evaluation of the combined arms battalions (CAB) structure as per U.S. Army doctrine. Therefore, a CAB must be capable of conducting combined arms warfare independently or being augmented to execute the decisive operation as a part of a larger element.

²⁸ Republic of Moldova, Ministry of Defense (MOD), *Military Doctrine of the Republic of Moldova* (Chisinau, Moldova: MOD, 1995).

The purpose of this section is to examine the CAB capabilities and its taskorganization that allows it to execute a large spectrum of tasks, from offensive, defensive, and stability all the way to conducting tasks in support of civil authorities.

The concept of "combined arms" has existed for long time, starting during the times of Gustavus Adolphus of Sweden, Frederick the Great of Prussia, and Napoleon I of France, which at that time meant the combined implication of infantry, artillery, and cavalry. The "combined arms" concept represents two or more arms or branches working together towards accomplishing the same goal. Today, after decades of change and evolution, the combined arms term has gained greater importance and encompasses today not only ground forces but also extends far beyond them, basically from infantry (mechanized, motorized, airborne, air assault, light, and special or unconventional operations forces), armor, cavalry/reconnaissance, artillery, antitank forces, air defense, combat engineers, attack helicopters, and some forms of close air support to electronic warfare and cyber operations, under certain circumstances. Last but not least, all combat support and service support elements, which are equally important as part of the designated-for-fight force package, are also part of the combined arms concept.

When discussing combined arms and its implication in warfare, three critical elements or their combination must be considered: mobility, protection, and offensive power. ²⁹ Mobility encompasses the entire spectrum from tactical movement and maneuvering with the concentration of forces towards achieving a massing effect, to the

²⁹ Jonathan M. House, "Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization" (Research Survey No. 2, Combat Studies Institute, US Army Command and General Staff College, Fort Leavenworth, KS, August 1984), 3, 4.

ability to move men and maneuver units when exposed to enemy fire while conducting operations. Mobility is not something that can be clearly or easily defined; however, it must be measured relative to terrain accessibility, and to the mobility of other friendly and enemy forces. For a combined arms unit, the least mobile element may determine and influence the mobility of the entire unit. In other words, if a unit cannot provide massing effect, cannot maneuver, and an offensive or eventually a counteroffensive operation cannot be conducted, the achievement of surprise is very difficult if not impossible, and will result in failure of an operation.

Protection is another important element that includes both security against an enemy attack and general protection on the battlefield. Battlefield protection is usually achieved through the effective use of terrain defilade, defensive fortifications, or by utilizing proper equipment such as Kevlar helmets and armored protective vests. Fire power is necessary to impose one's will on the enemy, to overcome his protection.

The interaction of mobility, protection, and offensive power has been observed multiple times throughout military history. The best examples are from the past century which can be easily characterized as a period of increased weapons power, an increase that can be overcome only by a tactical, operational, and strategical combination of mobility, protection, and other firepower. The best example that describes such an environment is the defensive system of World War I. The fortified defense that encompassed the combination of firepower and protection had to be countered only by close coordination of infantry (mobility), fire support (offensive power), and limited armor assets. The basic and simplistic example of World War I illustrates the masterful

combination of the three basic elements as an inseparable part of the combined arms concept, such as mobility, protection, and offensive power used increasingly.

Having a military doctrine that defines the threat and procedures that must be taken towards eliminating the threat is vital not only because it provides clear guidance in terms of approved strategies but also because it backs the necessary investment in the defensive mechanism of the state. However, having a military doctrine that supports a combined arms implication is not sufficient to practice, refine, and employ this doctrine. At least five other elements are necessary:

- 1. An army must procure weapons with the characteristics required by the doctrine and monitor the changes.
- 2. The doctrine must be effectively explained and disseminated to the commanders that are directed to use it.
- 3. The commanders must believe the effectiveness of the doctrine considering their available organizations, assets, and personnel.
- 4. The commanders must consider that their units are well trained in accordance with requirements and a healthy level of morale.
- 5. Effective command and control system. ³⁰

An historical example that would illustrate the importance of all the above elements would be the antiarmor operations on the Golan Heights during the Yom Kippur War in October 1973. Having a very strong, well equipped and trained army, the Israelis learned a tough lesson during the Syrian attack, predominantly due to the lack of

³⁰ House, "Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization," 5.

understanding of their doctrine, a negligent attitude of the main stake holders responsible for the Israeli security, and ineffective command and control system that admitted too many assumptions.

As a result, the U.S. Army, for example, developed and adopted a doctrine of Active Defense based largely on the perceived "lessons" of the battle for the Golan Heights, fought in the earliest days of the 1973 war. ³¹ Even today, the U.S. Army considers some of those lessons, as per ATP 3-90.5 as foundations of unified land operations, commanders can achieve strategic success by integrating the four foundations of unified land operations: initiative, decisive action, core competencies, and mission command. The foundations of unified land operations begin and end with the exercise of individual and operational initiative.

However, having an exceptional military doctrine and all of the elements required for its successful implementation will not necessary result in success in battle if the combined arms tactics are not properly utilized. The key is to have all of these different arms and weapons support each other once they have been organized into integrated teams.³²

This in fact is the most important part of the successful team integration, which quite often is neglected by military personnel. Leaders at many levels do not properly understand that and soldiers do not apply it accordingly and as a result, major operations

³¹ Roger J. Spiller, *Combined Arms in Battle Since 1939* (Fort Leavenworth, KS: US Army Command and General Staff College Press, 1992), 27.

³² House, "Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization," 3.

have failed and lives have been lost. A clear example of a lack of tactical consideration towards available combined arms capabilities is the 1944 battle of the Hürtgen Forest, fought by the U.S. Army 28th Infantry Division and commanded by General Cota. It was during the final days of preparation that Cota made three crucial decisions that had farreaching effects on his division's assault into the Hurtgen.³³

The first crucial decision was his choice to not direct his troops to conduct patrols into the forest to obtain the necessary information to foster a better understanding of the operational environment and better prepare for the upcoming operation. Second, was his choice to use the Kall trail as the division main supply route without checking with the engineers. He assumed the trail would support tanks and that decision proved to be crucial. Third, the decision not to use armor to support his infantry subunits was arguably the worst decision he made during that time.³⁴

Further on, the author will discuss the role and importance of the CAB. As per ATP 3-90.5 Combined Arms Battalion, the role of the CAB is to close with and destroy enemy forces using fire, maneuver, and shock effect, or to repel his assault by fire and counterattack. The CAB combines the efforts of its armor and mechanized infantry companies to execute tactical missions as part of an ABCT, or when augmenting another brigade combat team. CABs are part of the Army's principal formation for conducting combined arms operations, are capable of deploying worldwide and conducting unified

³³ Thomas G. Bradbeer, Module III: Transition to Offense, M311: Commander's Visualization, Reading A. Advanced Operations Course, US Army Command and General Staff Officer Course, Fort Leavenworth, KS, 2019, 11.

³⁴ Ibid.

land operations. CABs can be attached to any type of organization and execute various type of tasks.

CABs can perform most shaping operations, hasty defenses, convoy security, and stability tasks without reinforcement. In addition, CABs are organized to fight and win, but they are equally capable of executing stability and defense support of civil authority tasks as part of a joint task force.³⁵

The CAB combines the efforts of its headquarters, mechanized infantry, and armor companies to execute tactical missions. Amassing the combat power of these companies quickly while integrating and synchronizing the supporting and sustaining multipliers, is the key to victory. CABs are designed to maneuver in all types of terrain, and climatic and visibility conditions. The inherent versatility of infantry also makes it well suited for employment against asymmetrical threats across decisive actions. CABs often provide mechanized infantry, armor power, reconnaissance capabilities, mortars support and sniper teams suited to operate in any operational environment to successfully execute the mission. Depending on the appurtenance of the CAB, the task-organization may vary from two mechanized infantry companies and one armor company in some cases, to one mechanized infantry company and two armor companies in other cases. The following figure (Figure 2) provides the doctrinal layout of the CAB that can be augmented with additional assets if needed, as per ATP 3-90.5.

³⁵ Headquarters, Department of the Army. Army, Techniques Publication 3-90.5, *Combined Arms Battalion* (Washington, DC: Government Printing Office, 5 February 2016), 1-9.

COMBINED ARMS BATTALION

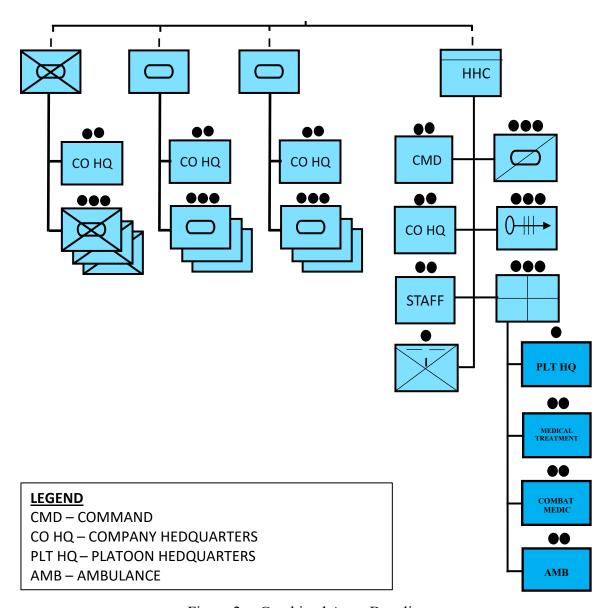


Figure 2. Combined Arms Battalion

Source: Created by the author using Headquarters, Department of the Army, Army, Techniques Publication 3-90.5, Combined Arms Battalion (Washington, DC: Government Printing Office, 5 February 2016), 1-10 – 1-14.

It is important to mention that besides the CAB formation an army has pure infantry units as well. In comparison to the U.S. Army CAB battalion, the infantry

battalion provides similar capabilities without armor strength. As per FM 3-21.20, the infantry battalion is designed for employment in full spectrum operations, specifically, offense, defense, stability operations, and civil support operations as well. The combination of rifle companies, weapons company, and specialty assets such as scouts, mortars, and snipers, allows the commander to internally task-organize capabilities as needed. Essentially the main difference between those two units is the armor companies in the CAB and weapon company in the regular infantry battalion, however, the capabilities in term of combat power differ significantly. Therefore, the CAB is normally engaged in the battle first and then the regular infantry units exploit the initial accomplishments.

Slovenian Armed Forces Requirements for Change

In order to initiate any major transformations or start any modernization efforts, some basic steps must be undertaken by an organization, institution or country. In this particular case, the author will bring forward some critical elements that drove the change in the Slovenian Armed Forces.

First of all, The National Security Strategy of Republic of Slovenia was published in 2010 with the defense budget at its highest point $(1.61\% \text{ of GDP}, 583 \text{ MN EUR.})^{36}$ However, in the period of 2011 - 2017 the defense budget supported a significant

³⁶ Jure Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces. A Study of the Slovenian Armed Forces" (Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2017), 35.

decline,³⁷ it is almost impossible to support the national interests with an initial budget cut of 36%.³⁸

Second, the Republic of Slovenia Defense Strategy was published in 2013.³⁹ and the defense institution had already felt a severe financial decrease. Even though, the government gave some very broad and general guidelines for the defense institutions with the respect to the budget. The end state was that the defense budget will be development-driven and would aim to achieve the NATO recommended 2 percent of GDP for defense spending with a ratio of 50:30:20 between personnel, operating, and investment costs.⁴⁰

Next, the Republic of Slovenia Strategy of the Participation in International Operations and Missions, published in 2010, 41 did not consider the decreasing defense budget nor the economic crisis of the country as a whole. Nevertheless, the strategy provided some cooperation vectors that were necessary during the financial depression. To be more specific those vectors included cooperation in following areas: peacekeeping operations, crisis response operations, development cooperation, humanitarian assistance, international civilian missions, and other forms of support, assistance, and cooperation. 42

³⁷ Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces. A Study of the Slovenian Armed Forces," 35.

³⁸ Ibid., 36.

³⁹ Ibid.

⁴⁰ Ibid., 37.

⁴¹ Ibid.

⁴² Ibid.

prevention, peacekeeping, peacemaking, peace building, and peace enforcement to a complex humanitarian operation that requires a lot of coordination and financial support.

The most important document related to the military of the Republic of Slovenia is Military Doctrine and that is outdated, the existing one was signed in 2006. 43

According to the MAJ Jure Himelrajh, the existing Military Doctrine does not reflect the changed complex operational environment, effects of the economic crisis in the country, or the last major transformation of the SAF (2013-14) that detailed the reorganization of combined arms capable battalions into light infantry regiments, independent combat support battalions into brigade combat support companies, and the abolition of the SAF operational level command. 44

Finally, the Mid-term Defense Program of the Republic of Slovenia 2016 – 2020 and the Strategic Defense Review are the only strategic level documents that take into consideration the realities of the current operational environment, effects of the economic crisis, and the current state of Slovenian Armed Forces. 45

At the same time all of these strategic documents place a lot of emphases on national defense capabilities, the ability to respond effectively to any military threat, and international operations. NATO and the EU require the existing forces to be brought to a certain standard, the NATO standard, and that is the state's responsibility to honor its obligation to its partners.

⁴³ Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces. A Study of the Slovenian Armed Forces," 39.

⁴⁴ Ibid.

⁴⁵ Ibid., 40.

Another interesting fact is the Resolution on Long-term Development and Equipping states the basis of the Slovenian Armed Force land capabilities will be combat capabilities of medium, light (motorized) and mountain infantry, and special operations forces. Light and medium infantry capabilities will serve as a basis for a task-based motorized and medium infantry battalion group. ⁴⁶ It is important to mention the armed forces were supposed to be built on the principle of modularity as task forces; within Slovenia the highest level unit would be a brigade tasks force, and for operations abroad the highest level unit would be a task force infantry battalion battle group. ⁴⁷

The picture of the situation that pushed the Slovenian Armed Forces to make the change would not be complete if the author did not mention the fact that the Mid-term Defense Program of the Republic of Slovenia 2016-2020, puts a great emphasis on the development of the military capabilities up to 2020. The main focus should be oriented on combat and combat support units with an emphasis on motorized and mountain infantry and special forces. The infantry capabilities should be established in infantry companies organized in infantry regiments that form the basis of two battalion battle groups. 48

The Resolution on Long-term Development and Equipping has been taken into account when determining NATO Capability Codes for Slovenia with developmental priorities on a medium (mechanized) battalion battle group, CBRN capabilities,

⁴⁶ Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces. A Study of the Slovenian Armed Forces," 49.

⁴⁷ Ibid.

⁴⁸ Ibid., 51.

enhancement of battlefield maneuver, firepower and mobility, proper indirect fire support, and enhancement of mobile communication capabilities. ⁴⁹ There is no doubt, if the Slovenian Armed Forces achieve all the goals mentioned above, they should be able to conduct combined arms warfare within the framework of task-organized capability (brigade level in Slovenia, battalion level abroad,) that will be trained, equipped, and manned across the spectrum of operations for a duration of up to a year. ⁵⁰

Chapter Summary

This chapter was focused on acquiring necessary information in order to establish the process of determining the optimal structure for the infantry units in the National Army of Moldova. Different countries at different times can serve as examples of successfully transforming their armies; however, one must keep in mind the economic power of each of those states. Even if the Slovenian Armed Forces are used by the author as a base line or a starting point to the research, the main focus still remains on the factors that forced the change. It is impossible to make a continuous comparison of Moldova and Slovenia due to the fact that Slovenian strategic documents foresee the detailed structure of its basic units, and their structure with a focus on their specific capabilities. If the Slovenian Armed Forces are focused on the battalion sized basic combat units that encompass the principle of combined arms, the questions are still valid: is Moldova able to use that example and can an optimal structure for its infantry units be determined. This

⁴⁹ Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces. A Study of the Slovenian Armed Forces," 51, 52.

⁵⁰ Ibid., 52.

study will provide some solutions and recommendations to the initial question and also will evaluate the capacity of Moldova and its army to properly organize its infantry units with the main focus on the battalion-size elements. The review of the CAB with its capabilities; the Republic of Slovenia strategic premises, in terms of strategic documents and level of detail stipulated in them; and the evaluation of Moldova's strategic documents provide the foundation for the future organization of the National Army of Moldova's infantry units.

Decision makers at the Army's General Staff will have to make difficult decisions to properly balance protection, mobility, and firepower along with the strategic objectives set for the National Army, including support for the civil authorities and the ongoing peacekeeping operation in the Transnistrian region. They will have to conduct a detailed analysis of the required capabilities that will ultimately guide the design of the infantry units, starting with the battalion sized elements. The biggest questions are, will the suggested change require a significant financial investment and if so, will the Moldovan Government commit to the cause with proper funding or significantly increase the defense budget so the Army can complete its transformation and modernization path. Only after a chief decision maker approves this concept can unit structure changes be made, and significant and visible progress be made in the Army's organizational transformation.

This study also intends to provide the most viable solution for the Moldovan Army in terms of the combined arms concept and its implementation within the limited financial capabilities that directly influence the army's modernization path. When comparing the Slovenian Armed Forces and the Moldovan Army's doctrinal layout, the

differences start to appear, and they are quite significant in terms of force structures and capabilities required. Furthermore, if you compare the actual employment of units in real operations, the difference is even larger. While both entities are predominantly involved with peacekeeping or stability operations, the difference is in the size of the contributing elements and in the number of theaters of operations. Both governments are very cautious in terms of their involvement in peacekeeping operations, searching for the safest possible environment to commit their forces. With that, the Slovenian contribution to the global security is considerably greater and more significant. In addition, it is very unlikely that Moldova's "defensive" attitude, continually hiding behind "neutrality" concept will change in the near future. However, the differences in Moldova's strategic documents should be one of the driving factors behind the modernization of the Moldova's military doctrine.

Considering that Moldova's strategic documents provide a solid foundation for the employment of the Army and provide clear priorities in terms of national objectives, there is still much room left for improvement, especially in determining the basic combat units of the Moldovan Army. What elements (size of the military unit or battle group) have to be capable of fulfilling those security requirements? What are the required capabilities? Are those units capable of operating independently (conducting combined arms operations, defending the territorial sovereignty, or assisting civilian administrations in case of natural emergency situations?)

Those are supplementary questions that will be answered in order to gain a better understanding of the vector assumed by the Moldova's governing coalition. It is also important to mention, once again, that the existing strategic documents and the military

doctrine in Moldova are outdated and do not match each other's requirements, do not properly describe the existing environment and threats, and are very superficial. In addition, restricted access to the Moldovan Army's documents regarding its current place in modernization or in the transformation process hampered the detailed evaluation of this particular aspect. Therefore, some assumptions, limitations, and delimitations were stipulated in the Chapter 1 to alleviate any confusion about this issue and to leave it open for further research.

CHAPTER 3

RESEARCH METHODOLOGY

Purpose of the Research

The purpose of this study is to provide relevant information and supporting facts for the Chief of the General Staff of the National Army of the Republic of Moldova and other decision makers within the National Army about existing inefficiencies in the structure of infantry units. The study also strives to provide an accurate assessment of existing disconnects between the requirements stipulated in the National Security Documents and existing capabilities needed to respond to a threat. Therefore, the requirement to provide Moldovan decision makers with a solution that is suitable, feasible, and acceptable, to close the current capability gap, is vital. Current points of concern for the Chief of the General Staff include inappropriate budgeting that results in limited available resources, outdated military equipment and infrastructure, outdated military doctrine that is not aligned with the National Defense Strategy, and improper use of military forces of the National Army with respect to internal affairs.

In order to apply the findings of this research, the transformation/modernization process of the National Army must be properly conducted. The process must target not only personnel and materiel domains, but also the remaining domains of the DOTMLPF concept and continually be supported and approved by the Government of the Republic of Moldova. In addition, the process stipulated in the national documents must be aligned with prominent actions that support existing concepts. All Army echelons directly influenced by and involved in a potential change of the infantry units and have direct access to the Chief of the General Staff, might influence the final decision. Therefore, the

study must be clear and comprehensive. Nevertheless, to apply any recommended changes to the existing infantry units' structure, the Chief of the General Staff should look for available resources and the ability to carry on the Army's assigned tasks as prescribed by the National Security Documents. Therefore, as stated above, the proposed solution must be suitable, feasible, and acceptable, and within the framework of transformation of the National Army.

General Information

A "qualitative research" method is continuously applied in this study. As per Sharan B. Merriam and Elizabeth J. Tisdell's *Qualitative Research*, qualitative research focuses on meaning, understanding and the process, a purposeful sample, data collection, inductive and comparative data analysis and results. ⁵¹ Predominantly, a qualitative research is rich in description, shows depth of understanding, and is presented as themes or categories. It does not focus on asking "what" event occurred; instead, it focuses on understanding "why" the specific event occurred. ⁵²

In addition to the simple qualitative research, "Dr. Long's Methodology" is applied that requires an analysis of a professional case study, application of professional knowledge to the initial recommendation, and finally provides recommendations after the decision maker's analysis is applied to the existing problem. ⁵³ Applying Long's

⁵¹ Sharan B. Merriam, and Elizabeth J. Tisdell, *Qualitative Research: A Guide to Design and Implementations* (San Francisco, CA: Jossey-Bass, 2015), 42.

⁵² US Army Command and General Staff College, A-211 Presentation, Fort Leavenworth, KS, 2018.

⁵³ Long, discussion with author.

Methodology, which consists of three main phases, R1 – Initial Personal Recommendation, R2 – Updated Personal Recommendation, and R3 – Proposed Solution (Concept), will ultimately provide an unbiased, complete, and feasible solution to the initially identified problem statement. As described in chapter 1, the R1 is the author's solutions based on his knowledge, experience, and preferences. However, this initial recommendation cannot be proposed to the chief decision maker as a final product. Therefore, an informed, complete, and detailed approach to the initial problem statement is required, that will provide a solution achievable within existing resources and limited financial allocations.

In chapter 4, after applying the Force Development Process and the DOTMLPF analysis, the author will provide the R2 Updated Personal Recommendation. Finally, in chapter 5, after applying change management techniques through the Kotter Model, the proposed solution (concept) will be provided to the chief decision maker, as illustrated in Figure 3. To achieve its final goal, this study used several qualitative methods to conduct the research. First, is the study and analysis of national strategic documents and existing doctrine, important to the existence of the National Army. Then, the research is focused on available sources for proposed changes to basic combat units of the Slovenian Armed Forces and to understand the needs, conditions, and environment that influenced the transformation. Finally, the research analyzes the existing capabilities of the National Army, using the DOTMLPF concept. It should also be considered that information regarding the budget was limited, and focused on main allocations for the National Army.

RESEARCH METHODOLOGY

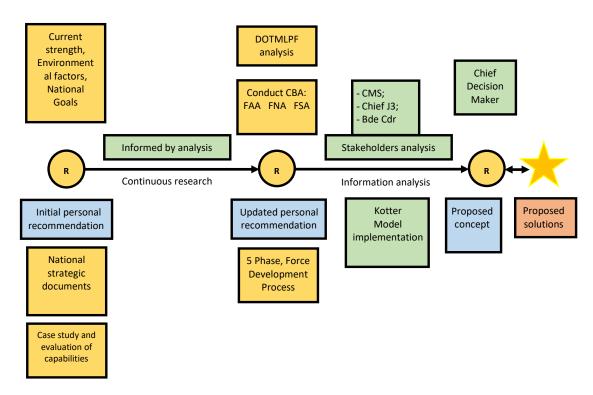


Figure 3. Author's Approach to the Research

Source: Created by author.

Research Methodology

To supplement the qualitative research methodology, the author applied his professional judgment and used a professional case study to create a more complex research methodology. As per Sharan B. Merriam and Elizabeth J. Tisdell's *Qualitative Research*, basic qualitative research focuses on meaning, understanding and the process, a purposeful sample, data collection, inductive and comparative data analysis and results in a richly descriptive data presented as themes or categories. ⁵⁴

⁵⁴ Merriam, and Tisdell, *Qualitative Research: A Guide to Design and Implementations*, 42.

It is necessary to understand the need and the process of the transition of the Slovenian Armed Forces from something "nebulous" to a defined, in size, combat unit with combined arms capabilities that satisfies all national requirements. The author has studied the recent transformation of the Slovenian Armed Forces and the conditions that led to the changes. The Slovenian Armed Forces cannot be directly compared to the Moldovan Army due to various reasons. The most obvious difference is the employment of the force along with the significantly higher budget for the Defence Institution as a whole, however there are processes and concepts that are applicable to both. Therefore, the transition of the Slovenian Armed Forces to its basic combat unit can serve as a case study to discover the process to determine the proper structure of the infantry units in the Moldovan Army.

In this research the author also applies a modified capability-based assessment (CBA) through its functional area analysis (FAA), functional needs analysis (FNA), and functional solutions analysis (FSA) that considers the professional body of knowledge. The product of CBA is a material or non-material solution based on a detailed analysis through the DOTMLPF-P lenses. ⁵⁵

A modified CBA application to a set of National Strategic Documents of the Republic of Moldova provided valuable insights to identify some of the more essential capability gaps in the existing structure of the infantry units of the National Army of the Republic of Moldova.

⁵⁵ US Army Command and General Staff College (CGSC), F100: Managing Army Change, F102: Joint and Army Capability Development, F102RA-Consolidated Extracted Reading, Common Core, CGSC, Fort Leavenworth, KS, 2018, 14.

During the first analytical phase of the CBA process, the FAA, the author identifies the operational tasks, conditions, and standards needed to achieve the military objectives. ⁵⁶ The FAA's output is a description of the mission and the military problem being assessed, and a list of required capabilities and associated tasks, conditions, and standards against which current and programmed solutions are analyzed to meet the mission objectives. ⁵⁷ The FAA is basically conducted through chapters 1 and 2, where the author provides the background information and the current status of the National Army. The author also conducts an analysis of the conditions that drove the transformation in the Slovenian Armed Forces and the capabilities evaluation that were needed for the battalion-size element basic combat unit. Furthermore, the evaluation continues and all national interests and objectives are also stated that imply a development of some urgent current and future capabilities for the National Army in order to be able to accomplish its missions.

The second phase of the CBA process, the FNA, is used to identify and prioritize gaps that will impede the future force from accomplishing its mission. ⁵⁸ The primary input is the approved list of tasks, conditions, and standards from the FAA and the output analysis is a list of capability gaps, redundancies, shortfalls, and an estimate of the timeframe in that a solution is required. ⁵⁹ The author will prioritize the existing

⁵⁶ CGSC, F102RA, 13.

⁵⁷ Ibid.

⁵⁸ Ibid., 14.

⁵⁹ Ibid.

objectives based on the national interests and based on his professional judgment will identify the gaps that significantly and continuously imped the National Army from executing its constitutional obligation towards its population and the state itself.

The third and last phase of the CBA process, the FSA, is the phase where potential materiel and non-materiel DOTMLPF solutions, and policy approaches to solving, or at least mitigating, one or more of the capability gaps identified in the FNA are provided. ⁶⁰ The proposed approaches as a result of an FSA must meet three criteria. First, they must be strategically responsive and deliver approaches when and where they are needed; second, they must be feasible with respect to policy, sustainment, personnel limitations, and technological risk; and third, they must be realizable in that the defense institution could actually resource and implement the approaches within the timeframe required. ⁶¹ It is important to reiterate the fact that in this research, the author will focus only on an evaluation through the doctrine, organization, training, and leadership and education domains.

In chapter 4, the author's personal initial recommendation (R1) will be evaluated by conducting a thorough analysis of the Republic of Moldova's National Strategic Documents, combined arms concept, Slovenian Armed Forces decision points, and other available related sources. The analyses will provide the output for the (R2) as the Informed Position. Then, the position provided in R2 will be evaluated through the lens

⁶⁰ CGSC, F102RA, 14.

⁶¹ Ibid.

of the Chief Decision Maker and responsible stakeholders to identify the Recommended Solution (R3.)

Chapter Summary

In this chapter the author provides general information with respect to the subject and describes the methodology applied to answer the primary research question. The author also describes the path that will bring him to the point of providing some reasonable solutions for the respective Chief Decision Maker and responsible stakeholders. A professional case study is used and the research is focused on providing an understanding of the combined arms concept that provides a base-line for the desired change. The relevance and connection among the utilized tools is explained by selecting all relevant evidence that can be applied to the case of the National Army of the Republic of Moldova. Finally, in this chapter, the author lays out the framework that leads into the next chapter.

CHAPTER 4

ANALYSIS

Introduction

The overall purpose of conducting this study is to provide the optimal structure of infantry units in the Moldovan Army. Considering all the challenges, threats, and constitutional responsibilities of the Army, the unit has several primary duties. The Army should be capable of defending the national integrity and state's borders, independent employment, encompassing combined arms capabilities, and executing any missions and tasks prescribed by existing strategic documents nationally or overseas. Currently, none of the available and existing doctrinal documents indicate what the primary focus areas are for the formation of an infantry unit or what capabilities the unit should possess. The Moldovan Army's current task organization and its recent ambition to participate in the Operational Capability Concept (OCC) program indicates the Army is committed to provide a larger force in order to contribute to global peace. The Moldovan Army has been involved in the OCC since 2008 and has obtained multiple certifications of the infantry company elements and Explosive Ordinance Detachment (EOD) teams to participate in multinational peacekeeping or peace support operations across the globe.

However, since declaring these company-size packages ready for participation in multinational operations, Moldova has never deployed an element larger than platoon-plus size elements along with its EOD teams. In the near future Moldova has plans for a battalion size element to start the OCC program and to participate in not only multinational operations but also internally as part of the ongoing peacekeeping mission in the Transnistrian Region. That being said, it is important to acknowledge infantry units

in the Moldovan Army do not have the capability to be deployed independently and conduct even peacekeeping operations, and they are very limited in terms of combined arms capabilities. The only unit that is partially capable of executing these tasks is the 22nd Peacekeeping Battalion of the National Army of the Republic of Moldova. The unit was designed to execute such tasks, but through the years' multiple modifications were made in its TOE, so it no longer has the capability to match its multinational partners.

Furthermore, considering Moldova's commitments to its strategic partners, and continued desire to participate in multinational operations under the UN or NATO, the Army should consider developing the capabilities it is currently lacking. These include CBRN, EOD, sustainment, antitank, artillery, signal, and cyber that are crucial in the current operational environment under the Multi Domain Operations (MDO.) Due to its limited resources and reliance on its strategic partners, Moldova is currently able to deploy an element up to the company size, considering the fact that the unit must be formed, trained, and equipped accordingly, ready to deploy at any given time wherever the situation requires.

Finally, in this chapter the author intends to answer the secondary research questions through thorough analysis and re-evaluate the provided Initial Personal Recommendation (R1) presented in chapter 1. All initial assessments will be evaluated considering the analysis of literature reviewed and in accordance with the Research Methodology presented in chapter 3.

What are the critical capabilities the National Army must develop to support the National Security Strategy and National Defense Strategy requirements?

The Army must change; this is a strategic and fiscal reality. We are facing unexpected challenges, and declining budgets. Consequently, we must find innovative ways to generate sustained land power.

—The Honorable John McHugh, Secretary of the Army, quoted in CGSC, F101RA-Consolidated Extracts

John McHugh's statement is a very valid point that applies to any armed forces in the world. In order to obtain that, the Moldovan Army should create an element able to translate the national strategy into policies and programs that manage and resource change across the total force 62 to ensure the organization can deliver sustained capabilities and execute its constitutional tasks. Furthermore, the Army should adopt mechanisms from other institutions or their partners that are efficient and have proven useful in providing solutions, to support the execution of given tasks. Countries have adopted mechanisms from other institutions through different processes, depending on available resources, their capabilities to influence change, their national objectives, and the existing threat to the state. In the U.S. Army there are four broad lines of effort that help facilitate the development/modernization process, which are: 1) Capabilities Development is the assessment of current capabilities versus future concepts to develop solutions across the Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy (DOTMLPF-P) domains; 2) Force Development develops priorities, resources, and documents organizations based on requirements identified under the capabilities development function; 3) Materiel Development is a multi-phase process that develops and procures material for the force,

⁶² CGSC, F102RA, 1.

based on requirements identified under the capabilities development function; and 4)

Force Integration, the process that distributes personnel and equipment to build, train, and maintain readiness within the Army in support of combatant commanders' requirements. 63 The Moldovan Army contains none of these lines of effort and no institution identifies capability gaps that need to be addressed. So it is extremely difficult, or even impossible, to determine what is needed to be able to respond to the existing threat and support National Strategic Documents and the national objectives.

However, the NSS does not foresee any substantial threats of foreign aggression towards the RM although existing instabilities across Europe might directly affect the security of Moldova. In addition, the NSS also mentions an entire security sector reform and the acute necessity of the National Army's modernization. In contrast, due to its current release, the NDS states its objectives may slightly vary. The objectives are: 1) the development and consolidation of military capabilities for the efficient execution of the constitutional tasks; 2) the establishment of a mobilization mechanism; 3) strengthen the national defense system in order to anticipate, prevent, and counter threats and risks towards the state's security, especially the existing hybrid threat; and 4) improve the national emergency management system. ⁶⁴ The above mentioned objectives create the main focus areas that need to be addressed and are considered priorities in the modernization process of the Army.

⁶³ US Army Command and General Staff College (CGSC), F100: Managing Army Change, F101: Foundations of Change, F101RA-Consolidated Extracts, Common Core, CGSC, Fort Leavenworth, KS, 2018, 1.

⁶⁴ Moldova MOD, *National Defense Strategy*, 10-11.

All of the above objectives stated in the NDS are tied directly to the threat evaluated in terms of 1) Russian Federation military contingent in the Transnistrian Region, 2) informational propaganda instruments, 3) possible attacks directed at critical infrastructures of the Republic of Moldova, 4) cyber-attacks, 5) instability and the conflict in Ukraine, 6) illegal immigration, 7) illicit arms trafficking, 8) terrorist activities in the region, 9) CBRN threat, and 10) natural and technical risks. 65 In addition, considering the threat is persistent, especially the hybrid threat posed by the Russian Federation, Moldova must do something to effectively oppose the threat and it must start with a national will to resist a potential Russian hybrid threat. 66

Furthermore, even though no direction exists in Moldova's Strategic Documents, to illuminate capabilities that need to be developed, practices collected from other armies can be very useful. One is the study from the U.S. Army Center of Army Lessons

Learned that identified the 10 fundamental skills required to win the first fight by the Brigade Combat Team (BCT.) Even though the study refers to the BCT, it is clear that a battalion, especially the CAB, as part of a BCT, must be able to perform those skills as well. So, the 10 required skills are: 1) Commander-driven operations process; 2)

Combined arms breaching; 3) Decisive action in an urban environment; 4) Operations in a cyber-electromagnetic activities (CEMA)-denied environment; 5) Reconnaissance and security; 6) Digital fires capability (sensor to shooter); 7) Counterfire; 8) Chemical,

⁶⁵ Moldova MOD, National Defense Strategy, 5-7.

⁶⁶ Sergiu Cirimpei. "Moldova versus Russian Hybrid Threat: A Question of National Will" (Master's Thesis, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2016), 3.

biological, radiological, nuclear, and high-yield explosives (CBRNE) in decisive action;

9) Joint force integration and interoperability; and, 10) Sustainment in decisive action. 67

Even though, some of these skills are not applicable to the Moldovan Army due to its involvement in a global arena and possessed capabilities, some are relevant and must be considered in order to be efficient during the modernization process of the Army. Finally, in order to determine the capabilities that must be developed, some additional factors must be considered, especially the ability to: deploy anywhere required in a limited time frame, to self-sustain for a designated period of time, and to independently conduct combined arms operations.

After considering all the evidence provided by the National Strategic Documents and lessons learned from other armies, the capabilities the Moldovan Army must develop, considering its limited innovation and financial capabilities are 1) proper restructuring and slight increase in manpower; 2) modernization of infrastructure, especially training facilities; 3) gradual renewal of its equipment and vehicles fleet; 4) increased focus on cyber capabilities; 5) update of all strategic documents and draft of a new Military Doctrine; 6) increased support from the government in terms of increased defense budget allocations; and, 7) the establishment of proper instruments that are able to continuously evaluate the threat, identify capability gaps, and propose viable recommendations to address those gaps seeking material or nonmaterial solutions.

⁶⁷ Center for Army Lessons Learned (CALL), CALL Newsletter No. 17-19, *Ten Fundamental Brigade Combat Team Skills Required to Win the First Fight* (Fort Leavenworth, CALL, August 2017), iii.

Considering all objectives and requirements mentioned above, the development of an infantry unit able to conduct its constitutional tasks is the only feasible approach.

Therefore, significant trade-offs must be made in terms of mobility, protection, and firepower in addition to the legal bases required for the establishment of such units. The strategic environment, limited resources, the intention to participate in multinational operations, and prioritization of the threat, must be addressed first and should drive the decisions behind the trade-offs. In terms of combined arms, initially, the unit can perform its task by encompassing the following assets: limited intelligence collection, reconnaissance, indirect fire, signal, engineers, and sustainment in addition to the already existing light or motorized infantry units in the Moldovan Army under the current task-organization.

What was the framework prescribed by the Slovenian strategic documents for determining the size of the basic combat unit?

In order to precede and to analyze the conditions that influenced or dictated the adaptation of the idea of having the Slovenian Armed Forces (SAF) basic combat unit as a battalion sized element, it is important to mention that in SAF some sort of force management was conducted. Even today that process continuously provides the balance between national requirements and the capability gaps existing in the defense organization that limit it in successfully executing its missions and tasks. Force management, in simplest terms, is the process of providing a capable Army within

available resources by generating forces and providing units to commanders in support of national objectives.⁶⁸

After assessing that force management in SAF exists, if not in its perfect shape or form, it provides some efficient results. The reason why the author is inclined towards the imperfect force management process is because Slovenia's National Strategic Documents contain some huge differences. Some of them need to be updated or redrafted in order to depict the real operational environment, the existing threats, and provide restated national objectives. Even though there are differences among the existing strategic documents, they all provide common ground that leads towards the establishment of a basic combat unit. Slovenia's National Security Strategy states the fundamental mission of the Slovenian Military is to ensure integrity of the country's borders and national territory.⁶⁹ Slovenia's Defense Strategy indicates that SAF must maintain its readiness status and carry out common defense and international commitments. ⁷⁰ And even if both of the above mentioned documents do not indicate the size of the basic combat unit being a battalion, due to the SAF international commitments and being able to provide one Battalion Battle Group to NATO, 71 the author makes an assumption that the level of this basic combat unit is a battalion-sized element.

⁶⁸ US Army Command and General Staff College (CGSC), F100: Managing Army Change, F101: Foundations of Change, F101RB-The Professional Case for Force Management, Common Core, CGSC, Fort Leavenworth, KS, 2018, 2.

⁶⁹ Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces". A Study of the Slovenian Armed Forces," 69.

⁷⁰ Ibid.

⁷¹ Ibid., 7.

The Slovenian Resolution on Long-term Development and Equipping lists additional missions and tasks for the SAF, such as to provide dual-use capabilities for participation in protection, rescue, and relief operations during natural and other disasters, and to support other national bodies and organizations in the provision of security. The Furthermore, it states Slovenia will maintain a reasonable amount of independence and autonomy in defense regardless of being a member of the EU and NATO. Considering the fact that Slovenia is committed to honor its engagement towards NATO and must rely primarily on itself to conduct homeland defense, it is estimated that its basic combat unit must be capable of conducting defensive operations and deploying to "crisis response" or "peace support operations." Finally, the Mid-term Defense Program discusses the development of a battalion battle group unit. Sa its strategic view ahead.

Even though some of the Slovenian strategic documents reflect the creation of the SAF's basic combat unit as a battalion size element the main document that should reflect it is the Military Doctrine. But as mentioned earlier, not all of those national documents are aligned with each other and Military Doctrine, in particular, signed in 2006, does not take into account the effects of the financial crisis, or reflect a decade of changes in the operational environment. ⁷⁶ Despite the differences in those documents the Military

⁷² Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces". A Study of the Slovenian Armed Forces," 69.

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Ibid.

Doctrine states the SAF missions and tasks are: defense of homeland, participate in international operations, and reestablish national sovereignty of Slovenia (if necessary.).

As a result, the existing legal framework supports the creation of the basic combat unit in SAF as a battalion size element, and it also indicates the unit must possess the following characteristics:

- 1. Able to operate independently.
- 2. Self-sustainable for a defined period of time.
- 3. Combined arms organized.
- 4. Self-sustainable for a defined period of time.
- 5. Airmobile, deployable around the world in a defined time frame.
- 6. Dual-use (pure military operations, response to natural and other disasters.)
- 7. Organized in a manner that enhances execution of crisis response and peace support operations (integration into NATO command and control structure, interoperability with Allies.).⁷⁸

It is also important to mention that Slovenia did not change everything overnight, but after a thorough assessment of its possibilities, existing equipment, available budget for the defense institution, and objective projection of its national will, the SAF assessed they can create its principle unit based on the follow:

- 1. Existing motorized capabilities.
- 2. Limited in areas of firepower and protection and augmented as needed.

⁷⁷ Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces". A Study of the Slovenian Armed Forces," 70.

⁷⁸ Ibid., 70-71.

3. Deployed to crisis response and peace support operations with caveats on its employment.⁷⁹

All of the above-mentioned aspects with respect to the existing favorable framework in the Slovenian Strategic Documents are proof the Slovenian Government desires to support the change and assume responsibility for the successful transformation of the defense institution of the country to a capable and agile force. Therefore, Moldova might use Slovenia as an example to achieve the desired end state with a clearly defined timetable that is fully supported financially.

What measures should be implemented to solve identified shortfalls and how can they be integrated into the modernization programs?

It is vital to mention, that in contrast to the Slovenian example, the Moldovan strategic documents do not indicate the main direction the Army should take in order to be able accomplish its constitutional tasks and support all national objectives.

Furthermore, a definition such as "basic combat unit" to Moldova is strange as well. However, Moldova is committed to protect its sovereignty with its own means and continuously expresses the desire to train its forces with its strategic partners and, even more, to participate in multinational operations, predominantly peacekeeping operations. An example of such a commitment is the statement of the Minister of Defense of Moldova, Mr. Eugen Sturza, during a meeting on 18 October 2018 with a delegation of NATO parliamentary assembly led by Rasa Jukneviciene, Head of the Delegation of the NATO Parliamentary Assembly. Mr. Sturza expressed the hope that the Alliance will

⁷⁹ Himelrajh. "Basic Combat Unit of the Slovenian Armed Forces". A Study of the Slovenian Armed Forces," 71.

continue to support the reforms in Moldova's defense sector that are oriented towards creating a modern, mobile, well-prepared and equipped army that will be interoperable with NATO's allied forces. ⁸⁰

The Moldova's defense institution efforts, by themselves, are not enough to operate the desired changes, a stronger governmental support is needed and is critical in this situation. And with that said, some indicators of the government's commitment towards the modernization of its defense institution already exist in Moldova. The first one is the promulgation by the President of Moldova of the new National Defense Strategy on 2 May 2018. The President in this particular case is supported by the Prime-Minister as well, who multiple times has mentioned that under his watch, the Army will have the government's full support and assistance in obtaining its objectives stated in the new NDS. Present at the multinational exercise *Scutul de foc* — 2018", conducted at the Military Training Base of the National Army *Bulboaca* on 20 September 2018, Prime-Minister Pavel Filip mentioned that the Republic of Moldova cannot maintain a very large army, but must have one that is well-trained and professional. 81

Considering all of the above, and given the will of the actual government to contribute to the modernization of its defense institution, it is time to start identifying the

⁸⁰ Republic of Moldova, Ministry of Defense, "Delegation of the NATO Parliamentary Assembly to the Ministry of Defense," 18 October 2018, accessed 28 November 2018, https://www.army.md/?lng=2&action=show&cat=122&obj=5303#.W8qTRvlKjIV.

⁸¹ Republic of Moldova, Ministry of Defense, "Battle shots in the 'Fire Shield' exercise," Video, 20 September 2018, accessed 04 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=5242#.XFj3kPlKjIW.

existing shortfalls that need to be addressed in order to obtain the desired results. The existing shortfalls can be divided in two categories: legal and financial.

The legal issues refer to the misalignment of the existing strategic documents. First of all, apart from the NDS that was signed in 2018, all the documents starting with the NSS and finishing with the Military Doctrine are outdated and do not reflect the current operational environment. They do not point at the current security challenges Moldova is facing today, and are not related in great detail to each other. In addition, most of those documents are very general in context and a specific connection in the military documents do not exist with the NSS; furthermore, Moldova does not have a current Military Strategy. The Action Plan for the implementation of the National Defense Strategy for the years 2018-2021, clearly states in point 4.1 Development and Approval of the Military Strategy that in six months after the approval of the NDS a valid Military Strategy must be developed and approved. 82 However, that is the only document that is mentioned in the Action Plan on the implementation of the National Defense Strategy for years of 2018-2021, and there are no notes related to the Military Doctrine or to the NSS as a responsibility of the government or other entities. Therefore, all of the above strategic documents must be revised and updated to reflect the current situation that encompasses the Transnistrian Region issue and the Ukrainian conflict that can be replicated with minimum effort towards Moldova.

In addition, there is no clear guidance regarding the elements (size of the military unit or battle group) that must be capable of fulfilling all of the national security

⁸² Moldova MOD, National Defence Strategy, 44.

requirements. In addition, as mentioned earlier, it is not clear what capabilities are required, what those units should be capable of, whether they should be operating independently (conducting combined arms operations, defending the territorial sovereignty or assisting civilian administrations in case of natural emergency situations,) or participating in multinational operations. The Action Plan on the implementation of the NDS, in point 2.11.2 *Development of the necessary capacity to increase the participation in the international operations in accordance with the assumed commitments*. Moldova estimates to have a battalion size element ready for deployment in three years from the NDS approval. ⁸³ This point clearly states the size of the expected interoperable unit, so that is the main reason the author is focusing on the battalion size elements. Assuming the battalion will participate in multinational operations and considering the analysis of the literature, the unit should have the following capabilities:

- 1. Able to operate independently with a high degree of interoperability.
- 2. Self-sustainable for a limited period of time.
- 3. Combined arms organizational structure.
- 4. Dual-use (pure military operations, response to natural and other disasters.)
- 5. Organized in manner that enhances good cooperation with the strategic partners (interoperability with NATO members and its Allies.)

As mentioned above, that is not the only issue Moldova is currently facing. By having a permissive environment that does not indicate the size or special requirements for its military forces, the situation is even more confusing and ambiguous.

⁸³ Moldova MOD, National Defence Strategy, 39.

The second issue is the low budget allocated to the defense institution as a whole. As mentioned in the Table 1, p. 6, the budget allocation of the National Army is extremely low, barely sufficient to cover salaries and feed its conscript soldiers. However, the recently approved NDS and its Action Plan for years 2018-2021, point 2.1.1 *Strengthening the current operational capacity of the National Army*, indicates the budget allocation should be almost doubled by 2025, from 625.0 mln leis in 2019 to 1465.0 mln leis in 2025. ⁸⁴ The financial support is needed to support the modernization effort that includes procuring new equipment, weaponry, vehicles, and so on. The Action Plan on the implementation of the NDS, in point 2.2.3 *Endowment and equipment of the Armed Forces with modern equipment and technologies necessary for the fulfillment of its constitutional mission*, indicates this action should be accomplished in the period of 2018 – 2025, and after 2025 in increments of five and ten years after the budget allocation reaches the point of 1465.0 mln leis. ⁸⁵

After a detailed examination of the Action Plan on the implementation of the NDS, it is fair to state that the government does not foresee the modernization of the entire defense institution overnight; initially, all existing capabilities should be maintained in the limits of the existing or approved budget allocation. However, from a long-term perspective it is obvious that a majority of the aspects related to the national security tied to the defense institution will change in a positive way.

⁸⁴ Moldova MOD, National Defence Strategy, 24.

⁸⁵ Ibid., 28.

DOTMLPF Analysis and Solution Identification

The following sub-chapter will primarily be focused on the analysis of the current state of the Moldovan Army utilizing the DOTMLPF methodology. The author will point out the existing potential shortfalls that significantly impede the development of a ready, capable, and combined arms-capable units that can both provide homeland security and efficiently contribute to global peace and security. The information provided in this sub-chapter is based mainly on the author's personal knowledge and experience in the National Army, especially as a commander of the 22nd Peacekeeping Battalion. As mentioned earlier in the delimitations, the author will mainly concentrate on Doctrine, Organization, Training, and Leadership and Education out of the DOTMLPF domains.

Doctrine

The current doctrine of Moldovan Army is maintained by the J7 Doctrine and Joint Training Directorate of the General Staff, and directed towards all units across the Army with the exception of the Armed Forces Military Academy. The J7 Doctrine and Joint Training Directorate mission is to assist general planning, organize, run, and evaluate the training process within the National Army and institutions of the Ministry of Defense, as well as to train the military staff from military educational institutions. ⁸⁶ The J7 Directorate is also focused on organizing individual training, issuing proposals on supply and improvement of military security, legislation, and financial resources for educational in the Army. It also runs the development of military training programs, and

⁸⁶ Republic of Moldova, Ministry of Defense (MOD), "J7 Doctrine and Joint Training Directorate," accessed 04 February 2019, http://www.army.md/?lng=3&action=show&cat=186.

the professional development of officers, non-commissioned officers, and sergeants from military units. Arguably, one of the most important tasks of the J7 Directorate is to continuously engage in training troop commands for combat missions.⁸⁷

Considering the Directorate's limited capabilities and lack of qualified personnel during for the last a few years, the proper execution of its mission was almost impossible. As a result, units are trained using different programs that are not standardized across the Army. The current trend in the Army is that all infantry brigades are trained in accordance with the existing programs, in use from the late 90s, and some independent units have their own training programs aligned towards NATO or UN cooperation. The author, as a former battalion commander of the 22nd Peacekeeping Battalion, directed his staff multiple times to develop new programs aligned with the NATO Standardization Agreements (STANAGs) as a requirement to participate with his sub-units in the Operational Capability Concept, to which Moldova acceded in 2008. A STANAG is a NATO standardization document that specifies the agreement of member nations (or a partner nation) to implement a standard, in whole or in part, with or without reservation, in order to meet an interoperability requirement. 88 As a result, the 22nd Peacekeeping Battalion is the only unit in the Moldovan Army that trains in accordance with the NATO STANAGs and national regulation.

⁸⁷ Moldova, MOD, "J7 Doctrine and Joint Training Directorate."

⁸⁸ North Atlantic Treaty Organization, "Standardization," last updated 23 January 2017, accessed 04 February 2019, https://www.nato.int/cps/en/natohq/topics_69269.htm?selectedLocale=en.

As mentioned by LTC Radu Burduja, one positive side to the Moldovan Army's doctrine is that it is written by officers who are graduate from courses in NATO countries. 89 As a result Moldovan Army doctrine is very similar to Romanian, U.S., and NATO doctrines with regard to the existing weapons systems, specific units, and different mission sets. However, this is not enough to provide clear guidance for the Army as a whole. The previously mentioned factors have some negative effects on the Army overall, such as the Moldovan Army does not have an organization such as the U.S. Army's Training and Doctrine Command (TRADOC.) This often results in Moldovan officers have different approaches to the planning process and its application because they train in different institutions of the U.S. vs NATO, and finally, due to the lack of the common doctrinal base, Army units are trained differently having different objectives and standards. As a result, many field manuals and training materials are written without an adequate level of analysis and research. In some cases, those manuals are adopted from the Romanian Army without proper assessment and evaluation. Furthermore, all that creates confusion at the tactical and operational levels. For example, what is the planning process used throughout the Army? Is it the U.S. Army's Military Decision Making Process or NATO's Operational Planning Process? That is the question that needs to be answered before we as an institution go any further.

In spite of the significant steps the Army has made towards the implementation of some aspects of the NATO doctrine with an eye towards increasing interoperability with NATO members, there is still much to do to completely adjust the doctrine to fit current

⁸⁹ Burduja, "Transforming for Multinational Operations: A Study of the National Army of Moldova," 75.

operational needs. Creation of an organization such as TRADOC would increase the chances of having a completely useful doctrine that would respond to the current operational environment, and indicate the ways and means to achieve that.

Organization

Since its creation in 1992, the Moldovan Army has undergone a series of transformations and reforms. Due to the lack of political will and insufficient financial support, most of these reforms were just on paper without actually providing any changes to the structure of Army units. As a result, most of the Army's units remained practically unchanged. Even nowadays, just like 20 years ago, the Army structure is still based on three motorized brigades, a few independent specialized battalions, some combat support and logistic units, and limited air force and air defense units.

The last major change occurred in 2018, when reorganization of the entire defense institution created some clear delimitations between the Ministry of Defence and the National Army itself. As a result, today's mission of the Ministry of Defence is to develop defense policy, conduct the building and development of the National Army, discover military risks and threats, and respond to the needs of the national defense system to protect state security. ⁹⁰

In contrast, the mission of the Army's General Staff, as a core structure of the National Army, is to assist the Chief of National Army General Staff in commanding the

⁹⁰ Republic of Moldova, Ministry of Defense (MOD), "Mission," accessed 07 February 2019, http://www.army.md/?lng=3&action=show&cat=154.

Armed Forces. ⁹¹ What this basically means is that the Ministry of Defense is responsible for the legal and political aspects related to the entire defense institution while the Chief of Army's General Staff is basically commanding the Army by being responsible for any aspects related to its readiness, capabilities, discipline, and morale. All that is estimated to facilitate the command and control, and reduce the bureaucracy. Up to now, none of the changes in the higher echelons has affected the interoperability and the intention to participate in multinational operations, things confirmed by the most current visit by Mr. Sturza at Brussels. Mr. Sturza listed the priorities of the Ministry of Defense for 2019, including the National Army's professionalization and the reformation of the privates and sergeant's corps training system, and asked for the nation's foreign partners' support to achieve these goals. ⁹²

The most significant of all changes through the years, since the Army's creation, was formation of the 22nd Peacekeeping Battalion (PK BN) in 1999, the unit designed to participate in multinational peacekeeping operations. Even though the unit itself went through some significant changes in its table of organization, today the Army can certainly declare that the objective of the 22nd PK BN was accomplished. Most of the 22nd PK BN personnel participated in the NATO mission in Kosovo (KFOR), 93 and with

⁹¹ Moldova MOD, "Mission."

⁹² Republic of Moldova, Ministry of Defense (MOD), "Moldova-NATO Partnership, discussed in Brussels," 4 February 2019, accessed 06 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=5507#.XFtD PlKjIU.

⁹³ Republic of Moldova, Ministry of Defense, "Contingent KFOR-10 Starts Peacekeeping Missions in Kosovo," 30 January 2019, accessed 07 February 2019, http://www.army.md/?lng=3&action=show&cat=122&obj=5493#.XFzkHvlKjIU.

individual officers in the UN peacekeeping operations in Africa. The general structure of the unit was established in accordance with the NATO standards to ensure maximum interoperability that ultimately will facilitate the deployed unit's integration with its multinational partners. Even though, the general structure remained the same, especially at the staff level with staff organization in sections like S1, S2, S3, S4, etc., battalion subunits suffered dramatic changes from its original table of organization. The main changes ware dictated by the Army limitations in personnel that resulted in chipping out subunits in order to meet the requirements without considering the unit's capabilities and its mission. Furthermore, all the units including the General Staff of the National Army adopted the NATO HQ nomenclature of the sections such as G1/J1, G2/J2, G3/J3, G4/J4 etc., but the combat subunits all have different tables of organization dictated predominantly by the existence of the vehicles on the Army balance. The Moldovan Army unit's organization contradicts the entire process of force development that defines military capabilities, designs force structures to provide these capabilities, and produces plans and programs which, when executed through force integration, translates organizational concepts based on doctrine, technologies, materiel, manpower requirements, and limited resources into a trained and ready Army. 94

All of the differences mentioned above create one of the biggest issues related to the organization of military units, to have a few units (22nd PK BN and possibly the Special Forces Battalion) structured to meet the minimum requirements for deployment to NATO or UN missions. Furthermore, those differences create a huge

⁹⁴ CGSC, F102RA, 23.

obstacle in assuring cooperation among Army units to accomplishment its constitutional role to defend the country's sovereignty and protect its population from any threat.

Even though the Army took significant steps forward, from the organizational perspective, it must continue to work towards developing a standardized structure for its infantry units that will facilitate cooperation at a national level between its units and ensure maximum interoperability while deployed in multinational operations. This work can be accomplished with some minor adjustments to the table of organizations of Army units, regardless of the type of vehicles some units have in their possession, with limited financial contribution. However, this is potential short-term solution, and for the long term, Moldova must make some critical decisions. They must start supporting the Army financially in order to modernize its equipment, weapons, and vehicles, and continue to contribute to its commitments to participate in multinational operations with battalion size elements on a rotational basis.

Training

Training in the Moldovan Army has always been an issue. The lack of resources or an outdated set of training sites negatively impacts it. As a result, the Army units are not trained accordingly and that ultimately affects their readiness status and ability to quickly react. However, for the last few years the level of training increased in terms of quantity and quality due to the successful cooperation with NATO and in particularly with the U.S. During his last visit to Brussels and Mons, the Minister of Defense of Moldova, Mr. Eugen Sturza discussed the strategic partnership with U.S. and NATO respectively, focusing on the subjects such as: Defense Capabilities Building Initiative (DCBI), Interoperability Platform, OCC, Individual Action Plan of the partnership

Moldova-NATO, Professional Development Program (PDP,) ⁹⁵ and others. The minister also mentioned that all of the above projects contributed significantly to the development and strengthening of the national defense system.

There is another factor that also contributes positively to the training, the mindset possessed by the Army leadership. Predominantly, starting from 2009, the leadership of the Ministry of Defense and the General Staff of the National Army are graduates of U.S. Army Command and General Staff College (CGSC), U.S. War College, Baltic Defense College, and other higher professional military education (PME) institutions from NATO countries. ⁹⁶ Even though, that is not enough to have continually efficient training, due to the lack of resources, it at least directs the training in the correct direction, and comprehensively provides the theoretical part of training.

Moldova benefits enormously from multiple programs with its strategic partners, especially from a large variety of specialized and PME courses offered by U.S. and NATO. As a result, the training progresses, especially at the tactical level. Besides the courses offered by Moldova's strategic partners, a variety of Mobile Training Teams (MTT), Joint Combined Exchange Training Teams (JCET), Advisory Teams and others visit Moldova annually to train Moldovan military. Another important element that must be mentioned is the "train the trainer" courses from which Moldova has benefited a lot,

⁹⁵ Republic of Moldova, Ministry of Defense (MOD), "Advancement of strategic dialogue Republic of Moldova – NATO discussed in Belgium," 5 February 2019, accessed 06 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=5513#.XFtEtvlKjIU; Moldova MOD, "Moldova-NATO Partnership, discussed in Brussels."

⁹⁶ Burduja, "Transforming for Multinational Operations: A Study of the National Army of Moldova," 78.

and as a result was able to develop and conduct training courses on its own, using national instructors. ⁹⁷ A good example are Advisory Visits of the Baltic countries that contributed to the initial development of the non-commissioned officers (NCO) Course, both basic and intermediate. However, that was only the first step in the development of the NCO corps.

Furthermore, Moldova has an ambition of creating a Sergeant Training

School in line with international standards and the subject was also discussed in Brussels

by Minister Sturza. ⁹⁸ The entire professional reorganization of the NCO corps to include

the creation of the NCO school was discussed in Brussels and for which the Minister

Sturza asked for support from Moldova's foreign partners in order to achieve these

objectives. ⁹⁹ Another example is the Special Forces Qualification Course set up in

Moldova by the officers and NCOs who graduated from Special Forces Qualification and

Ranger Courses in the U.S. ¹⁰⁰

Also, as a result of a productive and fruitful cooperation with strategic partners, Moldova benefits from participation in multiple multinational exercises. Besides training its military personal, the Army is also testing its ability to cooperate with its partners by more frequently involving its vehicles in the training. Transporting vehicles oversees also

⁹⁷ Burduja, "Transforming for Multinational Operations: A Study of the National Army of Moldova," 78.

⁹⁸ Moldova MOD, "Advancement of strategic dialogue Republic of Moldova – NATO discussed in Belgium."

⁹⁹ Moldova MOD, "Moldova-NATO Partnership, discussed in Brussels."

 $^{^{100}}$ Burduja, "Transforming for Multinational Operations: A Study of the National Army of Moldova," 79.

contributes to create a proficient staff capable of planning and organizing the deployment of its forces, even though with only small elements initially. A good example of that is the participation at the Platinum Eagle 18.1 multinational exercise conducted 11-17 February 2018 at the Babadag Training Center, Romania. Moldova participated with a contingent of 60 personnel and 12 HMMWVs..¹⁰¹

Moldova participated at the multinational exercise, Sea Breeze 2018, conducted 9-21 July 2018 at the Training Center, Shirokiy Lan, Ukraine, with 80 personnel and 15 HMMWVs. 102 and is another example of commitment and working towards obtaining interoperability and success in professionalizing its Army. All of those exercises, in which Moldova participates more often in the last a few years, have proved to be of extreme value for the Moldovan military. The value is not only observed at the tactical level, but also at the operational level. They gave Moldova's officers multiple opportunities to be part of large multinational exercises, observe the process, study it, and implement it in the training process either in garrison or at the Army's training centers (located in Cahul, Bulboaca, Ungheni, and Balti.) As a result, besides successful participation at the multinational exercise conducted overseas, the Moldovan Army organizes a series of exercises at home. They are usually focused on decisive action. For

¹⁰¹ Republic of Moldova, Ministry of Defense, "Moldovan Service members at 'Platinum Eagle' Multinational Exercise," 9 February 2018, accessed 06 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=4777#.XFtXvPlKjIU.

¹⁰² Republic of Moldova, Ministry of Defense, "National Army Participates in 'Sea Breeze' Exercise'," 6 July 2018, accessed 06 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=5106#.XFtZxvlKjIU.

a national exercise, a battalion level offensive, defensive or even stability operation, ¹⁰³ with some limited resources, is something regularly planned and executed, followed by several days of stability operations.

Even though the Moldovan Army units participate in multiple exercises overseas and in a series of national exercises, there are still multiple obstacles that impede the successful execution of training. Especially at the national level, the main impediments are: minimal training resources, inadequate and poorly equipped National Training Areas, and the limited size of the training areas.. ¹⁰⁴ Therefore by increasing its participation in multinational exercises overseas, the Army executes a balance between its limited national training capabilities and resources. There are great training opportunities that are derived from being part of a multinational exercise conducted in large areas that simulate real distances and employ all weapons systems of a real operational environment where the NATO forces and its allies operate today.

Leadership and Education

The leadership and education domain in the Moldovan Army has developed significantly over the past 8 to 10 years. That was possible through cooperation programs with NATO and other bilateral agreements with countries such as the U.S.A., Romania, Italy, Lithuania, and many others that are continuously establishing new strategic objectives that Moldova is willing to accomplish. In this sub-chapter, the author will

¹⁰³ Burduja, "Transforming for Multinational Operations: A Study of the National Army of Moldova," 79.

¹⁰⁴ Ibid.

analyze the current state of the above mentioned leadership and education domain in the Moldovan Army.

The leadership and education domain, as the training domain, benefits from having a large number of officers and NCOs who have completed their professional education abroad. The value and the quality of education received by Moldovan officers abroad is absolutely vital and unquestionable. Today, most of the senior leadership of the Moldovan Army conducted their PME in countries such as the U.S.A., Romania, Germany, Baltic States, and Greece. This includes the senior officers and civilians from the Ministry of Defense, General Staff of the National Army, and unit commanders.. ¹⁰⁵

Furthermore, this not only contributes to development of the leadership style characteristic to the western armies, but most importantly supports the development of organizational-level leadership. This is a complicated definition for the Moldovan Army to grasp due to the large numbers of individuals who are under the effect of the former Soviet military mentality. However, in contrast to the "old school", the new organizational-level leaders contribute significantly to the development of the Moldovan Army. This is done by often developing programs, plans, and policies, making complex concepts understandable for the organization, and anticipating organizational friction points and mitigating them, even though some of them will not occur during their tenure due to long implementation timelines. ¹⁰⁶

¹⁰⁵ Burduja, "Transforming for Multinational Operations: A Study of the National Army of Moldova," 82.

¹⁰⁶ US Army Command and General Staff College (CGSC), L100: Developing Organizations and Leaders, Lesson L101 Developing Organizations and Leaders,

The educational aspect of the Moldovan Army's personnel is emphasized and mentioned at any bilateral or strategic level discussion conducted by Moldovan officials.. ¹⁰⁷ As a result, due to IMET and other similar programs and agreements that allow Moldovan officers to accomplish their professional education abroad, the number of officers that have graduated from foreign military educational institutions is quite significant. This positively influences the leadership style of officers who have attended only national institutions and have never left the country, particularly the young lieutenants that just graduated from the Moldovan Military Academy "Alexandru cel Bun." After they graduate from the Military Academy and reach their respective units, they are influenced by their commanders who often are graduates of one of the foreign institutions and normally promote the leadership style learned in those institutions. It is important to mention this is the current trend in the Moldovan Army and there are multiple exceptions that do not exactly follow the described model.

In addition, national PME registered significant steps forward as well, predominantly with the help of Moldova's strategic partners. In 2013, Armed Forces Military Academy "Alexandru cel Bun" was accredited for scientific work and research in the field of "Insurance of National Security - Landmarks for the Republic of Moldova." ¹⁰⁸

Reading E-Crossing the Rubicon: An Introduction to Organizational-Level Leadership, Common Core, Fort Leavenworth, KS, CGSC, 2018, 3.

¹⁰⁷ Republic of Moldova, Ministry of Defense, "Moldovan-Romanian cooperation plan signed at the Ministry of Defence," 29 January 2019, accessed 08 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=5488#.XF4ArPlKjIU.

¹⁰⁸ Armed Forces Military Academy "Alexandru cel Bun," "Armed Forces Military Academy acquired the accreditation," 20 December 2013, accessed 08 February

After its accreditation, besides the basic courses, advanced courses, and staff officers courses, the Military Academy provides Master Degree Programs, Strategic Studies and Defense Security Programs, and a Doctoral School. ¹⁰⁹ The last three are equivalent to the U.S. Army Graduate degree studies (18 months, equivalent of CGSOC), Post-graduate studies (3 to 4 months, equivalent of U.S. War College), and a PhD program (3 to 4 years.) As mentioned earlier by the author, this success in the PME field at the national level was accomplished with great assistance from Moldova's partners. Therefore, all national courses were built based on the U.S. and NATO models that ultimately ensured a high level of interoperability with NATO partners.

As one can imagine at this early stage, with significant financial restraint, national education clashes with some issues that require improvement. Those issues are manifested in terms of lack of qualified and experienced instructors, lack of adequate technological assets in support of the educational process, limited access to the international sources, and last but not least, implementation of the lessons learned identified by other military educational institutions of Moldova's partners. In addition, it is important to mention that if the officers' educational process is aligned to the international standards at some degree, the NCO core PME is still in the development phase, the process that is the defense institution's focus as one of the primary objectives for the fiscal year 2019.

^{2019,} http://www.academy.army.md/2013/12/o-remarcabila-realizare-stiintifica-a-academiei-militare-a-fortelor-armate-alexandru-cel-bun.

¹⁰⁹ Armed Forces Military Academy "Alexandru cel Bun," "Education," accessed 08 February 2019, http://www.academy.army.md/studii.

Overall it is fair to say that the Leadership and Training domain has developed significantly in recent years, and with continuous financial support the identified shortfalls can be easily overcome in the near future. The most important part of this domain is it creates a high level of interoperability of Moldovan Army with its partners.

Army Force Development Process

Force development, in general, is the starting point, rationale, and underlying basis. ¹¹⁰ for establishing the Army's most suitable force structure. It is a process that consists of: defining required military capabilities, designing the force structure needed to implement those capabilities, and providing trained and ready forces for the Army. ¹¹¹ The main goal of having trained and ready forces, is achieved through providing concepts based on the threat, doctrine, technologies, materiel, manpower requirements, and limited resources. ¹¹² It is important to mention, that this Force Development Process is very well suited for large organizations and have proven very effective through the years in most of the leading countries to maintain their ready and trained forces as a guaranty for global security. In the U.S. Army the Force Development Process consists of five phases: 1) Develop capabilities; 2) Design organizations; 3) Develop organizational models; 4)

¹¹⁰ US Army Command and General Staff College (CGSC), F100: Managing Army Change, F104: Determine, Document, and Resource Organizational Authorizations, Reading F104RA- The Army Force Development Process, phases IV-V, Common Core, CGSC, Fort Leavenworth, KS, 2018, IV-V, 1.

¹¹¹ Ibid.

¹¹² Ibid.

authorizations...¹¹³ One may question the application of such a complex process to a small organization such as the National Army. It might be the case, however, a small organization like the Moldovan Army must understand the process of building capabilities and their steady implementation in order to provide some reliable mechanism to determine gaps, analyze capabilities, and recommend organizations to cover those gaps within existing financial possibilities.

The U.S. Army, for example, has multiple organizations involved in the process, each is responsible for one of the above-mentioned phases, and for the production of specific documents. Organizations such as: TRADOC, Army Capabilities Integration Center (ARCIC), and U.S. Army Force Management Support Agency (USAFMSA) that do not exist in the Moldovan Army, play a significant role in the process to allow commanders to concentrate on strategic, operational, and tactical level issues. TRADOC particularly, has the greatest responsibility being in charge of multiple existing subprocesses such as Functional Area Analysis (FAA), Functional Needs Analysis (FNA), Functional Solution Analysis (FSA), and Post Independent Analysis (PIA) that are vital to determine the required capabilities in accordance with all strategic guidance received particularly for the Army, mainly conducted in Phase 1. As a result of the existing intense and complex process, the following documents are developed and considered: Unit Reference Sheet (URS), Force Design Update (FDU), and basis-of-issue plan (BOIP), as part of a Total Army Analysis (TAA.) These documents and processes are completely unfamiliar to the Moldovan Army language. However, the lack of the above-mentioned

¹¹³ CGSC, F104RA, 1.

entities does not necessarily indicate that military units do not have a Table of Organization and Equipment (TOE) generated by the existing processes in order to respond to national requirements.

Considering the Moldovan Army's inexperience in this field and its current structure, there are a few directorates in the Army General Staff that could execute the initial responsibilities of TRADOC, ARCIC, USFMSA, and others in order to produce organizations ready to respond to the national needs. The J3 Operations Directorate is responsible for the development of the operational plans; employment of the Armed Forces (particularly the National Army) during peacetime, crisis situations, and war; and to test the combat readiness of the Army units. 114 With additional manpower, the J3 Operations Directorate could easily be involved in providing better understanding of required capabilities based on the current situation observed by the directorate working groups and Army units' reports. The J1 Personnel Directorate is responsible for the management of active human resources based on operational requirements, supply of human resources to the military units, and development of current and future requirements for the Army 115 in cooperation with the J3 Operations Directorate, could provide a valid TOE for the newly created or reorganized organization. In this regard, in cooperation with the J4 Directorate of Logistics, created TOE should reflect the reality in terms of available resources in the Army. J4 Directorate of Logistics has a mission to

¹¹⁴ Republic of Moldova, Ministry of Defense, "J3 Operations Directorate," accessed 17 February 2019, http://www.army.md/?lng=2&action=show&cat=182.

¹¹⁵ Republic of Moldova, Ministry of Defense, "J1 Personal Directorate," accessed 17 February 2019, http://www.army.md/?lng=2&action=show&cat=181.

plan the defense resources for the National Army needs, and to make recommendations to correlate available resources with existing capabilities. Furthermore, the directorate is responsible for the coordination of existing Army strategic plans with respect to the existing capabilities. ¹¹⁶

To support the successful implementation of the entire process, the following should always be considered: Army objectives must be nested with national objectives and after the TOE approval, the desired "unit type" will enter into the resourcing phase, ¹¹⁷ arguably the most important phase of the entire process. During these phases organizations appear with balanced and affordable force structures, which support the strategic and operational planning guidance. Also, during this phase a significant emphasis is put on the financial aspect, evaluating existing possibilities versus constraints, and their relevance to the strategic objectives.

Considering all of the above mentioned, and the existing limited financial support to the Defense Institution as a whole, things not change significantly in the near future with respect to the force development process, but it must be considered and identified as an existing shortfall that must be addressed as soon as possible. Therefore, as mentioned by the author, the key for eventual success is cooperation among the existing directorates (J1, J3, J4, and all others) with external assistance. This option has been previously used in different programs and perfectly fits the short-term planning scenario. However, for the long-term, existing methodology could be applied only with the full commitment of

¹¹⁶ Republic of Moldova, Ministry of Defense, "J4 Logistics Directorate," accessed 17 February 2019, http://www.army.md/?lng=2&action=show&cat=183.

¹¹⁷ CGSC, F104RA, 1.

the Defense Institution as a whole and with the "generous" support of Moldova's Government.

Evaluation of the R1: Initial Personal Recommendation

In this sub-chapter, the author will evaluate the R1: Initial Personal Recommendation, through the lenses of:

- 1. Provisions of the Moldovan Constitution and NSS.
- 2. Provisions of the NDS and the Action Plan on the implementation of the NDS for years of 2018-2021.
- 3. Military Doctrine.
- 4. Combined Arms Concept.
- 5. Resource availability.

The author will start the evaluation of the R1 through the lenses of the Moldovan Constitution and NSS are focused on providing a connection between the documents in terms of having nested objectives that support the national security. In this regard, the Constitution of the Republic of Moldova is clearly stipulating in Art. 57, that the Armed Forces of the country are responsible for the national defense, border protection, and law enforcement activities, when the situation requires and within the legal framework provided by the respective entities. ¹¹⁸

Shifting towards the NSS, a clear connection can be followed, and in the NSS section 2 *National interests and security policy*, it clearly states in order to obtain its national interest, it is vital for Moldova to assure and defend the independence,

¹¹⁸ Republic of Moldova, Constitution of the Republic of Moldova.

sovereignty, territorial integrity, inalienable borders of the state, citizens' safety, respect for and protection of human rights and freedoms, and the consolidation of democracy, which enables the development of a rule of law and an economic market. It also states that pursuit of these interests is an absolute priority in the security policy of the Republic of Moldova. ¹¹⁹ Furthermore, in order to obtain its interests, in NSS section 3

Strengthening national security through foreign policy and defense policy, a clear emphasis is put on the EU integration process, cooperation with NATO, bilateral cooperation in the security domain, and promotion of the defense policy. With respect to the promotion of its defense policy, Moldova should:

- Deter and, as appropriate, reject an armed aggression by conducting defense operations (combat actions);
- 2. Ensure airspace control and management;
- 3. Support civil authorities in managing exceptional situations;
- 4. Participate in peacekeeping missions, including international ones, and humanitarian missions. 120

Finally, in the NSS section, 4 *Ways of providing national security*, among social tasks, a great emphasis is put on the Moldovan Armed Forces by:

- 1. Managing Transnistrian conflict issues and withdrawal of the foreign troops;
- 2. Preventing, managing and eliminating the effects in the event of natural disasters, environmental pollution and techno genic accidents;

¹¹⁹ Parliament of the Republic of Moldova, *National Security Strategy of the Republic of Moldova*.

¹²⁰ Ibid.

- 3. Providing information security;
- 4. Managing entire State Border in an integrated manner;
- 5. Combating terrorism, and;
- 6. Researching threats, risks and vulnerabilities with impact on defense capability and national security. 121

Regarding national interests, objectives, and national security, the organization outlined in R1, with the respect to homeland security, has the capacity to execute all tasks related to those objectives and would increase the defense capability of the Moldovan Army. All units will have significant combat power in terms of personnel and equipment and will operate on a common basis, to significantly increase their level of cooperation. With the respect to participation in peacekeeping and humanitarian missions, the Moldovan Army could easily declare a battalion level element and have ready forces to assure its timely rotation and continuity. The structure of the unit would provide enough manpower in the unit's headquarters that will ultimately provide effective command and control of its subordinate sub-units.

In addition, the structure provided in R1, with its organic enablers, would be capable of conducting a wider array of operations and would offer more flexibility than the current structure of the infantry units in the Moldovan Army, which are significantly smaller in terms of personnel and organic enablers. Finally, with respect to support provided to civil authorities in managing events of natural disasters, the task organization of the unit provided in R1 does not consider any organic specialized dual-use teams and

¹²¹ Parliament of the Republic of Moldova, *National Security Strategy of the Republic of Moldova*.

equipment to be used during such situations. However, the unit can provide a working force, which is frequently required from Moldovan Army personnel in times of natural disasters and other activities in support to local civil authorities. In addition, some minor transport, engineer, surveillance, reconnaissance (UAS), and medical assistance may be provided and, through the years, those particular capabilities have proved to be vital for the success of the operation.

It is important to mention the current task organization of the 22nd PK BN for example, provides the TOE for an infantry company with up to 75 individuals. That number does not provide sufficient personnel in terms of establishing a command cell; however, it will create a sufficient number of teams that can work in shifts and provide a feasible rotation for the designated teams. The reason for having a big emphasis on this particular task is due to its continuous applicability, even today when Army special teams are ready to provide different type of assistance in terms of vehicles and personnel to support the civil authorities to help a population in need. The author focused on the objectives that are related to the Armed Forces as a whole, however there are entities besides the Army that have a significant role in contributing to national security. Therefore, the design of the infantry battalion proposed in the R1 can achieve all those national objectives. The NSS also states additional objectives that require involvement of other governmental entities besides the Ministry of Defense.

¹²² Republic of Moldova, Ministry of Defense, "National Army ready to act in snow affected areas," 11 January 2019, accessed 10 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=5461#.XGBNeflKjIU.

The author will continue the evaluation of the R1 through the lenses of the NDS provisions and the Action Plan on its implementation for the period of 2018-2021, which demonstrates a more comprehensive approach towards assuring national security with clearly stated objectives. In its current publication, the NDS describes the defense domain as a dynamic one, having a complex and multidimensional character, directly dependent on the political, administrative, economic and cultural realities, processes and phenomena of the state. ¹²³ Furthermore, in the NDS Chapter 1, *Strategical context*, are specifically mentioned the following national interests:

- 1. Securing the sovereign, independent, unitary and indivisible character of the state.
- 2. Ensuring stable and sustainable state development.
- 3. European integration.
- 4. Territorial reintegration.
- 5. Prosperity and welfare of citizens.
- 6. Contribution to the international security. 124

It is important to mention as well, that due to its recent development, the NDS are the only strategic documents that describe the threat in an accurate and detailed Manner. They clearly indicate threats under the NDS section of *Threats and risks*, which takes into consideration all the threats starting with the issues of the Transnistrian Region, pointing at the Ukrainian conflict, and even illegal immigration that affects the entire

¹²³ Moldova MOD, National Defence Strategy, 2.

¹²⁴ Ibid., 3.

Europe. Last, but not least, the risk of natural disasters is mentioned as well. 125

Having observed a connection between the NDS and other documents described earlier in the current subchapter, it is clear that even as the NDS is currently published the tasks are nested to the national objectives stated in the NSS. The proposed unit structure in the R1 would respond in a similar manner to all the needs directed to the Army as a whole. In addition, to accomplish national interests, from 2 to 6, basically the NDS directs the Army to support other national bodies and organizations in the existing security framework. Therefore, the structure provided in the R1, does not reflect the ability to execute some related tasks. However, the unit will be trained and equipped to support those interests through different programs and activities directed by the government.

It is also important to mention that the Action Plan on NDS implementation for the period of 2018-2021 does not indicate that the NDS objectives will be accomplished by the end of 2021. For example, the financial support is described in clear figures all the way through 2025 (from 625.0 mln lei in 2018 to 1465.0 mln lei in 2025.). Therefore, the objectives that are dependent directly on the budget cannot be executed by the end of 2021. Furthermore, the Action Plan point 2.1.2 *The sustainable development of the national defense sector in line with the requirements of the new configuration of forces*, has to be executed after 2025.

¹²⁵ Moldova MOD, *National Defence Strategy*, 5-7.

¹²⁶ Ibid., 24.

¹²⁷ Ibid., 25.

The most important part is probably that most of the objectives indicated in the plan have to be accomplished within the limits of the allocated budget, and eventually get better as the budget for the defense institution increases. A good example would be the Action Plan point 2.1.6 that updates the calculation algorithm and completes the state reserve and mobilization; it clearly states that in two years, with the existing budget allocation, the objective should be accomplished. Now, as one can imagine, the mobilization and reserve systems that do not work at this time cannot be physically fixed in two years with such limited resources. As a result, some of those objectives need to be revised but those related to the Army directly will have to be accomplished by reorganizing the existing capabilities. Therefore, the proposed structure of the unit, which is a light infantry battalion, might not be completely feasible due to the fact that the Moldovan Army has some motorized and mechanized capabilities as well.

Further, the author will conduct an evaluation of the R1 through the lenses of military doctrine does not actually bring something significantly different. The existing Military Doctrine points at the importance of maintaining operational readiness, executing appropriate and adequate training, maintaining the necessary reserve, and having ready forces to deploy them as needed internally or abroad. All of those are direct responsibilities of the National Army General Staff. Therefore, the proposed structure in the R1, assuming adequate and realistic training, should be capable of conducting defensive operations and only limited offensive operations due to the lack of firepower and protection capabilities.

In addition, it is important to mention the Army's limited sustainment capabilities that will have to be addressed as well at the Army and governmental levels. However,

this subject can serve as a separate research topic for other researchers. With respect to the combined arms concept, the author considers that the combination of light infantry elements with engineer, sniper, mortar, UAS, sustainment, medical, and air defense elements that are part of the proposed task-organization in the R1, satisfies the combined arms requirement.

Finally, the author's evaluation of the R1, through the lenses of resource availability indicates the existing dilemma in terms of "existing" versus "required" resources that support the transformation of the task organization of the existing infantry units to the proposed structure that will support the national strategic objectives. The main decision that must be made is whether the task-organization should be built with a light infantry unit or motorized unit as a base. The reason for that is due to the existing trend in the Moldovan Army of keeping old Soviet equipment in the existing brigades (armored personnel carriers such as BTRs and TAB-70, and infantry fighting vehicles such as BMPs) and equipping its specialized independent battalions with High Mobility Multipurpose Wheeled Vehicles (HMMWVs) that were donated by the U.S. Government in 2014 (43 vehicles). 128 and in 2017 (41 vehicles.). 129

¹²⁸ Republic of Moldova, Ministry of Defense, "The US government donated a batch of military technology to the National Army," 12 November 2014, accessed 10 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj= 3021#.XGB5tPlKjIU.

¹²⁹ Republic of Moldova, Ministry of Defense, "Donation of US military technology to the National Army," 15 February 2017, accessed 10 February 2019, http://www.army.md/?lng=2&action=show&cat=122&obj=4234#.XGB7HflKjIU.

Comparison of Light Infantry Versus Motorized Infantry Organization Mobility

The biggest disadvantage of a light infantry organization equipped with HMMWVs is that of having limited teams and insufficient manpower to protect the vehicles. In the 22nd PK BN, the current size of an infantry squad is five individuals, including the commander, the driver and the gunner, which leaves the squad with two individuals as ground combat power to execute tasks and provide internal security. The size of a motorized squad is nine individuals, a significantly larger force capable of a larger variety of tasks that has stronger protection provided by an armored carrier.

Firepower

A BTR-80 armored personnel carrier (APC) is equipped with a 14.5mm KPVT anti-aircraft heavy machine gun, a 7.62mm general purpose coaxial machine gun, and 6 smoke grenade dischargers. In contrast a light HMMWV in the Moldovan Army is equipped with a 12.7mm DShK heavy machine gun. It is also important to mention that that the HMMWVs are more suitable for the Moldova terrain, which represents a hilly terrain with a subtle slope south toward the Black Sea and elevations never greater than 430 m. However, the HMMWV is a new dimension for the Moldovan auto-world therefore providing units with the required spare parts for maintenance creates a dilemma versus having easy access for the spare parts for the old Soviet equipment. As one can imagine, if the vehicle cannot move, it has no firepower capabilities.

Protection

The existing APCs offer a greater protection against small arms, up to a 7.62mm caliber, versus the HMMWV, which does not provide any and relies on the crew to use their own protective equipment, which in the Moldovan Army is also a significant issue. Therefore, it is correct to assume that APCs offer more protection to their personnel in any type of operational environment.

Looking at Moldova's continuous desire to participate in peacekeeping operations under UN or NATO supervision, it is safe to say that the deployment of Moldovan forces with HMMWVs would increase their level of interoperability and also simplify the sustainment portion of the deployment by being supported by some of its partner nations. That does not necessarily mean that all units should be deployed with their own vehicles; however, the Moldovan Army must find the most efficient way of maintaining those vehicles in any theater of operations. Arguably, for a light infantry unit, the logistics footprint is significantly smaller, favoring exploitation of a light infantry unit in operations with restricted and severely restricted terrain.

Currently, there are no indicators in favor to a light infantry organization over a motorized one or vice versa. First of all, as mentioned earlier, Moldova has only 84 HMMWVs and those were received from donations so Moldova did not commit to purchase a certain number of vehicles as part of the Army modernization process. Therefore, to rely solely on HMMWVs is absolutely impossible due to the uncertainty around them, predominantly caused by the lack of spare parts for them and their production year (most of them are second generation vehicles.) At the same time, the old Soviet equipment is not to be trusted, they are old and their period of use has expired.

However, considering the current situation in the defense sector and limited financial support from the government, until 2025, things in this area will not change significantly. Therefore, the Army must adapt to the existing situation and make some correct decisions by establishing clear priorities for its modernization, while being able to maintain the interoperability with its partners with the current equipment.

The only consideration with reference to the light infantry units equipped with HMMWVs is that their current manpower of 75 personnel is not sufficient to accomplish any missions. As a result, their number of personnel must be increased at least up to 140 or 150, and that would require a significant vehicles allocation to those particular units. Vehicles that the Army does not have today. As a result, the possibility to balance the existence of the equipment in the current units in terms of light infantry or motorized infantry bases could be a solution, a solution that would provide a possibility to focus existing limited financial resources in fields that are completely undeveloped in the Moldovan Army. Those fields would be modern antitank weapons systems, unmanned aerial systems, and specialized engineering equipment. With a slight increase in the budget allocation these shortfalls can be overcome by the end of 2021, as stated in the Action Plan of the NDS implementation.

R2: Informed Position

The R2 is an outcome of the R1 that was analyzed and evaluated in accordance with the Research Model presented in chapter 3. As a result of the evaluation, three main issues were identified:

- 1. Purpose of an infantry unit in the Moldovan Army (prepared predominantly for Transnistrian Region issues, provide assistance to the national authorities, or participation in the multinational peacekeeping operations.)
- 2. The unit's base structure (based on light infantry or motorized infantry organization.)
- 3. Mission command (initial multiple subunits in an infantry organization.)

With reference to the first issue, based on the initial assessments, the situation around the Transnistrian Region will not significantly change. Therefore, the Internal Peacekeeping Mission will remain one of the most important tasks of the Moldovan Army. Furthermore, the present frequent involvement of the Army to assist civil authorities in handling national disaster situations and continuous emphasis of the governmental coalition on the Army roll in such situations, is a direct indication that this situation will continue. Also, the Army elements will continue to assist civil authorities, when called, during times of natural. However, considering NDS objectives, the Army's goal to participate in multinational peacekeeping operations with battalion size elements will require larger financial allocations. Therefore, the priorities are: Transnistrian Region, assistance to civil authorities, and participation in multinational operations.

Considering the second issue and the Army's goal to support a major transformation, the following is the most suitable combination for the Moldovan Army. Some of the independent battalions (22nd PK BN) will be based on a light infantry organization, while the battalions in the three motorized brigades will be based on a motorized infantry organization. That will not require a major initial investment in the Army and will allow the units to focus more on training at that stage.

Finally, the third issue determined by the author is referred to as mission command within the organization itself. Initial concern is the HHQ Company, which encompasses more than six elements, a company commander can exercise effective control over a maximum of six elements. As a result, to make the command and control structure more efficient and also to contribute to the employment of the existing fire power, the sniper teams will be reassigned as organic elements to the infantry companies.

In addition, the mortar section will be part of a Fire Support Coordination

Platoon, which will be composed of mortar and antitank elements. To ensure a

"combined arms" concept, the mortar battery as part of a battalion task-organization will

be established as well. However, other enablers, such as engineers will be reduced in size,
enough to provide initial mobility and survivability to the entire element. Control of the
various elements will facilitate a successful execution of any given mission, providing
each element has enough manpower to support civil authorities in case of natural
emergences or disasters. Furthermore, the new task-organization will facilitate the
command and control down to the smallest element, allowing the executive officer to
focus on HQ and Combat Support Elements, the first sergeant on logistics and health
care, and finally the commander on his or her maneuver elements and direct fire
employment.

REVISED RECOMMENDATION

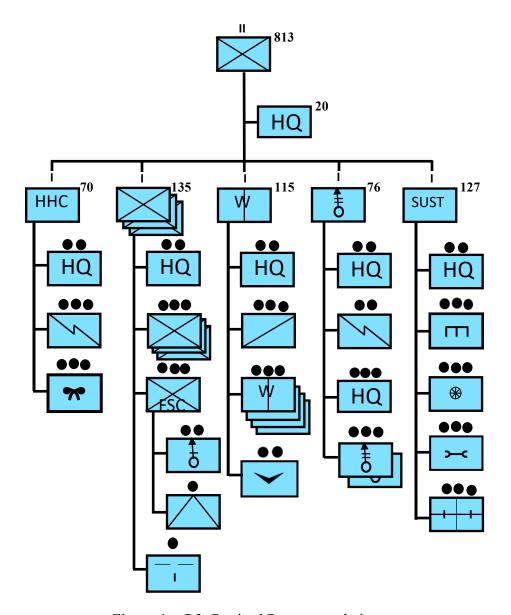


Figure 4. R2: Revised Recommendation

Source: Created by author using symbols from Headquarters, Department of the Army, Army Doctrine Reference Publication 1-02, *Terms and Military Symbols* (Washington, DC: US Government Printing Office, 16 November 2016).

Chapter Summary

As one can observe, there is a significant difference between the R1 and R2 unit designs. However, based on a detailed analysis, the author determined that the unit taskorganization proposed in the R2 should be based on light infantry or motorized infantry formations. The main reason is the limited resources available in terms of vehicles and weapons systems, a situation that will not change significantly in the near future. The limited numbers of BTRs, BMPs and HMMWVs are the main reason to have a mixture of light and motorized units. With the current limited defense budget, Moldova will not procure any new combat vehicles, weapons systems, or special equipment earlier than 2025, according to the NDS. In addition, utilizing the existing vehicles augmented with enablers that can be transported on the existing old Soviet wheeled vehicles, will not affect the existing budget significantly; the main issue is the number of personnel that must meet authorized requirements for the Army as a whole. Furthermore, the recommended number of personnel would result in a more realistic employment of the Army in ongoing Transnistrian Peacekeeping Operations, to provide support to civil authorities in case of an emergency, and to train ready forces able to participate in multinational peacekeeping operations. In the regard to the last task, units can be easily deployed with HMMWVs, vehicles that have proven their interoperability with Moldova's partners multiple times. The main organizational change between the R1 and R2 is the establishment of the mortar battery, the Moldova 120mm mortar-based unit, which also responds effectively to the combined arms concept.

The same detailed analysis pointed to the fact that the recommended unit structure will successfully accomplish any given task by supporting all national objectives.

However, a reliance on the higher echelon in terms of providing sustainment will be significant, especially if the unit will be an independent battalion that must be deployed independently to accomplish its constitutional tasks.

Currently, the Moldovan Army does not have personnel approval and necessary resources (prepositioned somewhere) to support the creation of the recommended task-organizations in the R2. However, with an initial investment in small UAS, special engineering equipment, and an update of the existing weapons and weapons systems, a significant step forward would be accomplished. It is also important to mention if the Army needs its units to be able to execute its tasks in a very efficient manner, the personnel limitations should be changed in terms of the authorized number of individuals at the battalion size element. In the future, depending on the budget allocation and evolution of the operational environment, the Moldovan Army should change its military formations on reliable APCs or IFVs to meet the national objectives. One thing is certain, the existing "fleet" of old Soviet vehicles will not last much longer. Even though the current situation does not allow the Moldovan Army to execute bold steps in its reorganization and modernization, there is still time to update its outdated and unaligned doctrine to the NDS and eventually to a National Military Strategy.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Decision Makers Analysis and Recommended Solution

In order to present the final recommendation, the R3, the author must perform an evaluation of the R2 - Revised Recommendation through the lenses of key decision makers, including the Chief of the General Staff of the National Army of Republic of Moldova. In addition to the Chief of the General Staff, the author will also use brigade commanders as directly involved and interested stakeholders in the modernization process. While evaluating the proposed task-organization of the infantry battalion as a base line for the entire Moldovan Army, both parties agreed upon the main tasks that the unit should be able to perform in the short and mid-term period of time. Those tasks are centered on having units ready to execute their duties, as part of the peacekeeping operation in the Transnistrian Region. The units must aid the national authorities in case of an emergency or natural disaster, and participate in multinational peacekeeping operations. However, some points of friction arose from that recommendation, predominantly based on the existing limited budget for the Army and lack of qualified personnel in different fields.

Particularly from the perspective of the Chief of the General Staff of the National Army of Republic of Moldova, the main points of concern are:

- 1. Lack of modern equipment including vehicles and personal equipment;
- Lack of sufficient protection for the Army personnel while executing their duties in country or overseas;
- 3. Time for implementing the changes;

- 4. Limited ability to honor the obligations assumed by Moldova to participate in multinational peacekeeping operations;
- 5. Limited budget allocations;
- 6. Resistance of the entire enterprise for change; and,
- 7. Lack of sufficient qualified personnel able to initiate and control the modernization process at all levels.

Considering brigade commanders' position and their perspective of the proposed change in the task-organization of the infantry battalion, the following points of concern were mentioned:

- Complex legislative system, that will not simply approve the increase of the
 personnel figures of the units based on security concerns and national
 objectives that the civilian legislators seem not willing to consider;
- 2. The proposed change has actually to be executed not only on paper but in reality, with proper work (if the Army will initiate the change);
- Change, or upgrade of the military doctrine has to be executed in order to
 match the current requirements and allow brigade commanders to focus on the
 operational issues only;
- 4. Lack of a transparent plan of equipping Army units with individual and collective equipment;
- Natural state of resistance to change in a large organization, especially
 considering the elimination of the mandatory service and focus particularly on
 professional soldiers in current not attractive conditions for the military
 service; and,

6. Inability to hold personnel with some degree of experience and limited brigade commander's authority in solving social issues related to their subordinates.

Some of the above-mentioned points of concern, from both sides, are covered by the author with limited emphasis on change itself. The focus is how change in an organization affects the entire Army considering the Defense Institution's limited support from the Government of the Republic of Moldova. However, some of those aspects will be closely discussed in the following paragraphs. With the proposed development of an infantry battalion (including the motorized version,) the Army General Staff should focus more on logistical aspects. These include providing necessary equipment and sustainment of the units with the needed equipment while they are executing their constitutional tasks on Moldova's territory or overseas. This is critical in order to allow the Army to focus on near-term objectives and smoothly transition to the mid-term objectives to allow sufficient time for planning, revising, and adjustment of long-term plans and objectives.

The issue of protection still remains open, however with the existing armored protective capabilities, operations conducted in Moldova should benefit from a sufficient number of vehicles that can provide this protection. The issue with the existing vehicles is more related to their technical condition or lack of spare parts to properly maintain them. Furthermore, for operations abroad, Moldova should continue to work on limited dependence on partner countries. That dependence is clearly stated in bilateral agreements and provides Moldovan soldiers with vehicles and other types of logistical support needed while in the mission area. A good example is the Moldova contribution to

the KFOR mission, where Moldova has an agreement with Italy, and needed logistical support is provided by the Italian Army.

Furthermore, considering Moldova's ambition to increase its presence in peacekeeping operations and honor its commitments towards its strategic partners, lack of sufficient qualified personnel continues to be one of the biggest concerns at the strategic level for Moldova's key decision makers. Traditionally, Troop Contributing Nations honor their commitments by deploying battalion-level units or higher to NATO or UN lead missions. Having the same structure and training standards for all infantry battalions in Moldovan Army would allow Moldova to fulfill its desire to deploy a battalion-size element to multinational theaters. By having sufficient units on rotational basis, the Army could replace a previous unit after six months of deployment and at the same time have enough forces to focus on national defense and related issues.

After conducting a thorough evaluation of the R2 through the lens of key decision makers and other stakeholders, R3's task-organization remains unchanged, just as recommended in the R2. However, its implementation proves to be challenging because it requires the entire Army to assume some serious steps towards its modernization within the limits of its current budgeting. It also requires responsible Directorates to step up and support the idea of having units that are able to respond to existing national objectives and do not require an initial large financial investment, a part that is critical for the Moldovan Army. Furthermore, in order to have a successful implementation, the Army Directorates should also perform additional analysis and conduct professional debates to establish priorities in terms of equipment, personnel, units, and how it affects each domain across the DOTMLPF-P spectrum separately or combined.

As mentioned earlier, change in a large organization can cause negative effects if not managed properly. In order to have a better integration of the proposed taskorganization, in the following Action Plan the author will recommend stages that must be performed considering implementation of the John P. Kotter eight-stage change model. 130 and facilitate the decision process of the Chief of the General Staff of the National Army of Republic of Moldova. All of the stages from the Kotter's change model are important, some of them are an easy fix, but others not so much, therefore a commitment to the cause is vital and will be the main factor that will determine the success or the failure of the change into an organization. From the eight following stages: 1) establishing a sense of urgency; 2) creating the guiding coalition; 3) developing a vision and strategy; 4) communicating the changed vision; 5) empowering a broad base of people to take action; 6) generating short-term wins; 7) consolidating gains and producing even more change; and 8) institutionalizing new approaches in the culture, ¹³¹ the author will focus more specifically on the second, fifth and sixth steps, as they are indirectly covered in the following Action Plan. Steps one, three, and four, are direct responsibility of the key decision maker and are easy to be executed when the vector in which the Army as an institution wants to move and with the assistance of the subordinate directorates that is an easy task to be executed and continuously observed. However, the first set of steps

¹³⁰ Billy Miller and Ken Turner. L100: Developing Organizations and Leaders, Reading L104RB-Leading Organizational Change, "A Leader's Role," Common Core, Fort Leavenworth, KS, CGSC, 2018, 2.

¹³¹ Ibid.

requires more time and mutual support at different levels to achieve the desired end state and be able to implement the last two steps of the Kotter Model.

| Table 3. Action Plan for the R3 Implementation | | | | | | | | |
|--|---|--|-----------------------------------|--------------------------------|---|--|--|--|
| No. | Action description | Period of execution | Responsible entity | Supporting entity | Financial resources required | Progress indicators | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| | Short-term (1-2 years) | | | | | | | |
| 1.1 | Legislative change required to allow increase of the personnel numbers (Kotter Model, St. 6) | First six months from initiating the process | Legal Directorate | J1 Personnel Directorate | In existing budget allocation limits | Legal Project should be submitted to the Government revision by the end of the first three months from the initiation of the process | | |
| 1.2 | TOE Development: a) 22nd PKBn; b) 2nd Inf Bde; c) 1st Inf Bde; d) 3rd Inf. Bde. | One year from receiving approval for extending the number of personnel in the Army units | J1 Personnel Directorate | Army Units | In existing budget allocation limits | 22nd PKBn has to go first and set the example for the rest of the Army units. One year for the battalion should be closed with approved TOE | | |
| 1.3 | Key personal selection (Kotter Model, St. 2) | After TOE approval | J1 Personnel Directorate | All remaining directorates | In existing budget allocation limits | Cdr, Deputy and COS position filed | | |
| 1.4 | Equipment distribution | After the distribution to the Army units of the new TOE in terms of three months per unit | J4 Directorate of Logistics | Army Logistic Units | In existing budget allocation limits | Existing equipment and materiel that are currently located at the Army warehouses are started to be distributed to the unit level, especially weapons and weapon systems | | |
| | (Kotter Model, St. 6) | | | | | | | |

| 1.5 | Procurement of new equipment (Kotter Model, St. 6) | At the end of the short-term a clear procurement plan must be approved | J8 Financial Directorate | J3 Operations Directorate, J4 Directorate of Logistics | In existing budget allocation limits with a consideration of the slight increase in the budget allocation and foreign programs assistance | Plan with clear priorities coordinated at all levels should be developed and proposed for approval to the Army Chief of General Staff by the end of the designated short-term |
|-----|---|---|---|---|---|--|
| 2.1 | NT B | D d 1 f | | m (3-5 years) | la ese a a c | D. |
| 2.1 | New Doctrine Development (Kotter Model, | By the end of the mid-term | J7 Doctrine and Joint Training Directorate | J3 Operations Directorate | In existing budget allocation limits | Proper coordination at all levels is executed and foreign experts' assistance is requested |
| | St. 6) | | | | | |
| 2.2 | Training and personnel enrolment (Kotter Model, St. 5) | Throughout the entire period, completed at 90% by the end of the mid-term | Military Academy | J1 Personnel Directorate (enrolment), J3 Operations Directorate (determine readiness level), J4 Directorate of Logistics (logistics support), J7 Doctrine and Joint Training Directorate (training coordination), J8 Financial Directorate (financial support needed for training), Recruiting centers and Army units | In existing budget allocation limits | Complete elimination of mandatory service, create conditions for professional base force, and improve the existing social package for all military personnel. Allocate sufficient resources for training considering the experience from participation in exercises abroad |
| 2.3 | Procurement of new equipment (Kotter Model, St. 6) | End of the mid-term | J8 Financial Directorate | J3 Operations Directorate, J4 Directorate of Logistics | Considering the significant increase in the budget allocation starting with 2025 (NDS implementation Action Plan) and foreign programs assistance | Clear plan with distinguished priorities that reflect type of equipment and unit that will go through the modernization first and so on |

| 2.4 | Development | Throughout | J1 | Recruiting | In existing budget | Increased request |
|-----|------------------|----------------|-------------|-------------|--------------------|--------------------|
| | of the strategy | the entire | Personnel | centers and | allocation limits | and interest in |
| | to make | period, | Directorate | Army units | | military service |
| | military service | completed by | | | | with increased |
| | attractive for | the end of the | | | | figures that prove |
| | yang men and | mid-term | | | | efficiency of the |
| | women of | | | | | strategy that |
| | Moldova | | | | | would increase |
| | | | | | | the enrolment by |
| | | | | | | 25% annually. |
| | | | | | | |
| | (Kotter Model, | | | | | |
| | St. 3) | | | | | |

Source: Created by author.

Recommendations for the Chief of the General Staff of the National Army of Republic of Moldova

The following recommendations are based on the author's general professional experience, his experience in multinational operations, and the Professional Military Education he received from CGSC. Furthermore, using his professional body of knowledge, the literature review with its analysis, and different evaluating models as part of his research model, the proposed action plan for the R3 Implementation is a starting point that must be evaluated later in a larger and more complex working group. A detailed development of an action plan that encompasses different stake holders and entities across the Army would facilitate a comprehensive approach towards the proposed recommendation and would provide multiple solutions to the identified issues in the transformational process.

First of all, the National Army of the Republic of Moldova must execute a comprehensive analysis of all existing Moldovan strategic documents and make sure all military documents are aligned with the nation's and reflect current realities, reflecting on the Transnistrian Region issues and the unstable environment that covers the neighboring

countries (Ukraine and Romania) and Europe. Upon completion, the Army General Staff should present its conclusions to the Ministry of Defense. The Minister of Defense must present those conclusions to the Republic of Moldova's Government, in particular to the Prime-Minister and the Cabinet of Ministers. All concerns related to the national security must be clearly defined and presented in a comprehensive and simple form that can be understood by civilian stake holders. When the Defense Institution's direction has been accepted by the government, not based on political party representation but considered as a national priority, the Moldovan Army should consider establishing a working group for Military Doctrine development. The working group must consider input from Moldovan Army experts and specialists from NATO or other partners to assist Moldova within a clearly proposed general timeline, to develop new Moldovan military doctrine to reflect all points of concern mentioned earlier in this paragraph.

The second issue that must be addressed as an urgent one is the readiness issue of military units to execute their constitutional tasks to defend the territorial integrity of the country and to provide support to the civil authorities in case of natural disasters or emergency. During multiple annual evaluations, a unit's readiness status is assessed by the higher echelon with an outcome as "not ready" or "partially ready." The reality that is not taken into consideration accurately but affects directly the ability of the Army to influence the Transnistrian Region issue. Readiness status reflects the availability of resources and the number of qualified personnel. However, with increased attention to training and proper allocation of resources, readiness could be mitigated even if the mandatory service continues. It is important to mention, that because Moldova is not a part of NATO or the EU, and cannot completely rely on their military support in case of

any foreign aggression, the Moldovan Army is the only entity that is responsible for its own national defense. The Moldovan Army's capabilities to execute its constitutional tasks will improve when the Army transforms into a more adaptive and flexible force.

The next issue that must be addressed at the Army General Staff and Ministry of Defense levels is the "blind implementation" of other military institutions standards and practices to assure an accurate functioning of the institution. Task-organization, specific functioning or developmental standards should not be simply copied from partner states. The plans must be analyzed and used as guides for further development, considering specific requirements related to Moldova's society, history, and required capabilities.

Therefore, bilateral agreement and other assistance programs must continue to be oriented towards the development of Moldovan Army's personnel through different educational programs that include both PME and specialized education. Finally, an absolute transformation of the Moldovan Army is vital and should be planned with shortand mid-term milestones that require full governmental support in order to obtain a force capable to fully execute its constitutional tasks.

Long-term planning must be considered with the respect of renewing the existing vehicles fleet, major special equipment, and its weapons systems with a significant budget increase for the Defense Institution as a whole. A complete renewal of the existing APCs must be performed in order to obtain better mobility and protection capabilities from the vehicles. The much-needed transformation should not be limited to the basic redesign of existing units, but should also include the development of critical capabilities that allow Army units to execute their tasks. It is important to mention, that to

be successful at all levels, the transformation should occur across all DOTMLPF-P domains at all three levels of warfare (strategic, operational and tactical.)

Recommendations for Further Study

While conducting research, the author encountered a few significant issues that he did not address but are of significant importance to the National Army. Subjects for further research that would benefit the modernization of the National Army include which capabilities required to develop into a force capable of defending the state and what may be needed to be fully interoperable while operating with its partners in a diverse and complex environment.

First, after concluding a comprehensive analysis of the existing legal framework, the author concluded there is a significant lack of support towards the Defense Institution in general. More specifically, there is no a single document that would legally support the modernization or transformation of the Army, as a part of a policy supported and controlled by the government. Therefore, a study with respect to its benefits (if any) of developing a policy that would support the transformation or modernization of an Army, and the possibility of it being affected by a change of government, would be an interesting work that can be executed next.

Second, considering the structure and the content of the newly approved NDS, the content of the National Army's military doctrine needs to be addressed as well. A significant disconnect between those two doctrinal publications exists. The differences are due to (1) different years of publication, (2) international military experts' assistance for the development of the NDS, (3) copy and implementation of old Soviet concepts into the military doctrine that are not applicable to the current operational environment, (4)

lack of an extensive approach to the military literature of the partners that requires only refinement in order to be applicable, (5) lack of governmental support to the defense institution as a whole, (6) continuous copy of foreign literature and regulation without applying a professional judgment while implementing them, and (7) finally lack of a clear transformation direction for the entire Army. The existing Army Doctrine was a good starting point for the "new" National Army, however a revision with international assistance is required to help the Army's decision makers to analyze the current state and provide possible solutions. A follow-on study therefore, should focus on requirements, formats, and necessary content of a reasonable and functional military doctrine.

Third, there is the importance of establishing a basic combat unit and then determine its size. A doctrinal base for the establishment of a basic combat unit is required. The establishment of that force will have to clearly delimitate the unit's responsibilities, its structure, and provide guidance for its employment for homeland security and in multinational peacekeeping operations. Another study therefore, should research the conditions and the legal framework necessary for the establishment of such an entity. In addition, that study should also focus on the framework that will prescribe the unit's employment in peacekeeping operations at a multinational level. That is important because to be able to participate effectively at this level, the following considerations such as: necessity in strategic airlift, aerial support, fire support, logistical support, and potentially protection must be addressed with clear directions where from the Moldovan units will receive it all.

Fourth is the issue of how the Army supports civil authorities. It is important to provide guidance for employment in such situations, roles, and responsibilities. In

addition, there should be clear delimitations to stipulate what entities of the Moldovan Armed Forces are involved as first, second, and third respondents in case of a natural emergency or disasters. That procedural delimitation would eliminate any points of friction between the Army and the General Inspectorate for Emergency Situations of the Republic of Moldova and to cooperate having clearly stipulated what institution, and under which conditions, becomes supporting and what institution assumes the lead. Even if not financially supported as it should be, the Army has plenty of reasons not to give up in front of other entities or institutions and stick to its primary role, the one of defending Moldova's sovereignty.

Finally, aspiring towards the fully professional Army and considering other states' experiences, Moldova wants to cancel its mandatory service. At the same time, Moldova has acknowledged the complexity of the operational environment that surrounds the country, all existing threats towards its sovereignty and integrity, and the Defense Institution's limited financial capabilities. In addition, an interesting research question for the future scholars could be: What are the Pros and Cons of having a professional army versus a draftee army?

Personal Learning Reflections

By conducting this particular research, the author has significantly improved his understanding of two critical elements that frame the existence of the National Army. First, the author has a better appreciation of Moldova's strategic documents, military doctrine, and action plan to the recently signed National Defense Strategy, in order to understand the current operational environment. Second, the author understood in depth

the "combined arms" concept, the transformational concept, as well as the modernization concept that are all vital to the National Army revitalization.

The author has also determined that the doctrinal framework that creates the basis on which the National Army operates is outdated, misaligned with the national objectives and provides limited guidance that is only partially applicable today. It appears the only document that accurately describes the existing threats is the NDS.

In addition, after completing the research, the author concluded the current National Army readiness posture does not actually reflect the true nature of things.

Today, the National Army is not capable of defending the state's sovereignty independently or to contribute to global security with company or battalion size elements without Moldova's partners' logistical support. The only area the Army is competent, with limited technical capabilities, is the area of providing support to the civil authorities in case of emergency or natural disasters. Identified capability gaps are flow of personnel, social packages to the military personnel and their families, and the ability to influence the Transnistrian issue. These capabilities should form the primary line of effort towards eliminating those gaps or provide mitigation measures in case of an escalation and significant negative effects towards the national security.

The author considers, that with this particular research, he has contributed to the development of the new force structure as a part of the current modernization effort, and provided essential support to bridge the gap between the tactical and operational levels of planning. The recommended task-organization of the infantry battalion, as the most optimal structure, is the true evidence that supports both levels of planning equally.

Finally, the author has obtained a greater appreciation of the term of "Military Art and Science" through understanding the requirements of research, its professional application, research methodologies, and application of force management fundamental plans and processes. The author also has reinforced his desire to write about an important and current subject related to national security and to continue his life-long professional military education.

BIBLIOGRAPHY

- Armed Forces Military Academy "Alexandru cel Bun." "Armed Forces Military Academy acquired the accreditation." 20 December 2013. Accessed 08 February 2019. http://www.academy.army.md/2013/12/o-remarcabila-realizare-stiintifica-a-academiei-militare-a-fortelor-armate-alexandru-cel-bun/.
- ——. "Education." Accessed 08 February 2019. http://www.academy.army.md/studii/.
- Bradbeer, Thomas G. Module III: Transition to Offense, M311: Commander's Visualization, Reading A. Advanced Operations Course, US Army Command and General Staff Officer Course, Fort Leavenworth, KS, 2019.
- Burduja, Radu. "Transforming for Multinational Operations: A Study of the National Army of Moldova." Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2014.
- Carver, Christopher. "Army Transformation and the Role of Tables of Distribution and Allowances: TDA vs. MTOE." *Army Sustainment* (March-April 2015): 10-16.
- Center for Army Lessons Learned (CALL). CALL Newsletter No. 17-17, *Decisive Action Training Environment at JMRC*. Vol. 4, *Multinational Interoperability, Lessons and Best Practices*. Fort Leavenworth, CALL, June 2017.
- ———. CALL Newsletter No. 17-19, *Ten Fundamental Brigade Combat Team Skills Required to Win the First Fight.* Fort Leavenworth, CALL, August 2017.
- Chairman, Joint Chiefs of Staff. Joint Publication 3-07.3, *Peace Operations*. Washington, DC, Government Printing Office, 01 August 2012.
- Cirimpei, Sergiu. "Moldova versus Russian Hybrid Threat: A Question of National Will." Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2016.
- Clas, Anthony M. "Commanding in Multi-Domain Formations." *Military Review* (March-April 2018): 91-100.
- Definitions. "Civil Support." Accessed 28 October 2018. https://www.definitions.net/definition/civil%20support.
- Demchak, Chris C. Military Organizations, Complex Machines: Modernization in the US Armed Services. Ithaca, NY: Cornell University Press, 2010.
- Donnelly, M. William. *Transforming an Army at War: Designing the Modular Force,* 1991-2005. Washington, DC: US Army, Center of Military History, 2007.

- Government of Republic of Moldova. "Pavel Filip: We appeal to Russia to stop illegal activities, resume withdrawal of military forces without delay." 29 September 2018. Accessed 28 November 2018. https://gov.md/ro/content/pavel-filip-latribuna-onu-facem-apel-la-federatia-rusa-sa-inceteze-activitatile-ilegale-si.
- Griffard, B. F. "Military Transformation Challenges: Moldova and Montenegro." Issue Paper, Center for Strategic Leadership, US Army War College, Carlisle Baracks, PA, October 2008.
- Headquarters, Department of the Army. Army Doctrine Reference Publication 1-02, *Terms and Military Symbols*. Washington, DC: US Government Printing Office, 16 November 2016.
- ———. Army Techniques Publication 3-90.5, *Combined Arms Battalion*. Washington, DC: Government Printing Office, 5 February 2016.
- ———. Field Manual 3-21.20, *The Infantry Battalion*. Washington, DC: Government Printing Office, December 2006.
- ———. Field Manual 3-90.12/MCWP 3-17.1, *Combined Arms Gap-crossing Operations*. Washington, DC: Government Printing Office, July 2008.
- Himelrajh, Jure. "Basic Combat Unit of the Slovenian Armed Forces. A Study of the Slovenian Armed Forces." Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2017.
- House, Jonathan M. "Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization." Research Survey No. 2, Combat Studies Institute, US Army Command and General Staff College, Fort Leavenworth, KS, August 1984.
- Johnson, Kimball. "Modernizing Soldier Lethality." NCO Journal (April 2018): 1-3.
- Kirkpatrick, Charles E. An Unknown Future and a Doubtful Present: Writing the Victory Plan of 1941. Washington, DC: US Army Center of Military History, 1992.
- Krahling, William, and Matthew Meenan. "Ensuring Army Equipment Readiness." *Army Sustainment* (November-December 2014): 14-17.
- Levy, Amir, and Uri Merry. *Organizational Transformation: Approaches, Strategies, Theories*. New York: Praeger Publishers, 1986.
- Lucas, Luis Francisco Cepeda. "US Army Transformation towards a Brigade-centric Model: Lessons Learned for the Spanish Army." Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2009.

- Maftei, Svetlana. "Eugen Sturza wants a professional army without soldiers within." Deschide.md, 8 November 2017. https://deschide.md/ro/stiri/politic/20968/Eugen-Sturza-vrea-o-armat%C4%83-profesionist%C4%83-f%C4%83r%C4%83-militari-%C3%AEn-termen.htm.
- McGrath J. John. *An Army at War: Change in the Midst of Conflict*. Fort Leavenworth, KS: Combat Studies Institute Press, August 2005.
- Merriam-Webster, "Neutrality," accessed October 28, 2018. https://www.merriam-webster.com/dictionary/neutrality.
- ———. "Proclaimed." Accessed 28 October 2018. https://www.merriam-webster.com/dictionary/proclaimed.
- Merriam, Sharan B., and Elizabeth J. Tisdell. *Qualitative Research: A Guide to Design and Implementations*. San Francisco, CA: Jossey-Bass, 2015.
- Military Periscope. "Moldova Overview." 30 December 2018. Accessed 8 January 2019. https://www-militaryperiscope-com.lumen.cgsccarl.com/armedforces/eurasian-republics/moldova/overview.
- ———. "Slovenia Overview." 30 December 2018. Accessed 8 January 2019. https://www-militaryperiscope-com.lumen.cgsccarl.com/armedforces/north-atlantic-treaty-organization-nato/slovenia/overview.
- Miller, Billy, and Ken Turner. L100: Developing Organizations and Leaders, Reading L104RB-Leading Organizational Change, "A Leader's Role." Common Core, Fort Leavenworth, KS, CGSC, 2018.
- Munteanu, Vasile. "Emisiunea "Punctul pe AZi" Invitat Traian Basescu." *TVR Moldova*, 29 January 2018. Accessed 28 November 2018. http://tvrmoldova.md/punctul-peazi.
- Newcomer, Jason M., Sandra L. Kolberg, and Jon M. Corey. "Leadership Development: A Senior Leader Case Study." *Air & Space Power Journal* (September-October 2014): 71-90.
- North Atlantic Treaty Organization. "Relations with the Republic of Moldova." Last updated 12 October 2018. Accessed 28 September 2018. https://www.nato.int/cps/en/natohq/topics 49727.htm.
- ———. "Standardization." Last updated 23 January 2017. Accessed 04 February 2019. https://www.nato.int/cps/en/natohq/topics 69269.htm?selectedLocale=en.

- Operations Group, US Army National Training Center. *Training for Decisive Action Stories of Mission Command Collected Insights from Commanders and Leaders on their Experiences at the National Training Center*. Fort Leavenworth, KS: Combat Studies Institute Press, 2014.
- Parliament of the Republic of Moldova. *National Security Concept of the Republic of Moldova*. Chisinau, Moldova: Parliament of the Republic of Moldova, June 1995.
- ———. *National Security Strategy of the Republic of Moldova. Official Gazette*, no. 170-175 (14 October 2011): article no. 499. Accessed 09 February 2019. http://lex.justice.md/md/340510/.
- ———. "Soldiers with secondary education will no longer be released from military service upon expiry of contract." Press Release, 10 October 2018. Accessed 28 November 2018.
 - http://www.parlament.md/Actualitate/Comunicatedepresa/tabid/90/ContentId/462 0/Page/0/language/ro-RO/Default.aspx.
- Perkins, David G. "Multi-Domain Battle: The Advent of Twenty-First Century War." Military Review (November-December 2017): 8-13.
- ——. "Multi-Domain Battle Driving Change to Win in the Future." *Military Review* (July-August 2017): 6-12.
- Perna, Gustave. "Projecting an Expeditionary Army." *Army Sustainment* (March-April 2016): 2-3.
- Poindexter, Todd Landon. "Transforming Mechanized Reconnaissance: How the Armored Brigade Combat Team (ABCT) Cavalry Squadron Should Be Structured for Reconnaissance and Security Operations in the Near Future." Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2014.
- Republic of Moldova. *Constitution of the Republic of Moldova. Official Gazette*, no. 78 (27 August 1994): article 140.
- Republic of Moldova, Ministry of Defense (MOD). "Advancement of strategic dialogue Republic of Moldova NATO discussed in Belgium." 5 February 2019. Accessed 06 February. 2019.
 - http://www.army.md/?lng=2&action=show&cat=122&obj=5513#.XFtEtvlKjIU.
- -----. "Battle shots in the 'Fire Shield' exercise." Video, 20 September 2018. Accessed 04 February 2019.
 - http://www.army.md/?lng=2&action=show&cat=122&obj=5242#.XFj3kPlKjIW.
- ——. "Contingent KFOR-10 Starts Peacekeeping Missions in Kosovo." 30 January 2019. Accessed 07 February 2019.
 - http://www.army.md/?lng=3&action=show&cat=122&obj=5493#.XFzkHvlKjIU.



- "National Army ready to act in snow affected areas." 11 January 2019. Accessed 10 February 2019. http://www.army.md/?lng=2&action=show&cat=122&obj=5461#.XGBNeflKjIU.
 —. National Defence Strategy. Chisinau, Moldova: MOD, 2 May 2018. Accessed 28 September 2018. http://www.army.md/img/userfiles/doconline/sna.pdf.
 —. "NATO Parliamentary Assembly's Delegation at Ministry of Defense." 18 October 2018. Accessed 04 February 2019. http://www.army.md/?lng=2&action=show&cat=122&obj=5303#.XFjzXvlKjIW.
 —. "The US government donated a batch of military technology to the National Army." 12 November 2014. Accessed 10 February 2019. http://www.army.md/?lng=2&action=show&cat=122&obj=3021#.XGB5tPlKjIU.
- Rus, Cristian V. "Transformation of the Romanian Army." Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 2006.
- Schifferle, Peter J. *Bringing Order to Chaos*. Fort Leavenworth, KS: Army University Press, 2018.
- Soeters, Joseph, Paul C. Van Fenema, and Robert Beeres. *Managing Military Organizations: Theory and Practice*. New York: Routledge, 2010.
- Spiller, Roger J. *Combined Arms in Battle Since 1939*. Fort Leavenworth, KS: US Army Command and General Staff College Press, 1992.
- Timpul.md. "Top 30 events that marked the foreign policy of the Republic of Moldova." 25 May 2014. Accessed 28 September 2018. https://www.timpul.md/articol/top-30-evenimente-care-au-marcat-politica-externa-a-republicii-moldova-59434.html.
- Ursu, Valentina. "Eugen Sturza: Non-membership of a military bloc such as NATO cannot guarantee the security of a country." Interview with Eugen Sturza. Radio Free Europe/Radio Liberty, 07 November 2017. Accessed 30 September 2018. https://www.europalibera.org/a/interviu-noul-ministru-al-apararii-eugen-sturza/28840760.html.
- US Army Command and General Staff College (CGSC). F100: Managing Army Change, F101: Foundations of Change, F101RA-Consolidated Extracts. Common Core, CGSC, Fort Leavenworth, KS, 2018.
- ———. F100: Managing Army Change, F101: Foundations of Change, F101RB-The Professional Case for Force Management. Common Core, CGSC, Fort Leavenworth, KS, 2018.

- -. F100: Managing Army Change, F102: Joint and Army Capability Development. Common Core, CGSC, Fort Leavenworth, KS, May 2018. -. F100: Managing Army Change, F102: Joint and Army Capability Development, F102RA-Consolidated Extracted Reading, Common Core, CGSC, Fort Leavenworth, KS, 2018. -. F100: Managing Army Change, F104: Determine, Document, and Resource Organizational Authorizations, Reading F104RA- The Army Force Development Process, phases IV-V. Common Core, CGSC, Fort Leavenworth, KS, 2018. -. L100: Developing Organizations and Leaders, Lesson L101 Developing Organizations and Leaders, Reading E-Crossing the Rubicon: An Introduction to Organizational-Level Leadership. Common Core, Fort Leavenworth, KS, CGSC, 2018. US Army Training and Doctrine Command (TRADOC). TRADOC Pamphlet 525-3-1, The US Army in Multi-Domain Operations 2016-2028. Fort Monroe, VA: TRADOC, December 2018. -. TRADOC Regulation 71-12, TRADOC System Management: Force Development. Fort Monroe, VA: TRADOC, 1 March 2002. US Army War College. How The Army Runs: A Senior Leader Reference Handbook, 2015-2016. Carlisle Barracks, PA: US Army War College, August 2015.
- The World Bank. "Military expenditure (% of DGP): Moldova." Accessed 28 October

2018.

 $http://databank.worldbank.org/data/reports.aspx?source=2\&series=MS.MIL.XPN \ D.GD.ZS\&country=DEU,MDA.$