

SEOUL'S SECURITY CALCULUS: SOUTH KOREAN SECURITY STRATEGY
AND DEFENSE SPENDING, 2017-2019

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Art of War Scholars

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

SEOUL'S SECURITY CALCULUS: SOUTH KOREAN SECURITY STRATEGY AND DEFENSE SPENDING, 2017-2019, by Major Todd Boese, 200 pages.

This thesis analyzes the defense budgets of the Republic of Korea (ROK) for 2018, 2019, and 2020 in order to determine if the requirements and objectives articulated in government policy rhetoric are receiving increased fiscal resources. Funding for programs associated with policy objectives indicates the political importance of those objectives. Determination of funding levels for budget programs is based on analysis of documents published by the ROK National Assembly, while identification of defense requirements and objectives is based on a review of statements made by the South Korean government. This research concludes that increases to the defense budget are not driven by changes in the security environment or security policy, but rather are a function of government expansionary fiscal policy. However, increased funding for aircraft programs in conjunction with decreased funding for maneuver and firepower programs does reflect the government's objective to build a more balanced military force.

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ACRONYMS

CFC	Combined Forces Command
COTP	Conditions-based OPCON Transition Plan
DAPA	Defense Acquisition Program Administration
DPRK	Democratic People's Republic of Korea
DR 2.0	Defense Reform 2.0
FIP	Force Improvement Projects
GSOMIA	General Security of Military Information Agreement
JCS	Joint Chiefs of Staff
JMS	Joint Military Strategy
KAMD	Korea Air and Missile Defense
KIDA	Korea Institute for Defense Analyses
KMPR	Korea Massive Punishment and Retaliation
MND	Ministry of National Defense
NDP	National Defense Policy
OPCON	Operational Control
O&M	Operations & Maintenance
ROK	Republic of Korea
SCM	Security Consultative Meeting
SMA	Special Measures Agreement
THAAD	Terminal High Altitude Area Defense

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CHAPTER 1

INTRODUCTION

Context of the Problem

From Moon Jae-in's election as the President of the Republic of Korea (ROK) on May 9, 2017 through 2019, South Korea's security environment transformed dramatically. Moon entered office during a period in which the Democratic People's Republic of Korea (DPRK) was conducting increasingly provocative missile tests, antagonizing the ROK, its U.S. ally, and other states in the region while raising the specter of war on the peninsula. Over the next two years, however, the DPRK stopped testing its ballistic missiles and the heads of state of the ROK, the DPRK, and the U.S. engaged in a series of diplomatic summits that eased military tensions. Moon Jae-in and Kim Jong-un raised their clasped hands together on the summit of Baekdusan, mythical birthplace of the Korean nation on September 20, 2018, giving hope that a permanent peace on the peninsula might finally be possible after 65 years of armistice conditions.

Following these rounds of seemingly successful diplomacy, President Moon's administration released a new National Security Strategy at the close of 2018, prompting the ROK Ministry of National Defense (MND) to also update many of its policy documents. Compared with the previous administration's policy statements, the Moon administration's policy rhetoric placed less emphasis on the security threat to South Korea from the DPRK and shifted the military's focus from preparing for a conflict with

the regime in Pyongyang to building readiness for a broader, but less specific, range of security threats.¹

Although the security threat to South Korea from the DPRK seemed to subside during the two-and-a-half-year period following President Moon's election, the ROK's defense budgets during the same span of time rose dramatically. Prior to Moon's election, the ROK National Assembly had approved a defense budget for 2017 measuring 40.3 trillion won. Only three years later, the defense budget for 2020 (approved in December 2019) had grown by nearly 25 percent from its 2017 level to surpass 50 trillion won (see Appendix A, line 1). ROK government policy rhetoric, or at least the headlines regarding the government's policy rhetoric, emphasized a reduced security threat, but the ROK government invested more in its defense than ever before.

A popular expression usually attributed to James Frick says, "Don't tell me where your priorities are. Show me where you spend your money and I'll tell you what they are."² The apparent divergence between ROK policy rhetoric concerning a reduced security threat and sharply rising defense budgets during the period of 2017 to 2019 suggests that the priorities that the ROK government has articulated publicly may not be aligned with the priorities in which the government is actually investing its fiscal resources.

¹ Yoo Kang-moon, "Defense Ministry's latest white paper omits language describing N. Korea as 'the enemy,'" *Hankyoreh*, January 26, 2019, http://english.hani.co.kr/arti/english_edition/e_national/878629.html.

² B. J. Gallagher, *Why Don't I Do the Things I Know are Good for Me?* (New York: Penguin, 2009), 164.

The apparent divergence between ROK security strategy objectives in policy rhetoric and its defense spending has significant implications for the ROK-US alliance. If the divergence is not only apparent but actually exists, then the ROK government may be vulnerable to criticism regarding the genuineness of the priorities that it articulates in policy rhetoric, such as continued commitment to the alliance. Additionally, actual divergence between ROK security strategy objectives in policy rhetoric and defense spending may indicate deep differences in U.S. and ROK strategic end states; it is relatively easy for the allies to say that they share the same goals, but if their allocations of fiscal resources are not aligned towards similar goals then they may be working towards conflicting end states.

Research Questions

The purpose of this study is to understand the relationship between the significant increases in ROK defense spending from 2017 to 2019 and the ROK government's policy rhetoric concerning its security strategy objectives during the same period of time. In order to understand the apparent divergence between ROK security strategy objectives in policy rhetoric and ROK defense spending from 2017 to 2019, the primary question that this study addresses is: Does the allocation of resources within the ROK defense budget align with the priorities of ROK security and defense policy documents?

Secondary questions that enable a complete answer to the primary question are:

1. How have strategic policy documents defined South Korea's security environment since 2017?
2. What security strategy objectives have ROK strategic policy documents articulated since 2017?

3. How do changes in the size of the defense budget reflect ROK strategic objectives and the security environment?
4. How do changes in the composition of the defense budget reflect ROK strategic objectives and the security environment?

Limitations

The assessment of the alignment between ROK security strategy objectives and ROK defense spending that is presented in this study is based on the security strategy objectives articulated by the ROK government in official policy documents. While some policy documents related to the development of strategy and budget are publicly available or publicly described by ROK government institutions, many are not released to the public. The literature review in Chapter 2 will identify whether or not the ROK government releases or describes each of these documents to the public. This study accepts as a limitation that the official documents related to strategy and budget that are not publicly available may provide additional details on the relationship between security strategy objectives and defense spending. However, the ROK government's policy rhetoric as articulated in public statements and descriptions of its policy documents is a primary method of signaling its priorities to domestic and foreign audiences, and therefore the relationship of defense spending to those security strategy objectives that the ROK government articulates in its policy rhetoric remains a worthwhile subject of inquiry.

This study focuses specifically on the period of 2017 to 2019. However, in order to identify changes in the defense budget during that period, the study reviews the details of ROK defense budgets starting with the 2013 budget. Detailed examination of budget

data that is published by the ROK National Assembly would be possible for years prior to 2013 as well, but the availability of time limited the researcher to reviewing the budgets for 2013 and after. Beginning the review of budget details with the 2013 defense budget provides five years of context for the budgets that have been approved under the administration of President Moon, and the review enables a contrast of the Moon administration's defense budgets with the budgets of President Lee Myung-bak (2008 – 2013) and President Park Geun-hye (2013 – 2017).

This study did not attempt to interview ROK government officials or bureaucrats who are engaged in processes associated with the development of security strategy or defense budgets. While such interviews might yield additional insights on the relationship between strategy and budget, they would be inconsistent with the research's purpose of understanding the relationship between defense spending and policy rhetoric.

Finally, time available for the research presented in this study has limited the number of security strategy objectives and budget programs that the researcher has been able to assess for alignment. It has not been possible to examine every security strategy objective that the ROK government articulates in official policy documents with every program in the ROK defense budget. Instead, the researcher has focused on security strategy objectives and budget programs that are of particular significance to the ROK-US alliance.

Sources

This study relies on original documents published by the ROK government to the greatest degree possible. Nearly all of these documents, with the notable exception of Defense White Papers, are published only in Korean. In cases of ROK-US government

communiques that are published by both governments, the researcher has generally cited the version published by the U.S. government for ease of accessibility by English-speaking readers. When referencing news reporting, the study primarily relies upon English versions of South Korean media outlets, although there are some cases where an English version of the applicable reporting could not be found and the original Korean version is cited.

Translations of Korean passages cited in this study have been done by the study's author. The author is a graduate of the Korean language program at the Defense Language Institute Foreign Language Center in Monterey, California and has a reading proficiency level of four as measured by the Defense Language Proficiency Test. For the translation of technical and other specific terminology, the author has cross-referenced the translations made in the Korean and English versions of the Defense White Papers as much as possible.

This study uses the Revised Romanization system for writing the names of Korean individuals and places in English. In some cases where the name of a person or place is more commonly known using a different romanization, such as Syngman Rhee or Kim Jong-un, the author has used the more common romanization. The names of Korean individuals are written with the surname first, followed by the two-syllable given name with the syllables separated by a dash. Korean authors that write their name in English using a different convention are cited according to the method in which they write their own names.

The significant time zone difference between Korea and the United States can complicate the cross-referencing of dates in government statements and news reporting. It

is fairly common for an article written in the United States to describe an event that occurs in Korea on the day written after the article's publication. For example, a U.S. article published on January 20th might describe an event in Korea that took place on January 21st, seemingly reporting on the future. Such discrepancies are due to the International Date Line and are fairly common.

The ROK government publishes many of the official documents and statements cited in this paper as electronic Hanword document files, with the file extension .hwp. Readers will likely need to download and install additional software in order to view those files.

The Way Ahead

This study will begin with a review of relevant literature in Chapter 2, which first provides an overview of the family of ROK policy documents that inform the design of ROK defense budgets, and subsequently argues that existing scholarly literature does not adequately explain the relationship of ROK defense spending to ROK security strategy objectives. In Chapter 3, the researcher presents a methodological framework for assessing the alignment of ROK security strategy objectives with trends and features of ROK defense budgets. In Chapter 4, the study analyzes the alignment of ROK security strategy objectives and defense spending within the context of a dynamic South Korean security environment. Finally, in Chapter 5 the researcher draws conclusions that are relevant to the ROK-US alliance.

CHAPTER 2

LITERATURE REVIEW

Introduction

This literature review consists of two sections. The first section provides an overview of documents produced by the ROK government that link security strategy with annual defense budgets. These documents articulate the ROK government's views of the security environment and its objectives for ensuring the security of the nation. The documents examined in this section of the literature review also establish priorities that guide the distribution of fiscal resources across the defense budget. Therefore, it is necessary to understand how these documents relate to each other and inform the annual defense budget in order to assess the alignment of South Korea's defense spending with its policy rhetoric regarding security strategy.

The second section of this chapter examines academic literature in order to determine if the existing literature adequately describes the relationship between ROK security strategy and defense spending during the period from 2017 to 2019 under the administration of President Moon Jae-in. While several pieces contribute to an understanding of the relationship between ROK security strategy and defense spending, analysis of that relationship during this period of time is absent in the literature. As a result of that absence, the analysis presented in this thesis will attempt to fill some of the gap in understanding of how the current ROK government is supporting its rhetorical policy objectives with fiscal resources.

From Strategy to Budget

Various offices within the ROK government produce a family of documents that ostensibly link the highest levels of national security strategy with annual budget requests produced by the ROK MND and the Defense Acquisition Program Administration (DAPA). The purposes of each of these documents and the relationships among them are described in the MND's "Gukbang Gihoek Gwanri Gibon Hunryeong" [국방기획관리기본훈령; Defense Planning and Management Basic Order].³ The system of Defense Planning and Management documents is designed so that individual programs within the defense budget support larger strategic objectives that ultimately derive from the ROK President's National Security Strategy (see figure 1). Designated offices are responsible for updating each document on a recurring schedule, and each document applies to a specified period of time (see table 1). The research presented in this thesis draws heavily from several of these documents, warranting an examination of the Defense Planning and Management system. While this thesis will examine the contents of specific Defense Planning and Management documents in further detail in the analysis chapter, this literature review focuses on the purpose of each document and the relationships among the Defense Planning and Management documents.

³ ROK MND, "Gukbang Gihoek Gwanri Gibon Hunryeong" [국방기획관리기본훈령; Defense Planning and Management Basic Order] June 29, 2017, http://www.mnd.go.kr/user/boardList.action?command=view&page=1&boardId=I_1198555&boardSeq=I_6322675&titleId=null&id=mnd_050902000000&siteId=mnd.

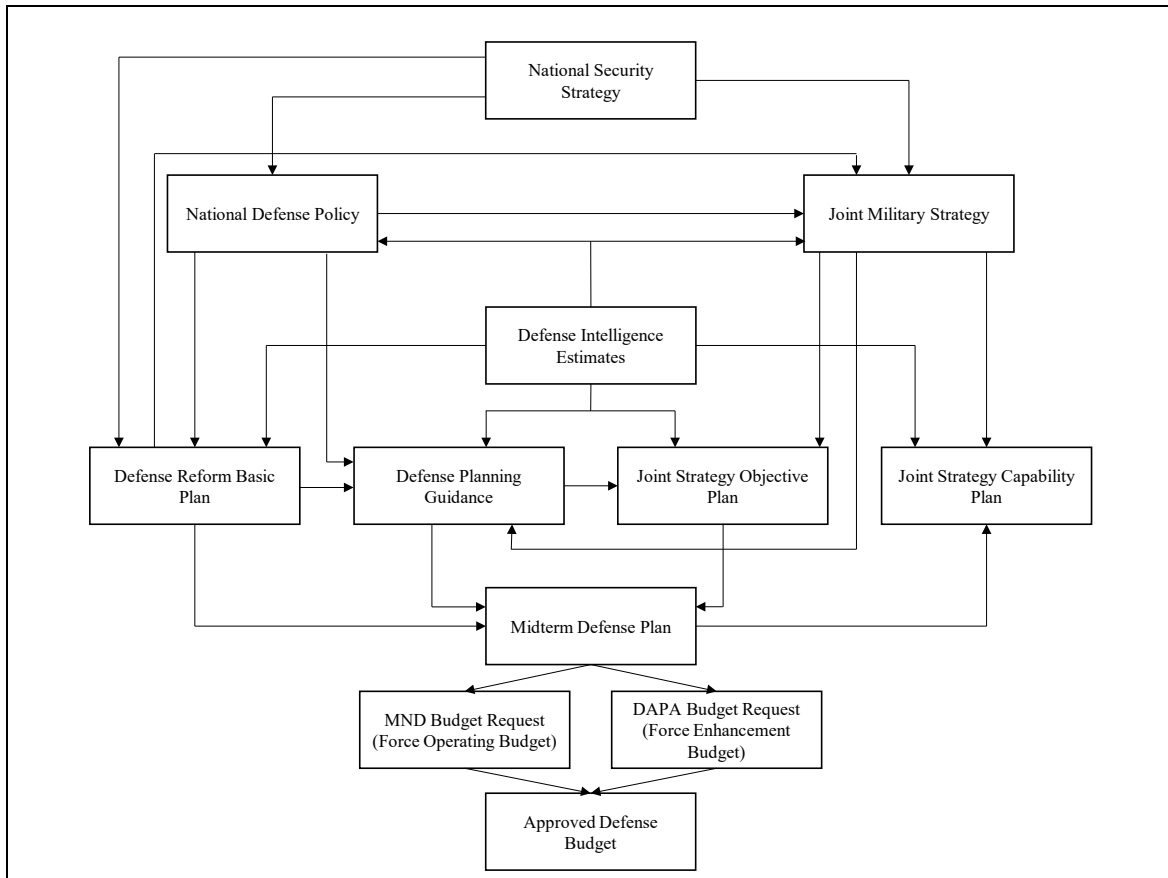


Figure 1. Relationships of Defense Planning and Management Documents

Source: ROK MND, “Gukbang Gihoek Gwanri Gibon Hunryeong,”

[국방기획관리기본훈령; Defense Planning and Management Basic Order], 8-53.

The National Security Strategy is not a Defense Planning and Management document itself, but it is a foundational document that informs the upper echelon of Defense Planning and Management documents. The National Security Strategy is published by the President’s Office of National Security, serving as a mechanism for the President to inform the strategic priorities of the MND, the Ministry of Foreign Affairs, and the Ministry of Unification. As ROK Presidents are limited to a single five-year term, the National Security Strategy is generally updated and republished every five years. The

Blue House (the colloquial term for the seat of the ROK Presidency thanks to its blue tile roof) last published a National Security Strategy in December 2018, approximately a year and half after President Moon's election.⁴

Along with the National Security Strategy, the Defense Intelligence Estimates produced by the ROK Defense Intelligence Agency also serve as a foundation that informs the rest of the Defense Planning and Management system. The Defense Intelligence Estimates are based on information and intelligence collected by the military and other government agencies, and they evaluate military threats and other factors that could influence South Korea's national security over the coming 15 years. The Defense Intelligence Estimates are updated every five years, although sections are modified when necessary regardless of the five-year update cycle. While the Defense Intelligence Estimates are produced by the Defense Intelligence Agency, they are approved by the ROK Minister of National Defense. The MND does not release the Defense Intelligence Estimates to the public.⁵

The MND's Policy Planning Bureau produces the National Defense Policy (NDP) in order to identify the direction of NDP and national defense objectives for the coming 15 years. The NDP is informed by the National Security Strategy and Defense Intelligence Estimates, and like those documents it is updated every five years. The MND

⁴ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] (Seoul: The Blue House, December 2018), <https://www1.president.go.kr/dn/5c1b2e9a52b8e>.

⁵ ROK MND, "Gukbang Gihoek Gwanri Gibon Hunryeong" [국방기획관리기본훈령; Defense Planning and Management Basic Order], 9-10.

does not release the NDP to the public, but the biennial Defense White Paper does include a description of the current NDP. The NDP is ultimately approved by the ROK President. The ROK MND has confirmed that it completed a new NDP for the period of 2019 to 2033.⁶

The ROK National Defense Reform Act requires the MND to develop and maintain a Defense Reform plan to provide a “continuous course of enhancing the efficiency, economic feasibility, and future-orientedness of military organizations for the improvement and development of the comprehensive national defense operating system.”⁷ The law also requires the MND to establish and implement an updated Defense Reform plan every five years, to include providing analyses of the progress in implementing the Defense Reform plan in the middle and at the end of each five-year period.⁸ Neither the National Defense Reform Act nor the MND’s “Gukbang Gihoek Gwanri Gibon Hunryeong” [국방기획관리기본훈령; Defense Planning and Management

⁶ ROK MND, “Gukbang Gihoek Gwanri Gibon Hunryeong” [국방기획관리기본훈령; Defense Planning and Management Basic Order], 10-12; ROK MND, *2018 Defense White Paper* (Seoul: MND, 2019), 42-46, http://www.mnd.go.kr/user/mndEN/upload/pblict/PBLICTNEBOOK_201908070153390840.pdf; ROK MND, “Daehanmingugeul Jikineun Teunteunhan Gukbangseolgyedo '20-'24 Gukbangjunggigyehoeng Surip” [대한민국을 지키는 튼튼한 국방설계도 '20-'24 국방중기계획 수립; Establishment of the '20-'24 Midterm Defense Plan as a Strong National Defense Blueprint Protecting the Republic of Korea] August 14, 2019, 1, https://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11740&num=1.

⁷ National Defense Reform Act, (2006), art. 3, para. 1 (Republic of Korea), http://elaw.klri.re.kr/kor_service/lawView.do?hseq=43954&lang=ENG.

⁸ Ibid., art. 5, para. 3.

Basic Order] specify the period of applicability for the Defense Reform plan. The MND's Office of Military Structure and Defense Management Reform produces the Defense Reform plan based on the National Security Strategy, Defense Intelligence Estimates, and the NDP. The MND reports the Defense Reform plan to the ROK President for his or her approval, and then reports the approved Defense Reform plan to the National Assembly.⁹ The Defense Reform plan itself, sometimes referred to as the Defense Reform Basic Plan, is not released to the public. However, the MND has made numerous public statements regarding the Defense Reform plan and has published a document that gives an overview of the current Defense Reform plan, Defense Reform 2.0 (DR 2.0). These public statements included the announcement of the MND initiation of planning for DR 2.0 as well as the announcement of some reform initiatives prior to the completion of the entire DR 2.0 plan.¹⁰ After the MND completed planning for DR 2.0, it published a booklet that gives an overview of DR 2.0's background, objectives, and reform tasks.¹¹

⁹ ROK MND, "Gukbang Gihoek Gwanri Gibon Hunryeong" [국방기획관리기본훈령; Defense Planning and Management Basic Order], 12-14.

¹⁰ ROK MND, "Gukbangbu, 'Gukbangaehyeok 2.0' Chujineul Wihan Silmujojik Gadong" [국방부, 국방개혁 2.0 추진을 위한 실무조직 가동; MND, Operation of Working Group for Advancing "Defense Reform 2.0"] August 31, 2017, https://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_10490&num=1; ROK MND, "Moon Jae-in Jeongbuui Gukbangaehyeok 2.0" [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration's Defense Reform 2.0] July 27, 2018, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11131&num=1.

¹¹ ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] (Seoul: MND, 2019), http://www.mnd.go.kr/mbshome/mbs/reform/images/contents/reform_EBOOK.pdf.

The Joint Military Strategy (JMS) articulates medium and long-term military strategic objectives and concepts, to include establishing military force development direction for the coming 15 years. The ROK Joint Chiefs of Staff (JCS) Directorate of Strategic Planning drafts the JMS every five years based on the National Security Strategy, Defense Intelligence Estimates, the NDP, and the Defense Reform plan. The ROK Chairman of the JCS and the Minister of National Defense approve the JMS. Similar to the NDP, neither the MND nor the JCS release the JMS to the public. However, the Defense White Paper does include a brief summary of the current JMS.¹²

While the documents considered above are updated every five years, the MND's Policy Planning Bureau prepares the Defense Planning Guidance annually in order to ensure that budgetary and other resource decisions made on an annual basis reflect the priorities of the Minister of National Defense. Defense Intelligence Estimates, the NDP, the JMS, and the Defense Reform plan provide higher strategic guidance that informs the Defense Planning Guidance. The Defense Planning Guidance is approved by the Minister of National Defense and informs resourcing decisions that apply from the current year through the coming seven years. The MND does not release the Defense Planning Guidance to the public, nor does it describe the Defense Planning Guidance in the Defense White Paper or other public statements.¹³

¹² ROK MND, “Gukbang Gihoek Gwanri Gibon Hunryeong” [국방기획관리기본훈령; Defense Planning and Management Basic Order], 15-16; ROK MND, *2018 Defense White Paper*, 46-47.

¹³ ROK MND, “Gukbang Gihoek Gwanri Gibon Hunryeong” [국방기획관리기본훈령; Defense Planning and Management Basic Order], 16-17.

The Joint Strategy Objective Plan identifies and prioritizes new and existing military force development requirements necessary to achieve defense objectives based on Defense Intelligence Estimates, the NDP, the Defense Reform plan, the JMS, and the Defense Planning Guidance. The Joint Strategy Objective Plan is updated annually and focuses on the midterm requirements for the period that extends from three years to seven years after the plan's completion. While the JCS's Directorate of Strategic Planning drafts the Joint Strategy Objective Plan, the Minister of National Defense provides the final approval of the document. The MND does not release the Joint Strategy Objective Plan to the public, nor does it comment on the plan in the Defense White Paper or other public statements.¹⁴

The JCS Directorate of Strategic Planning also prepares the Joint Strategy Capability Plan to articulate how the ROK military will contribute to the completion of strategic tasks in the coming year with its currently equipped capabilities. The Joint Strategy Capability Plan is updated annually on the basis of Defense Intelligence Estimates, the JMS, the JSOP, the Midterm Defense Plan (discussed below), and other documents related to war planning. The Joint Strategy Capability Plan is approved by the Chairman of the JCS. Neither the MND nor the JCS release the Joint Strategy Capability Plan to the public or make public statements regarding the document.¹⁵

¹⁴ ROK MND, "Gukbang Gihoek Gwanri Gibon Hunryeong"
[국방기획관리기본훈령; Defense Planning and Management Basic Order], 17-18.

¹⁵ Ibid., 19-20.

The Midterm Defense Plan (MDP) aligns the force and capability requirements articulated in the planning documents above with the fiscal resources that the MND expects to have available for the coming five-year period, providing detailed projections of expected budgets for defense programs. The development of the MDP involves inputs from several MND offices and other military organizations, but the MND's Programming and Budgeting Bureau is ultimately responsible for drafting the MDP every year. After being staffed through the MND and approved by the Minister of National Defense, the MDP is approved by the President. The MND's "Gukbang Gihoek Gwanri Gibon Hunryeong" [국방기획관리기본훈령; Defense Planning and Management Basic Order] provides a theoretical timeline in which the ROK President gives approval in December to an MDP that applies to a period beginning in the next January (13 months later), but the MDPs released during President Moon's administration have not followed that timeline.¹⁶ The MND does not release the MDP to the public, but it does provide an annual press release that describes the MDP and some of the MDP's priorities. While the level of detail in those press releases varies each year, they generally provide a projection of the size of the defense budget for the coming five years and describe program

¹⁶ ROK MND, "Gukbang Gihoek Gwanri Gibon Hunryeong" [국방기획관리기본훈령; Defense Planning and Management Basic Order], 26-30.

categories and specific programs of importance.¹⁷ Additionally, the Defense White Paper provides a summary of the most recent MDP and its funding priorities.¹⁸

Annual budget requests are based principally on the programming forecasts in the MDP, along with guidance articulated in the NDP, the Defense Planning Guidance, and other budget preparation guidelines from the government. The MND's Programming and Budgeting Bureau is responsible for the preparation of the force operating costs budget request, which government documents also sometimes refer to simply as the operations and maintenance (O&M) budget. Meanwhile, DAPA is responsible for the request for the force enhancement budget, also known as the Force Improvement Projects (FIP) budget, which covers military acquisition projects and supporting programs. Both the MND and DAPA complete their respective budget requests by late May, and they then provide those requests to the ROK Ministry of Economy and Finance for inclusion in the administration's consolidated budget request to the ROK National Assembly. The Ministry of Economy and Finance generally submits the administration's consolidated

¹⁷ ROK MND, “'Ganghan Anbo' 'Chaegimgukbang' Guhyeoneul Wihan '19-'23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-’23 중기간 소요재원 총 270.7 조원; Required Resources in the ‘19-’23 Midterm in order to Materialize ‘Strong Security’ and ‘Responsible National Defense’ Total 270.7 Trillion Won] January 10, 2019, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11447&num=1; ROK MND, “Daehanmingugeul Jikineun Teunteunhan Gukbangseolgyedo '20-'24 Gukbangjunggigyehoeng Surip” [대한민국을 지키는 튼튼한 국방설계도 '20-24 국방중기계획 수립; Establishment of the '20-'24 Midterm Defense Plan as a Strong National Defense Blueprint Protecting the Republic of Korea].

¹⁸ ROK MND, *2018 Defense White Paper*, 161-66.

budget request to the National Assembly in early September, and the National Defense Committee of the National Assembly then examines the budget requests from MND and DAPA in the fall. Finally, the National Assembly approves the administration's budget request with modifications in early December.¹⁹

¹⁹ ROK MND, “Gukbang Gihoek Gwanri Gibon Hunryeong”
[국방기획관리기본훈령; Defense Planning and Management Basic Order], 33-37.

Table 1. Defense Planning and Management Documents			
Document Name	Responsible Office	Applicable Period	Update Cycle
National Security Strategy	Office of National Security	-	Every 5 Years
Defense Intelligence Estimates	Defense Intelligence Agency	F+1 to F+15	Every 5 Years
National Defense Policy	MND Policy Planning Bureau	F+1 to F+15	Every 5 Years
Defense Reform	MND Office of Military Structure and Defense Management Reform	-	Every 5 Years
Joint Military Strategy	JCS Directorate of Strategic Planning	F+1 to F+15	Every 5 Years
Defense Planning Guidance	MND Policy Planning Bureau	F to F+7	Annual
Joint Strategy Objective Plan	JCS Directorate of Strategic Planning	F+3 to F+7	Annual
Joint Strategy Capability Plan	JCS Directorate of Strategic Planning	F+1	Annual
Midterm Defense Plan	MND Programming and Budgeting Bureau	F+2 to F+6	Annual
Force Operating Budget Request	MND Programming and Budgeting Bureau	F+1	Annual
Force Enhancement Budget Request	DAPA	F+1	Annual

Source: Data is adapted from ROK MND, “Gukbang Gihoek Gwanri Gibon Hunryeong,” [국방기획관리기본훈령, Defense Planning and Management Basic Order], 8-53. In the table above, “F” represents the year that the document is approved by the designated authority.

The National Assembly publishes detailed information concerning the defense budget requests and the final approved budget. After the Ministry of Economy and Finance submits the consolidated budget request to the National Assembly, the National Assembly website publishes those requests with the line-by-line appropriation requested for every program in the budget.²⁰ Around the same time that the National Assembly

²⁰ ROK National Assembly, *2018 Nyeondo Seipsechuryesanansaeopbyeol Seolmyeongseo* Vol. 2 [2018 년도 세입세출예산사업별 설명서 II; 2018 Explanation of Tax Revenue and Tax Expenditure Planned Budget Programs Vol. 2] September 1, 2017, 363-449, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_C1I7D0G9M0G1N1V0V2Z0O1G7S6Y6I1; ROK National Assembly, *2019 Nyeondo Seipsechuryesanansaeopbyeol Seolmyeongseo* vol. 2 [2019 년도

posts those budget requests to its website, the MND publishes a press release that provides a narrative for the budget request, identifying certain trends in relation to previous budget requests and highlighting the significance of some programs in the budget requests. The MND's press release highlights both the force operating costs budget request and the force enhancement budget request.²¹ After the National Defense Committee completes its examination of the budget requests from the MND and DAPA, the committee publishes a report that discusses many of the items in the budget and proposes modifications to the appropriations requested in the administration's consolidated budget request.²² When the National Assembly approves the

세입세출예산사업별 설명서 II; 2019 Explanation of Tax Revenue and Tax Expenditure Planned Budget Programs Vol. 2] September 3, 2018, 273-357, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_D1T8T0H9U0E3A1I0I1N4J0K2O7E0O9; ROK National Assembly, *2020 Nyeondo Seipsechuryesansaeopbyeol Seolmyeongseo* Vol. 2 [2020 년도 세입세출예산사업별 설명서 II; 2020 Explanation of Tax Revenue and Tax Expenditure Planned Budget Programs vol. 2] September 3, 2019, 273-357, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_H1N9P0R9U0G3H0B9B4J1U2M9Z1G1Q0.

²¹ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 6.9% Jeungaekdoen 43.1 Jowon” [신정부 첫 해, 국방예산 6.9% 증액된 43.1 조원; New Government's First Year, Defense Budget Increased 6.9% to 43.1 Trillion Won] August 28, 2017, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_10486&num=1; ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowon” [국방예산, 전년 대비 8.2% 증가한 46.7 조원; Defense Budget, Increases by 8.2% from Last Year to 46.7 Trillion Won] August 27, 2018, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11194&num=1; ROK MND, “2020 Nyeon Gukbangyesan, 50 Jowon Sidae Gaemak” [2020 년 국방예산, 50 조원 시대 개막; 2020 Defense Budget, Opening the Era of over 50 Trillion Won] August 28, 2019, https://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11749&num=1.

²² ROK National Assembly, *2018 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2018 년도 국방위원회 소관 예산안 예비심사보고서; 2018 National

administration's budget request, the National Assembly publishes the final list of modifications made by the National Assembly to the administration's budget request in an amendment to that year's requested budget.²³ However, the National Assembly does not republish a list of all the programs in the budget with their approved appropriations; rather, in order to determine the approved appropriation for any given program, modifications made by the National Assembly must be added to, or subtracted from, the amount originally requested by the administration. Shortly after approving the budget, the National Assembly also publishes a Government Transfer Report that specifies the exact funding for the entire budget broken down into categories of programs; the Government

Defense Committee Planned Budget Preliminary Review Report] November 14, 2017, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_C1I7D0G9M0G1N1V0V2Z0O1G7S6Y6I1; ROK National Assembly, *2019 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2019 년도 국방위원회 소관 예산안 예비심사보고; 2019 National Defense Committee Planned Budget Preliminary Review Report] November 14, 2018, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_D1T8T0H9U0E3A1I0I1N4J0K2O7E0O9; ROK National Assembly, *2020 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2020 년도 국방위원회 소관 예산안 예비심사보고; 2020 National Defense Committee Planned Budget Preliminary Review Report] November 7, 2019, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_H1N9P0R9U0G3H0B9B4J1U2M9Z1G1Q0.

²³ ROK National Assembly, *2018 Nyeondo Yesanane Daehan Sujeongan* [2018 년도 예산안에 대한 수정안; Amendment Regarding the 2018 Planned Budget] December 6, 2017, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_C1I7D0G9M0G1N1V0V2Z0O1G7S6Y6I1; ROK National Assembly, *2019 Nyeondo Yesanane Daehan Sujeongan* [2019 년도 예산안에 대한 수정안; Amendment Regarding the 2019 Planned Budget] December 8, 2018, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_D1T8T0H9U0E3A1I0I1N4J0K2O7E0O9; ROK National Assembly, *2020 Nyeondo Yesanane Daehan Sujeongan* [2020 년도 예산안에 대한 수정안; Amendment Regarding the 2020 Planned Budget] December 10, 2019, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_H1N9P0R9U0G3H0B9B4J1U2M9Z1G1Q0.

Transfer Report does not specify funding for individual programs.²⁴ Finally, the MND also publishes a press release after the National Assembly has approved the budget, once again highlighting certain programs and objectives of the defense budget.²⁵

The Defense White Paper is not a Defense Planning and Management document, but it is an important publication for understanding the ROK MND's policies, activities, and objectives. The MND publishes a Defense White Paper every two years in order to help the public understand "defense policies and the major defense accomplishments over

²⁴ ROK National Assembly, "Jeongbuisongjeongbo" [정부이송정보; Government Transfer Report] December 6, 2017, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_C1I7D0G9M0G1N1V0V2Z0O1G7S6Y6I1; ROK National Assembly, "Jeongbuisongjeongbo" [정부이송정보; Government Transfer Report] December 8, 2018, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_D1T8T0H9U0E3A1I0I1N4J0K2O7E0O9; ROK National Assembly, "Jeongbuisongjeongbo" [정부이송정보; Government Transfer Report] December 11, 2019, http://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_H1N9P0R9U0G3H0B9B4J1U2M9Z1G1Q0.

²⁵ ROK MND, "Sinjeongbu Cheot Hae, Gukbangyesan 7.0% Jeungaekdoen 43.2 Jowon Hwakjeong" [신정부 첫 해, 국방예산 7.0% 증액된 43.2 조원으로 확정; New Government's First Year, Confirmed Defense Budget Increased 7.0% to 43.2 Trillion Won] December 6, 2017, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_10733&num=1; ROK MND, "Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong" [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11401&num=1; ROK MND, "2020 Nyeon Gukbangyesan, Jeongbuangwa Donggilhan 50 Jo 1,527 Eogwoneuro Hwakjeong" [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration's Plan] December 10, 2019, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11914&num=1.

the past two years.”²⁶ The Defense White Paper explains some policies and concepts that do not appear in MND’s press releases and other statements, and the comparison of data presented in multiple Defense White Papers can reveal trends over time that the MND has not emphasized. Additionally, the MND publishes the Defense White Paper in both Korean and English, making it an invaluable resource for clarifying terminology when conducting research in both languages.

Perspectives on ROK Security Strategy and Defense Spending

The world, to include academia, has given significant attention to the Korean Peninsula since President Moon’s election in May of 2017, largely thanks to the DPRK’s continued missile test provocations in 2017 and the subsequent string of summits among the ROK, US, and DPRK heads of state in 2018 that sought the denuclearization of the Korean Peninsula. Scholastic literature that focuses specifically on the ROK and its security relations with other regional actors is easy to find in journals such as *The Korean Journal of Defense Analysis* and others.²⁷ While many of these pieces draw on ROK government statements regarding the nation’s security strategy, there is little analysis of the fiscal resources that the government is allocating to actually implement the nation’s security strategy. Rather, discussions of ROK security strategy simply cite the broad funding statistics that the MND provides in its press releases. The lack of an integrated analysis that considers both ROK government policy rhetoric concerning its security

²⁶ ROK MND, *2018 Defense White Paper*, 3.

²⁷ “The Korean Journal of Defense Analysis,” Publication, KIDA, accessed March 18, 2020, <http://www.kida.re.kr/frt/contents/frtContents.do?sidx=1508&depth=3&lang=en>.

strategy and ROK budgetary appropriations for defense programs which support that security strategy renders it difficult to assess the government's effectiveness in pursuing its strategic aims. Much of the literature that considers ROK security strategy or defense spending focuses on either of those two areas without detailed analysis of the other. Additionally, pieces that discuss how the ROK can or should implement its security strategy generally do not examine the financial resources that the ROK is devoting towards its national defense, thereby only partially elucidating the ROK's strategic framework of ends, ways, and means. Finally, some scholars have critically examined the relationship between ROK security strategy and defense spending, but they focused on previous administrations and their conclusions may not be valid for the period of 2017 to 2019.

Several articles concerning ROK security strategy and defense spending have appeared in the publications of various think tanks, both in South Korea and in the United States. The Korea Institute for Defense Analyses (KIDA), a ROK-government funded think tank, annually publishes an article that describes the annual defense budget in English. KIDA's description of the 2019 defense budget does link the budget to strategy, arguing that the substantial increase to the defense budget for 2019 "secured fiscal resources to allow for a smooth execution of the national tasks and the Defense Reform 2.0."²⁸ However, KIDA's analysis does not describe how specific programs within the budget are related to specific reform initiatives within DR 2.0, nor does it relate budget

²⁸ Paek Jae Ok, "Structure and Policy Implications of the 2019 ROK Defense Budget," *ROK Angle: Korea's Defense Policy*, no. 193 (January 28, 2019): 5, <http://www.kida.re.kr/frt/board/frtPcrmBoard.do?searchCondition=&searchKeyword=&pageIndex=1&depth=3&sidx=366>.

programs to policy objectives other than defense reform. KIDA's analysis of the 2020 defense budget is similar, asserting that the FIP portion of the budget reflects "the need to secure core military power for effective response to omni-directional security threats, and to prepare for the OPCON transition."²⁹ The 2020 analysis highlights specific programs and categories of programs that are receiving increased funding, but it makes no mention of specific programs or categories of programs towards which funding is decreasing in either absolute or relative terms. Therefore, it is difficult to discern where the ROK government is actually focusing its fiscal resources in support of strategic objectives.

In addition to budget analyses, KIDA published an analysis of DR 2.0 in 2018. While KIDA's analysis of DR 2.0 discusses specific reform initiatives, it does not consider the funding for specific budget programs that support those initiatives. Instead, the analysis's discussion of funding highlights that "the defense reform budget plan for the next five years (2019-2023) amounts to KRW 270.7 trillion (USD 241.7 billion)," which simply equates the "defense reform budget" with the entire defense budget as projected in the 2018 MDP.³⁰ Bruce Klingner, writing for The Heritage Foundation in

²⁹ Lee Young-bin, "A Quantum Leap toward a Military Power, the Dawn of an 'Era of 50 Trillion Won Defense Budget,'" *ROK Angle: Korea's Defense Policy*, no. 215 (February 17, 2020): 3, <http://www.kida.re.kr/frt/board/frtPcrmBoard.do?searchCondition=&searchKeyword=&pageIndex=1&depth=3&sidx=366>.

³⁰ Park Chang-kwoun, "The Moon Jae-in Administration's Defense Reform 2.0: Direction and Considerations," *ROK Angle: Korea's Defense Policy*, no. 184 (August 31, 2018): 5, <http://www.kida.re.kr/frt/board/frtPcrmBoard.do?searchCondition=&searchKeyword=&pageIndex=1&depth=3&sidx=366>; ROK MND, "'Ganghan Anbo' 'Chaegimgukbang' Guhyeoneul Wihan '19-'23 Junggigan Soyojaewon Chong 270.7 Jowon" ['강한 안보' '책임국방' 구현을 위한 '19-'23 중기간 소요재원 총 270.7 조원];

2019, also analyzed South Korea’s security objectives and defense reform agenda, arguing that South Korea should “fully implement” DR 2.0. However, Klingner’s analysis, like KIDA’s analysis, equated the defense reform budget with the entire projected defense budget, stating that the “total five-year cost for Defense Reform 2.0 will be \$240 billion from 2019–2023.”³¹ Additionally, Klingner argued that President Moon “plans to shift money to the air force and navy to plan against the long-term Chinese threat,” but he did not cite any changes within the ROK defense budget to support that assertion.³² The lack of granularity concerning relationships between specific budget programs and strategic objectives makes it difficult to assess which objectives the ROK government is actually prioritizing with fiscal resources.

While the literature discussed above focuses on the ends and the means of the ROK government’s security strategy, other pieces focus on the tools or ways that South Korea can employ to achieve its security objectives. A common theme of these pieces is South Korea’s status as a “middle power” within the international community. The characterization of South Korea as a middle power predates the Moon administration. In 2007 Gilbert Rozman argued that the ROK was “able to punch above its weight” in dealing with regional neighbors: “After successfully following the policy of *nordpolitik*

Required Resources in the '19-'23 Midterm in order to Materialize 'Strong Security' and 'Responsible National Defense' Total 270.7 Trillion Won].

³¹ Bruce Klingner, “Enhance South Korean Military Capabilities Before OPCON Transfer,” *Backgrounder*, no. 3452 (December 2, 2019): 7, <https://www.heritage.org/asia/report/enhance-south-korean-military-capabilities-opcon-transfer>.

³² *Ibid.*, 10.

to entice Moscow and then Beijing into normalized relations and then launching the Sunshine Policy by rallying support from these two capitals as well as Washington and Tokyo, this middle power was steering the region on the shoulders of giants.”³³ Sook-jung Lee further examined the ways in which middle powers can avoid being dominated by larger powers, arguing that the ROK “will seek cooperation with other middle powers in the region as a way of hedging the uncertain power transition between the United States and China.”³⁴ Cooperation with other middle powers and the “network power” that such cooperation confers also provides “channels to conduct middle power diplomacy” in order to build consensus in the international community in support of the ROK government’s policies.³⁵ However, neither Rozman nor Lee analyzed the fiscal resources that the ROK government was investing in its efforts to engage with regional partners and the broader international community. Middle power diplomacy may be a viable option for the ROK to pursue its security objectives, but an analysis of whether or not the ROK government is actually investing resources in middle power diplomacy has been absent from the dialogue running through the academic literature.

More recent literature has been critical of the ROK’s ability to conduct middle power diplomacy. Writing in 2017, Leif-Eric Easley and Kyuri Park argued that South

³³ Gilbert Rozman, “South Korea and Sino-Japanese rivalry: a middle power’s options within the East Asian core triangle,” *The Pacific Review* 20, no. 2 (June 2007): 197-98, <https://doi.org/10.1080/09512740701306840>.

³⁴ Sook-jong Lee, “South Korea as New Middle Power Seeking Complex Diplomacy,” *East Asia Institute Asia Security Initiative Working Paper* 25 (September 2012): 23, http://www.eai.or.kr/data/bbs/kor_report/2012091210545762.pdf.

³⁵ *Ibid.*, 22.

Korean anti-Japanese sentiment and unification interests often overwhelm the ROK's national interests as a middle power.³⁶ In seeking to understand why many of the ROK's middle power diplomatic efforts have fallen short of their objectives, Easley and Park argued that ROK foreign policy "becomes focused on the pursuit of particular identities or interests at the expense of middle power identity and interests."³⁷ In 2019 Michael Green adopted a similarly pessimistic assessment of the efficacy of ROK middle power diplomacy, arguing that "President Moon Jae-in's New Northern and New Southern Diplomacies have failed to gain any traction" due to problems of "capacity, geopolitics, and domestic political divisions."³⁸ Both the analysis of Easley and Park and the analysis of Green rightfully assess the efficacy of ROK middle power diplomacy through examining the outcomes of the ROK's middle power diplomacy, but an examination of the resources that the ROK government has invested in developing its instruments of national power would provide a more comprehensive understanding of how the ROK is working to achieve its strategic objectives as a middle power.

Jae-Jung Suh critically examined the trend of increasing ROK defense budgets and the relationship of that trend with South Korea's security environment and strategic objectives during the first decade of the 21st century. From 1990 to 2008, the ROK defense budget doubled approximately every ten years, which led Suh to ask, "Why has

³⁶ Leif-Eric Easley and Kyuri Park, "South Korea's Mismatched Diplomacy in Asia: Middle Power Identity, Interests, and Foreign Policy," *International Politics* 55, no. 2 (March 2018): 242-263, <https://doi.org/10.1057/s41311-017-0073-5>.

³⁷ Easley and Park, "South Korea's Mismatched Diplomacy in Asia," 252.

³⁸ Michael J. Green, "Is the Era of Korean Middle Power Diplomacy Over? A Realist Perspective," *The Korean Journal of Defense Analysis* 31, no. 1 (March 2019): 1.

South Korea's military spending increased so much in recent years, and especially under the liberal governments of the past ten years?"³⁹ The dramatic increase in defense spending was "all the more puzzling because it was maintained even as the Kim Dae-jung and Roh Moo-hyun governments pursued rapprochement with the North."⁴⁰ This dynamic of aggressive defense spending under liberal ROK administrations that ostensibly prefer peaceful engagement with the DPRK has been present during the period of Suh's analysis as well as the current period of President Moon's administration. Suh's analysis found that the North Korean threat to South Korea "alone cannot explain the South's disproportionately high spending relative to that of the North."⁴¹ Instead he concluded that the ROK-US alliance "figures prominently as a central factor that reflects the overall size of Seoul's military spending and the shape of its military transformation," because the alliance compels the ROK to spend more on its defense through mechanisms such as the Special Measures Agreement (SMA), and the alliance's transformation with ROK and U.S. troops fighting together around the globe drives the ROK to acquire capabilities for operating away from the Korean Peninsula.⁴² Suh wrote his analysis more than a decade ago, however; further analysis is required to determine if his conclusions are applicable to the period of 2017 to 2019 under the administration of President Moon.

³⁹ Jae-Jung Suh, "Allied to Race? The U.S.-Korea Alliance and Arms Race," *Asian Perspective* 33, no. 4 (2009): 102.

⁴⁰ Suh, "Allied to Race?" 105.

⁴¹ *Ibid.*, 124.

⁴² *Ibid.*, 125.

Summary and Conclusions

The Defense Planning and Management system of documents provides a framework for the ROK government's security strategy objectives to inform the development of annual defense budgets. Existing academic literature devotes significant attention to the discussion of those strategic objectives and the ROK government's effectiveness in achieving its strategic ends. However, there is a gap in the body of knowledge regarding the current ROK government's allocation of fiscal resources in order to achieve the security strategy objectives articulated in its policy rhetoric. The analysis presented in this thesis will attempt to fill some of that gap.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

The purpose of the research presented in this thesis is to understand the relationship between the significant increases in ROK defense spending from 2017 to 2019 and the ROK government's policy rhetoric during the same period of time, during which there was an apparent reduction of the security threat to the ROK from the DPRK. The primary research question and secondary questions stated in Chapter 1 are structured in order to gain an understanding of the ROK government's perceptions of its security environment, its security strategy objectives, and the resources that it has invested in order to achieve those objectives. This chapter will articulate how the researcher will identify the ROK government's perceptions of its security environment, its rhetorical security strategy objectives, and its allocation of resources towards achieving those objectives. This chapter will also present a framework for assessing the alignment of defense budgets' fiscal resources with the security strategy objectives stated by the ROK government.

This thesis treats the examination of ROK security strategy and defense spending from 2017 to 2019 as a qualitative case study focused on a single case, generally resembling process-tracing case study methodology. Although budgetary figures and percentages are prominent in the analysis, the strength of the analysis's conclusions rests on its descriptions and assessments of the linkages and discontinuities between policy rhetoric and fiscal appropriations rather than statistical or purely numerical analysis.

The Case Study

Process-tracing methodology focuses on a single case to identify the “causal mechanism” that explains a given outcome or observed phenomena.⁴³ In this analysis of the alignment of ROK defense spending with rhetorical policy objectives, the researcher identifies security strategy objectives in ROK policy documents that explain certain trends and features of ROK defense spending during the period of 2017 to 2019. The goal of process-tracing methodology is to identify the causal mechanisms that account for “all of the relevant facets of the outcome” better than “plausible alternative explanations.”⁴⁴ In the application of process-tracing methodology to this particular case, ROK defense spending serves as the given outcome and the objectives stated in ROK policy documents serve as hypothesized causal mechanisms. The researcher identifies policy objectives that the ROK government characterizes as increasingly important, and if the ROK government is appropriating increased funding to programs that support those objectives then the associated security strategy objective or set of objectives constitutes a causal mechanism that is a “minimally sufficient explanation”⁴⁵ of the given outcome.

This thesis establishes the validity of the hypothesized causal mechanisms as much as possible through triangulation, which is “a validity procedure where researchers

⁴³ Alexander L. George and Andrew Bennet, “Process-Tracing and Historical Explanation,” in *Case Studies and Theory Development in the Social Sciences* (Cambridge, MA: MIT Press, 2005), 206.

⁴⁴ Derek Beach and Rasmus Brun Pederson, *Process Tracing Methods: Foundations and Guidelines* (Ann Arbor, MI: The University of Michigan Press, 2013), 20-21.

⁴⁵ *Ibid.*, 20.

search for convergence among multiple and different sources of information to form themes or categories in a study.”⁴⁶ Considering that security strategy objectives stated in ROK policy rhetoric constitute proposed causal mechanisms in this analysis, the researcher will attempt to triangulate those causal mechanisms from multiple sources of data as found in the empirical evidence available. The identification of elements of a causal mechanism that are consistent throughout ROK policy documents, statements of ROK government officials, and other empirical evidence establish the validity of that causal mechanism as an explanation for the observed outcome as found in ROK defense spending.

A basic familiarity with the ROK’s security environment during 2017 to 2019 is necessary in order to understand the context of the security objectives that the ROK government has articulated in its policy documents. However, it is beyond the scope of this thesis to assess the suitability of the ROK government’s security objectives to the threats and challenges that South Korea faces in its security environment. The focus of this research is not the coherence of policy objectives with the security environment but the coherence of policy objectives with defense spending. This thesis will draw heavily from the ROK Defense Planning and Management documents identified in the literature review in order to develop the necessary familiarity with the ROK government’s perceptions of the security environment. Public statements by the ROK executive branch in the Blue House, as well as the ROK MND and other government ministries, also provide insights into the Moon administration’s understanding of the security

⁴⁶ John W. Creswell and Dana L. Miller, “Determining Validity in Qualitative Inquiry,” *Theory Into Practice* 39, no. 3 (Summer 2000): 126.

environment. Those documents and statements collectively describe the threats and challenges that the ROK government perceives. An understanding of those threats and challenges provides context for the government's security objectives and the fiscal resources that the government allocates to achieving those objectives.

Many of the Defense Planning and Management documents explicitly identify security objectives and specific tasks necessary to achieve those objectives. This thesis will employ those security objectives and tasks as the hypothesized causal mechanisms that potentially explain certain trends and features of the ROK defense budgets that the National Assembly approved in 2017, 2018, and 2019. Additionally, this thesis also identifies themes and principles that are common to multiple ROK rhetorical policy objectives, and those common themes and principles are also included for evaluation as causal mechanisms that potentially explain trends and features of ROK defense budgets.

Budget documents published by the ROK National Assembly enable the identification of trends and features of ROK defense budgets. The documents published by the National Assembly classify all of the individual programs in the defense budget into various categories. At the broadest level programs are categorized into either the force operating costs budget or the force enhancement budget, as discussed in the section of the literature review concerning budget request documents. Programs are further sub-categorized into groups that, in many cases, can be assessed against security strategy objectives in ROK policy rhetoric. Within the force enhancement budget, for example, budget programs are sub-categorized into command and control and reconnaissance programs, firepower and maneuver programs, aircraft programs, naval programs, and other categories of programs. This categorization enables a comparison of the budgets

allocated to each of those categories with ROK government policy rhetoric concerning the relative importance of each category.

The alignment between ROK defense spending and security strategy objectives stated in ROK policy rhetoric is assessed by determining whether or not those security strategy objectives constitute causal mechanisms that provide minimally sufficient explanations of certain trends and features of ROK defense budgets. Where there is a correlation between the importance that ROK policy rhetoric assigns to a security strategy objective and the fiscal resources being allocated to budget programs that support that objective, that security strategy objective constitutes a minimally sufficient explanation of the observed outcome in the defense budget. In cases where the importance of a security strategy objective in policy rhetoric does not correlate with the funding for supporting budget programs, the analysis will identify that the security strategy objective is not a causal mechanism of the observed outcome. This is not to say that there is no minimally sufficient explanation or causal mechanism for those programs' funding appropriations, but rather the causal mechanism is not a security strategy objective as stated in ROK policy rhetoric. Figure 2 graphically depicts the process for assessing the alignment of security strategy objectives with defense spending.

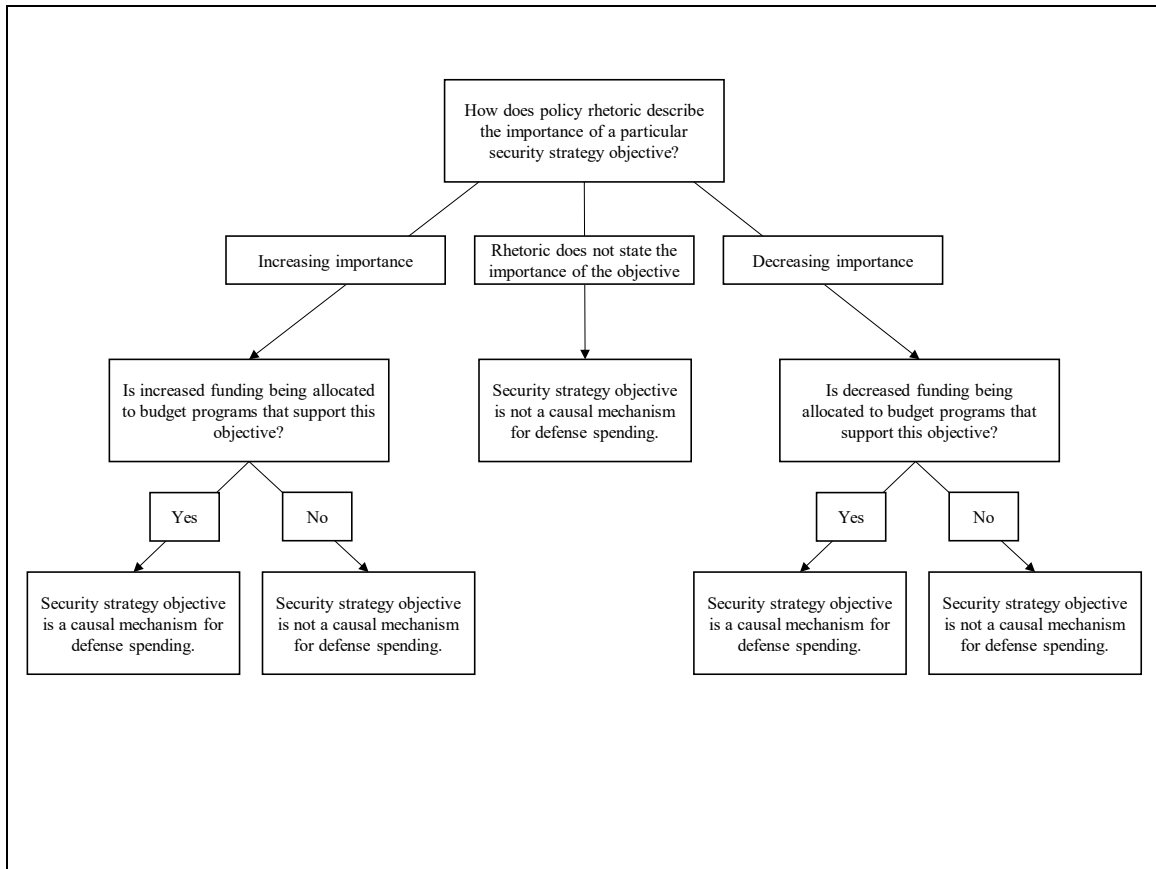


Figure 2. Framework for Assessing the Alignment of ROK Security Strategy Objectives and Defense Spending

Source: Created by author.

The analysis presented in this thesis recognizes that the security strategy objectives that the ROK government presents in policy rhetoric may not be perfectly representative of the security strategy objectives that the government is actively pursuing. Policy rhetoric is designed for public consumption, and there may be strategic objectives which are not in the government's interest to disclose to the public. Similarly, the government may argue in rhetoric that it is pursuing an objective for the unstated purpose of satisfying its constituents, while meanwhile it actually assigns little importance to the

achievement of that objective. This thesis identifies some instances where security strategy objectives in ROK policy rhetoric do not constitute causal mechanisms or minimally sufficient explanations for an observed trend or feature of ROK defense spending. Those instances will suggest that additional factors that are unstated by the ROK government in its policy rhetoric are compelling the government's allocation of resources within the defense budget. Those additional unstated factors, then, constitute the causal mechanisms for those particular trends and features of the defense budget.

A weakness of this methodology is that there may be cases where policy rhetoric indicates an increasing importance of a security strategy objective and there are increasing appropriations to budget programs that support that security strategy objective (thus validating that security strategy objective as a causal mechanism), but the increased appropriations are actually due to factors completely unrelated to the security strategy objectives articulated by policy rhetoric. In such cases the importance of a particular security strategy objective may be correlated with increased funding for supporting budget programs, but there is in fact no causal relationship between the objective and the fiscal appropriation. In this sense, it is possible that the methodology could validate causal mechanisms that are actually false positives. For example, a security strategy objective might articulate that a certain capability is important and budget programs supporting the acquisition of that capability might receive increased funding, and this methodology would then assess that defense spending and security strategy objectives in policy rhetoric are aligned. However, it is possible that the increased funding for those budget programs is not due to the importance of the capability articulated in the security strategy objective but rather to the promotion of defense industry or some other factor

completely unrelated to the security strategy objective stated in rhetoric. While the possibility of false positives in this methodology cannot be entirely eliminated, the probability of the occurrence of a false positive can be reduced by considering the breadth of security strategy objectives and the entirety of defense budget programs in order to maintain an awareness of the multitude of factors that could potentially influence any particular budget program. This goal of minimizing false positives is additional justification for establishing the validity of hypothesized causal mechanisms through triangulating security strategy objectives from across ROK policy documents and official statements.

It is not possible for this thesis to evaluate every security strategy objective that the ROK government articulates in policy rhetoric and every ROK defense budget program for alignment with one another. Rather, this thesis will identify those security strategy objectives and features of the defense budget that are most pertinent to the ROK-US alliance. Security strategy objectives that relate to the enhancement of ROK military capabilities and corresponding budget programs that relate to the development and acquisition of those capabilities will receive specific attention because those ROK military capabilities directly contribute to the combined capabilities of the ROK-US alliance. The methodological framework employed in this thesis could be used to assess the alignment of other ROK security strategy objectives with supporting defense budget programs, such as the objective of increasing the proportion of females serving in the ROK military with supporting programs such as funding for military childcare centers, but the alignment of such objectives and programs does not directly affect the combined capabilities of the ROK-US alliance.

Conclusion

Process-tracing methodology provides a framework for assessing the alignment of ROK security strategy objectives with ROK defense spending. Security strategy objectives serve as hypothesized causal mechanisms for trends and features of defense spending. Where security strategy objectives and defense spending on budget programs that support those objectives share similar emphases, as evidenced by increasing or decreasing rhetorical importance and increasing or decreasing fiscal appropriations, the security strategy objectives are valid causal mechanisms, and valid causal mechanisms indicate the alignment of defense spending with security strategy objectives. The next chapter develops an understanding of ROK security strategy objectives articulated in policy rhetoric and then assesses the alignment of ROK defense spending with ROK security strategy objectives using the methodology described in this chapter.

CHAPTER 4

ANALYSIS

Introduction

The purpose of the research presented in this thesis is to understand the relationship between the significant increases in ROK defense spending from 2017 to 2019 and the ROK government's policy rhetoric during the same period of time, during which there was an apparent reduction of the security threat to the ROK from the DPRK. This chapter will first summarize significant events that shaped South Korea's security environment from 2017 to 2019, to include reviewing how the ROK government described those events and their consequences in its policy rhetoric and other official statements. The study will then examine ROK policy documents in order to identify security strategy objectives that are relevant to defense spending. After identifying those security strategy objectives and common themes across security strategy objectives, the study describes the defense budgets that have been approved in 2017, 2018, and 2019 while President Moon has been in office. Finally, the study analyzes the alignment between the ROK government's security strategy objectives in its policy documents and the defense budgets of 2017, 2018, and 2019, considering changes in both the size and the composition of the defense budgets during that time.

ROK Perceptions of the Security Environment

North Korea

President Moon Jae-in's election on May 9, 2017 brought him to office in the midst of a series of DPRK provocations. A nuclear test and multiple ballistic missile

launches in 2016 had prompted a United Nations Security Council resolution and further condemnation, but the DPRK continued its provocative behavior undeterred.⁴⁷ In the opening months of 2017 prior to the election, the DPRK conducted four distinct ballistic missile launches, unveiled new ballistic missiles at a parade in Pyongyang, and allegedly orchestrated the assassination of Kim Jong-un's younger brother, Kim Jong-nam, using a nerve agent in the Kuala Lumpur airport.⁴⁸ The ROK MND's press statement on the 2017 MDP, published in the wake of these actions and a month prior to the South Korean election, named the construction of the Triad System (discussed in detail below) for countering explicitly North Korean nuclear and weapons of mass destruction threats at the top of its priorities for funding from 2018 to 2022.⁴⁹

A decade earlier Moon had served in the administration of President Roh Moo-hun, where his work involved Sunshine Policy programs such as the second inter-Korean summit in 2007. While President Moon's "affinity for Sunshine-esque engagement policies" might have offered the DPRK an alternative to further missile tests and other

⁴⁷ United Nations Security Council, Resolution 2270, S/RES/2270 (New York: UN, March 2, 2016), [https://undocs.org/S/RES/2270\(2016\)](https://undocs.org/S/RES/2270(2016)); United Nations Security Council, "Security Council Press Statement on Democratic People's Republic of Korea Ballistic Missile Launches," June 23, 2016, <https://www.un.org/press/en/2016/sc12418.doc.htm>.

⁴⁸ "Chronology of US-North Korean Nuclear and Missile Diplomacy," Arms Control Association, last modified April 2020, <https://www.armscontrol.org/factsheets/dprkchron>.

⁴⁹ ROK MND, "'18~'22 Gukbangjunggigyehoek, Hyanghu 5 Nyeongan 238 Jowon Tuip" ['18~'22 국방중기계획, 향후 5 년간 238 조원 투입; '18~'22 Midterm Defense Plan, Invests 238 Trillion Won in the Coming 5 years] April 14, 2017, 1, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_10213&num=1.

provocative acts, Pyongyang conducted another ballistic missile launch less than a week after the election.⁵⁰ Additional missile tests in May and July prompted President Moon to allow the U.S. deployment of additional Terminal High Altitude Area Defense (THAAD) missile defense interceptor launchers to South Korea, reversing an earlier decision to require an environmental review prior to deployment of the additional THAAD launchers.⁵¹ Further missile tests followed in August, along with a nuclear test in early September that Pyongyang claimed to be a hydrogen bomb.⁵² The ROK MND, describing the 2018 defense budget request in late August, cited “heightened tensions

⁵⁰ Marcus Noland and Kent Boydston, “President Moon Jae-in and Sunshine Policy 3.0,” *North Korea: Witness to Transformation* (blog), Peterson Institute for International Economics, May 9, 2017, <https://www.piie.com/blogs/north-korea-witness-transformation/president-moon-jae-and-sunshine-policy-30>; “Chronology of US-North Korean Nuclear and Missile Diplomacy,” Arms Control Association.

⁵¹ The Blue House, “Sadeu Chuga Banip Bogo Nurak Jinsangjosa Mit Husokjochi Balpyo Beuriping” [사드 추가 반입 보고 누락 진상조사 및 후속조치 발표 브리핑; Briefing on the Fact Finding Investigation regarding the Omission of the Report regarding the Introduction of Additional THAAD and Announcement of Follow-up Measures] June 5, 2017, <https://www1.president.go.kr/articles/127>; The Blue House, “NSC Jeonchehoeui Gyeolgwa Balpyo” [NSC 전체회의 결과 발표; Announcement of the Results of the NSC Full Council Meeting] July 29, 2017, <https://www1.president.go.kr/articles/264>; Reuters, “South Korea to deploy more THAAD units after North Korea ICBM launch,” July 28, 2017, <https://www.reuters.com/article/us-norhtkorea-missiles-thaad/south-korea-to-deploy-more-thaad-units-after-north-korea-icbm-launch-idUSKBN1AE02L>.

⁵² “Chronology of US-North Korean Nuclear and Missile Diplomacy,” Arms Control Association.

among regional states” in addition to DPRK nuclear and missile threats as justification for the proposed increase to that year’s defense budget.⁵³

The DPRK followed up its nuclear test detonation in early September with another ballistic missile launch two weeks later, and then conducted a final missile test of the year in late November in which it demonstrated the capability to launch a missile with the range necessary to strike anywhere in the United States.⁵⁴ Speaking on November 7th at a joint press conference with President Trump in Seoul, President Moon commented, “Against escalating nuclear and missile threats from North Korea, we [President Moon and President Trump] reaffirmed our principle that we must maintain a strong stance toward North Korean threats based on overwhelming superiority of power.”⁵⁵ President Moon might have hoped for a resumption of engagement with the DPRK along the lines of the Sunshine Policy advocated by previous liberal administrations, but continued DPRK provocations compelled his administration to project a strong military posture.

South Korean characterizations of the DPRK threat shifted after Kim Jong-un’s New Year’s Address on January 1, 2018, in which he stated that Pyeongyang was

⁵³ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 6.9% Jeungaekdoen 43.1 Jowon” [신정부 첫 해, 국방예산 6.9% 증액된 43.1 조원; New Government’s First Year, Defense Budget Increased 6.9% to 43.1 Trillion Won] August 28, 2017, 3.

⁵⁴ “Chronology of US-North Korean Nuclear and Missile Diplomacy,” Arms Control Association; Ankit Panda, “The Hwasong-15: The Anatomy of North Korea’s New ICBM,” *The Diplomat*, December 6, 2017, <https://thediplomat.com/2017/12/the-hwasong-15-the-anatomy-of-north-koreas-new-icbm/>.

⁵⁵ The White House, “Remarks by President Trump and President Moon of the Republic of Korea in Joint Press Conference, Seoul, Republic of Korea,” November 7, 2017, <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-president-moon-republic-korea-joint-press-conference-seoul-republic-korea/>.

“willing to dispatch our delegation” to the upcoming Winter Olympic Games taking place in South Korea.⁵⁶ The offer sparked a flurry of diplomatic activity between Seoul, Pyeongyang, and Washington that resulted in not only North Korean participation in the Winter Olympics but also a string of summits between President Moon, Chairman Kim, and President Trump.⁵⁷ Kim Jong-un’s “firm and unwavering commitment to complete denuclearization of the Korean Peninsula” gave hope that the North Korean nuclear and missile problems might be resolved without resorting to military force.⁵⁸ In the ROK MND’s press release unveiling many of the initiatives of DR 2.0 in July 2018, the MND acknowledged the possibility of a peaceful solution while hedging against uncertainty: “Even though there are high hopes and a possibility of progress towards the denuclearization of the Korean Peninsula and the establishment of a peace regime, we are facing a transitional period in which uncertainty regarding changes in the security

⁵⁶ “Kim Jong Un’s 2018 New Year’s Address,” The National Committee on North Korea, January 1, 2018, <https://www.ncnk.org/node/1427>.

⁵⁷ “The full text of North and South Korea’s agreement, annotated,” *The Washington Post*, April 27, 2018, <https://beta.washingtonpost.com/news/worldviews/wp/2018/04/27/the-panmunjom-declaration-full-text-of-agreement-between-north-korea-and-south-korea/>; “Full address by South Korean President Moon Jae In on May 26 inter-Korean summit,” *The Straits Times*, May 27, 2018, <https://www.straitstimes.com/asia/east-asia/full-address-by-south-korean-president-moon-jae-in-on-may-26-inter-korea-summit>; The White House, “Joint Statement of President Donald J. Trump of the United States of America and Chairman Kim Jong Un of the Democratic People’s Republic of Korea at the Singapore Summit,” June 12, 2018, <https://www.whitehouse.gov/briefings-statements/joint-statement-president-donald-j-trump-united-states-america-chairman-kim-jong-un-democratic-peoples-republic-korea-singapore-summit/>.

⁵⁸ The White House, “Joint Statement of President Donald J. Trump of the United States of America and Chairman Kim Jong Un of the Democratic People’s Republic of Korea at the Singapore Summit,” June 12, 2018.

environment is deepening.”⁵⁹ In the same statement, the MND shifted its rhetoric on the justification for military force improvements from focusing exclusively on DPRK nuclear and missile threats to preparing for “omnidirectional security threats” that included “not only North Korea’s existing threats, but also potential threats and nonmilitary threats.”⁶⁰ Similar language regarding “omnidirectional military readiness” had occasionally appeared in the previous administration’s statements on the defense budget, but the term had not been prominent in MND rhetoric since the *2006 Defense White Paper* published in the era of the Sunshine Policy under President Roh.⁶¹ The return to an emphasis on preparation for “omnidirectional security threats” suggested that President Moon’s administration was perceiving a relatively less hostile threat emanating from Pyeongyang.

The ROK MND’s statements continued to place less emphasis on North Korean threats, advocating for the “construction of strong military force that is capable of

⁵⁹ ROK MND, “Moon Jae-in Jeongbuui Gukbangaehyeok 2.0” [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration’s Defense Reform 2.0] July 27, 2018, 2.

⁶⁰ ROK MND, “Moon Jae-in Jeongbuui Gukbangaehyeok 2.0” [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration’s Defense Reform 2.0] 3.

⁶¹ ROK MND, “Oegyoanbo Bunya Yesanan Jeonnyeon Daebi 4.0% Jeunggahan 43 Jo 6,249 Eok Woneuro Hwakdae Pyeonseong” [외교안보 분야 예산안 전년 대비 4.1% 증가한 43 조 6,249 억 원으로 확대 편성; Planned Budget for Diplomatic Security Organized to Expand to 43.6249 Trillion Won, a 4.0% Increase from the Previous Year] September 9, 2015, 3, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_8799&num=1; ROK MND, *2006 Defense White Paper* (Seoul: MND, 2006), 50, http://www.mnd.go.kr/user/mnd/upload/pblict/PBLICTNEBOOK_201505220946564640.pdf.

responding effectively to any kind of threat” without even mentioning the DPRK in an August 2018 statement on the 2019 defense budget request.⁶² Rapprochement efforts continued, with President Moon visiting Chairman Kim in Pyeongyang in September 2018, while at the same time the ROK and DPRK militaries agreed to the Comprehensive Military Agreement for “easing tensions and building confidence” between the two belligerents.⁶³ Although the administration’s rhetoric continued to put less emphasis on threats from the DPRK, acquisition programs remained associated with countering DPRK threats. In its statement on the approved 2019 defense budget, the first category of acquisition programs highlighted by the MND was the Triad System, which MND described as a set of capabilities that can respond to “not only existing North Korean threats, but also future potential threats.”⁶⁴ DPRK threats had not entirely disappeared from the administration’s characterizations of the security environment at the end of 2018.

⁶² ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeungghan 46.7 Jowon” [국방예산, 전년 대비 8.2% 증가한 46.7 조원; Defense Budget, Increases by 8.2% from Last Year to 46.7 Trillion Won] August 27, 2018, 1.

⁶³ “Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain,” The National Committee on North Korea, September 19, 2018, <https://www.ncnk.org/sites/default/files/Agreement%20on%20the%20Implementation%20of%20the%20Historic%20Panmunjom%20Declaration%20in%20the%20Military%20Domain.pdf>.

⁶⁴ ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeungghan 46.7 Jowoneuro Hwakjeong” [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, 5.

After a year of diplomatic engagement that did not include any nuclear or ballistic missile tests, the ROK published an updated National Security Strategy and completed planning for DR 2.0. Published in December 2018, the National Security Strategy stated that “a new security environment has materialized” following the string of summits between the leaders of the DPRK, ROK, and United States in 2018.”⁶⁵ The new National Security Strategy still acknowledged threats from the DPRK, asserting that “the largest challenge now confronting our security is the North Korean nuclear problem.”⁶⁶ Furthermore, the National Security Strategy anticipated potential conflict with Pyongyang: “We [the ROK] will deter North Korean provocations in peacetime and manage the security situation in a stable manner so that the people are at ease and can carry out their lives.”⁶⁷ While the National Security Strategy acknowledged that the North Korean nuclear problem remained unresolved and that a return to conflict was possible, it also maintained that South Korea was at a “historic great transition point” where “the complete denuclearization of the Korean Peninsula, the establishment of peace, and combined prosperity of North and South” are all possible.⁶⁸ DR 2.0’s formulation of the security environment described a similar dynamic in which peace with the North is a realistic possibility that is not yet achieved: “There is an increase in

⁶⁵ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 9.

⁶⁶ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy], 27.

⁶⁷ Ibid., 67.

⁶⁸ Ibid., 11.

uncertainty until the DPRK's complete denuclearization and the permanent establishment of peace.”⁶⁹

Through 2019 the ROK MND's policy and budget documents continued to place less emphasis on security threats from North Korea. The 2018 MDP, belatedly announced by the MND in January 2019, articulated the requirement for a set of capabilities to “respond to nuclear and WMD threats” without referring to those capabilities as the Triad System or even mentioning North Korea as a possible source of those threats.⁷⁰ The *2018 Defense White Paper*, the Korean version of which was also published in January 2019, emphasized many of the same points as the National Security Strategy, stating that “an unprecedented security environment has been set in 2018 to realize complete denuclearization and peace establishment on the Korean Peninsula” while also acknowledging that “North Korea's WMDs still pose a threat to peace and stability on the Korean Peninsula.”⁷¹ The string of policy documents announced in December 2018 and January 2019 all contain similar descriptions of the security environment: the ROK-DPRK relationship has improved and denuclearization is possible, but South Korea still faces a security threat from the DPRK.

⁶⁹ ROK MND, *Gukbanggaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 18.

⁷⁰ ROK MND, “'Ganghan Anbo' 'Chaegimgukbang' Guhyeoneul Wihan '19-'23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-'23 중기간 소요재원 총 270.7 조원; Required Resources in the '19-'23 Midterm in order to Materialize 'Strong Security' and 'Responsible National Defense' Total 270.7 Trillion Won] January 10, 2019, 3.

⁷¹ ROK MND, *2018 Defense White Paper*, 42.

The trend of improving North-South relations reached an apparent plateau in 2019. North Korea tested short-range ballistic missiles in May, and it then conducted similar missile tests in July and August before conducting a submarine-launched ballistic missile test in October.⁷² The 2019 MDP, announced in August, acknowledged the threat posed by these weapons, asserting that the ROK military would acquire capabilities to intercept “the new type of short-range ballistic missiles that North Korea has launched.”⁷³ Nonetheless, the 2019 MDP’s description of the set of capabilities to respond to nuclear and WMD threats, like the 2018 MDP, does not mention the DPRK as a source of those threats.⁷⁴ The MND’s statements regarding the 2020 defense budget also do not cite North Korea specifically as a security threat, and instead refer to the requirement to respond to “omnidirectional security threats.”⁷⁵ Even though the DPRK had reverted to conducting provocative missile launches (albeit not as provocative as the tests of longer range ballistic missiles that it had conducted in 2017), ROK policy rhetoric

⁷² “Chronology of US-North Korean Nuclear and Missile Diplomacy,” Arms Control Association.

⁷³ ROK MND, “‘Ganghan Anbo’ ‘Chaegimgukbang’ Guhyeoneul Wihan ‘19-’23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-’23 중기간 소요재원 총 270.7 조원; Required Resources in the ‘19-’23 Midterm in order to Materialize ‘Strong Security’ and ‘Responsible National Defense’ Total 270.7 Trillion Won] January 10, 2019, 5.

⁷⁴ Ibid., 4.

⁷⁵ ROK MND, “2020 Nyeon Gukbangyesan, 50 Jowon Sidae Gaemak” [2020 년 국방예산, 50 조원 시대 개막; 2020 Defense Budget, Opening the Era of over 50 Trillion Won] August 28, 2019, 1.

in 2019 continued to focus on “omnidirectional security threats” without explicitly focusing on the DPRK.

The United States

The DPRK missile tests in the months leading up to President Moon’s election were prompting President Trump’s administration to pursue a more aggressive policy with Pyeongyang than those of his predecessors. In April 2017 the ROK’s ally adopted a policy of “maximum pressure and engagement” towards North Korea with the intention of “getting some tangible signal from the North Korean regime that it is serious about engaging in talks.”⁷⁶ Additionally, Washington was deploying a THAAD missile defense system to South Korea under an agreement made with the administration of Park Geun-hye, who had since been impeached for corruption and subsequently removed from office in March 2017.⁷⁷ Both the maximum pressure campaign and the THAAD deployment represented U.S. activities that directly impacted South Korea’s security as the new ROK administration entered government.

⁷⁶ Matthew Pennington, “Trump strategy on NKorea: ‘Maximum pressure and engagement’,” *Associated Press*, April 14, 2017, <https://apnews.com/86626d21ea2b45c79457a873a747c452>; U.S. Department of State, “Briefing on the Situation on the Korean Peninsula,” April 17, 2017, <https://www.state.gov/briefing-on-the-situation-on-the-korean-peninsula/>.

⁷⁷ “South Korea impeachment: Critics urge Park Geun-hye arrest,” *BBC News*, March 11, 2017, <https://www.bbc.com/news/world-asia-39240909>; U.S. Department of Defense, “Republic of Korea and the United States Make Alliance Decision to Deploy THAAD to Korea,” July 7, 2016, <https://www.defense.gov/Newsroom/Releases/Release/Article/831178/republic-of-korea-and-the-united-states-make-alliance-decision-to-deploy-thaad>.

The maximum pressure campaign came to be associated with a variety of diplomatic, military, and economic measures implemented by the United States to compel North Korean behavior, but the campaign's explicit purpose was to bring North Korea to the negotiating table: to get some "tangible signal" from the DPRK that the regime in Pyongyang would engage in talks. In this respect, the maximum pressure campaign aligned with the Moon administration's goal of engaging with North Korea even if it increased military tensions in the short term. In an interview a week before his election, Moon Jae-in had stated his agreement with the U.S. policy: "Trump talks about strenuous pressure, sanctions and even the possibility of a pre-emptive strike, but I believe his ultimate goal is to bring North Korea back to negotiations for the nuclear program. In that respect, I share the same opinion as President Trump."⁷⁸ President Moon would again affirm his support for the maximum pressure campaign shortly after taking office, agreeing with President Trump to "apply maximum pressure on the DPRK and compel Pyongyang to cease its provocative actions and return to sincere and constructive talks."⁷⁹ The maximum pressure campaign, despite the increase in military tension that it entailed, did not bring any major public objections from the new South Korean administration.

⁷⁸ Anna Fifield, "Interview with Moon Jae-in, set to become South Korea's next president," *Washington Post*, May 2, 2017, <https://www.washingtonpost.com/news/worldviews/wp/2017/05/02/interview-with-moon-jae-in-set-to-become-south-koreas-next-president>.

⁷⁹ The White House, "Joint Statement between the United States and the Republic of Korea," June 30, 2017, <https://www.whitehouse.gov/briefings-statements/joint-statement-united-states-republic-korea>.

While President Moon agreed with the aims of the maximum pressure campaign, the U.S. deployment of THAAD to South Korea was far more problematic. During his campaign for president, Moon Jae-in had argued against the then-in-progress deployment of the THAAD system to South Korea on the grounds that the Park administration's decision to allow the deployment had "lacked democratic procedure" and that the deployment had "aggravated foreign relations."⁸⁰ China had opposed the U.S. introduction of THAAD to South Korea since the deployment had been announced, and the continued insistence of U.S. and conservative ROK officials to proceed with the deployment was complicating the ROK's relationship with China (discussed further below).⁸¹ Nearly a month after his election, President Moon in fact suspended the deployment of additional THAAD interceptor launchers pending an environmental review, although he reversed that decision and gave the green-light for the launcher deployment in late July 2017 following another DPRK ballistic missile test.⁸²

⁸⁰ Anna Fifield, "Interview with Moon Jae-in, set to become South Korea's next president."

⁸¹ Foreign Ministry of the People's Republic of China, "Foreign Ministry Spokesperson Hong Heli's Regular Press Conference on July 8, 2016," July 8, 2016, <https://www.fmprc.gov.cn/ce/cedk/eng/fyrth/t1378753.htm>.

⁸² The Blue House, "Sadeu Chuga Banip Bogo Nurak Jinsangjosa mit Husokjochi Balpyo Beuriping" [사드 추가 반입 보고 누락 진상조사 및 후속조치 발표 브리핑; Briefing on the Fact Finding Investigation regarding the Omission of the Report regarding the Introduction of Additional THAAD and Announcement of Follow-up Measures] June 5, 2017; The Blue House, "NSC Jeonchehoeui Gyeolgwa Balpyo" [NSC 전체회의 결과 발표; Announcement of the Results of the NSC Full Council Meeting] July 29, 2017.

While the U.S. maximum pressure campaign and THAAD deployment captured much of Moon Jae-in's attention during his campaign, a third feature of the ROK-US security relationship became a more permanent fixture of his administration's policy rhetoric after his election: the transition of wartime operational control (OPCON) authorities from the United States to the ROK. In July 1950 as the DPRK's Korean People's Army was pushing its way south down the peninsula, ROK President Syngman Rhee gave General Douglas MacArthur, the Supreme Commander of United Nations Forces, "command authority over all land, sea, and air forces of the Republic of Korea during the period of the continuation of the present state of hostilities."⁸³ Command authority over ROK forces came to mean OPCON, and in 1978 the OPCON of ROK forces was transferred from United Nations Command to the newly established ROK-US Combined Forces Command (CFC) that is staffed by both ROK and U.S. military members but commanded by a U.S. general. In 1994, peacetime OPCON authorities of ROK forces were transferred from the CFC to the ROK JCS but wartime OPCON authorities have remained with the CFC.⁸⁴

The transfer of wartime OPCON authorities back to the ROK was a goal for the liberal administration of Roh Moo-hyun (in which Moon Jae-in served). In 2007, the ROK and the United States agreed to transfer wartime OPCON authorities to the ROK

⁸³ United Nations Security Council, "Note dated 25 July 1950 from the representative of the United States of America to the Secretary-General transmitting the text of an exchange of letters between President Syngman Rhee of the Republic of Korea and General Douglas MacArthur," S/1627, July 25, 1950.

⁸⁴ Chad R. Nishizuka, "Demystifying the US-ROK Command and Control Structure: How 'OPCON Transfer' Can Advance the Unity of Effort on the Korean Peninsula," *The Korean Journal of Defense Analysis* 30, no. 4 (December 2018): 458.

JCS on April 17, 2012. However, in June 2010 the conservative administration of Lee Myung-bak reached an agreement with the United States to delay OPCON transfer until December 2015. At the 46th Security Consultative Meeting (SCM) in October 2014, the U.S. Secretary of Defense and ROK Minister of Defense agreed to once again delay OPCON transfer, changing the framework for OPCON transition to “the ROK-proposed conditions-based approach to the transition of wartime OPCON from the U.S. forces-led CFC to a new ROK forces-led combined defense command.”⁸⁵ This decision entailed that the authorities for exercising wartime OPCON of ROK forces would transfer from a US-led command to a ROK-led command when certain conditions are satisfied rather than according to a predetermined timeline. The conditions of the new framework for transition of wartime OPCON authorities came to be known as the Conditions-based OPCON Transition Plan (COTP), and the conditions of COTP require that the ROK military acquire certain capabilities before OPCON transition. When Seoul and Washington agreed to the conditions-based approach in 2014 they stated that “the ROK will assume wartime OPCON when critical ROK and Alliance military capabilities are secured and the security environment on the Korean Peninsula and in the region is conducive to a stable OPCON transition.”⁸⁶ The ROK government later articulated three

⁸⁵ “S. Korea, U.S. Agree to Delay Wartime OPCON Transfer Again,” *Korea Broadcasting System*, November 6, 2014, http://world.kbs.co.kr/service/contents_view.htm?lang=e&menu_cate=northkorea&id=&board_seq=148891&page=25&board_code=; “Joint Communiqué of the 46th ROK-US Security Consultative Meeting,” October 23, 2014, https://archive.defense.gov/pubs/46th_SCM_Joint_Communique.pdf.

⁸⁶ “Joint Communiqué of the 46th ROK-US Security Consultative Meeting,” October 23, 2014.

distinct conditions required in order to execute COTP: the acquisition of military capabilities necessary for leading the combined defense, comprehensive alliance capabilities for responding to North Korean nuclear and missile threats, and a security environment on the Korean Peninsula and in the region that is conducive to a stable OPCON transition.⁸⁷

The execution of COTP did not seem to be a major priority for the administration of President Park Geun-hye. The joint communiques of the annual SCMs for 2015 and 2016 contained pledges to “faithfully” implement the COTP with little additional elaboration.⁸⁸ The ROK’s *2016 Defense White Paper* devoted three paragraphs to giving an overview of COTP, but the MND did not heavily emphasize the transition of wartime OPCON authorities in the White Paper.⁸⁹ Even though the first condition of COTP requires the ROK to acquire certain military capabilities, the MND’s press releases on the defense budgets for 2016 and 2017 did not mention COTP or the relationship between any defense acquisition programs and COTP.⁹⁰ Park Geun-hye’s administration may

⁸⁷ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 73.

⁸⁸ “Full text of the 47th ROK-US Joint Communique,” November 1, 2015, <https://www.usfk.mil/Media/News/Article/626859/full-text-of-47th-rok-us-joint-communique>; “Joint Communiqué of the 48th US-ROK Security Consultative Meeting,” October 21, 2016, <https://www.usfk.mil/Media/News/Article/981396/joint-communique-of-the-48th-us-rok-security-consultative-meeting>.

⁸⁹ ROK MND, *2016 Defense White Paper* (Seoul: MND, 2017), 150-51, http://www.mnd.go.kr/user/mndEN/upload/pblicitn/PBLICTNEBOOK_201705180357180050.pdf.

⁹⁰ ROK MND, “2016 Nyeon Gukbangyesan Yoguan, 40 Jo 1,395 Eok Won” [2016 년 국방예산 요구안, 40 조 1,395 억 원; 2016 Defense Budget Request, 40.1395 Trillion Won] June 16, 2015, <http://www.mnd.go.kr/user/newsInFileDown.action?siteId=>

have reached the agreement with the United States to establish the COTP framework, but COTP was not a major point of emphasis in her administration's rhetoric.

President Moon and his administration quickly made COTP a political priority after his election in May 2017. At a summit in late June 2017 in Washington D.C., President Moon and President Trump agreed “to expeditiously enable the conditions-based transfer of wartime OPCON of ROK forces.”⁹¹ President Moon's commitment to “expeditiously” fulfill the requirements of COTP by acquiring required military capabilities indicated that COTP would receive greater attention under his administration than that of his predecessor. A few months later on the occasion of South Korean Armed Forces Day, President Moon explained why he gave such importance to the expeditious transfer of wartime OPCON authorities: “Only if we possess wartime OPCON authority will North Korea fear us, and the South Korean people will come to respect the South

mnd&newsSeq=I_8607&num=1; ROK MND, “2016 Nyeondo Gukbangyesan 38 Jo 7,995 Eok Woneuro Hwakjeong” [2016 년도 국방예산 38 조 7,995 억 원으로 확정; 2016 Defense Budget Confirmed at 38.7995 Trillion Won] December 3, 2015, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_8973&num=1; ROK MND, “2017 Nyeon Gukbankyesan Yoguan, 40 Jo 8,732 Eok Won” [2017 년 국방예산 요구안, 40 조 8,732 억 원; 2017 Defense Budget Request, 40.8732 Won] June 10, 2016, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_9399&num=1; ROK MND, “2017 Nyeondo Gukbangyesan 40 Jo 3,347 Eok Woneuro Hwakjeong” [2017 년도 국방예산 40 조 3,347 억 원으로 확정; 2017 Defense Budget Confirmed at 40.3347 Trillion Won] December 5, 2016, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_9832&num=1.

⁹¹ The White House, “Joint Statement between the United States and the Republic of Korea,” June 30, 2017.

Korean military more.”⁹² If the DPRK does not fear the ROK then Pyeongyang may be more willing to engage in provocative behavior towards the South.

Shortly after President Moon and President Trump agreed to “expeditiously enable” the transfer of wartime OPCON authorities, the MND began to regularly emphasize the role of various acquisition programs in fulfilling the conditions of COTP. In its August 2017 statement on the administration’s defense budget request, the MND stated that it was making “concentrated investments” in support of the expedited OPCON transition from the United States to the ROK.⁹³ Support to COTP became a regular feature of MND’s statements on the budget, as discussed in detail in the below section on defense budget priorities.

While President Moon’s new administration suspended and then allowed the U.S. deployment of THAAD to South Korea and then began placing increasing emphasis on regaining ROK wartime OPCON authorities over ROK forces from the United States, President Moon remained aligned with the U.S. government’s maximum pressure campaign. President Trump’s rhetoric of “fire and fury” in the summer of 2017 prompted some concern in both South Korea and the United States about the possibility of war on

⁹² The Blue House, “Je 69 Junyeon Gukgunui Nal Ginyeomsik” [제 69 년 국군의날 기념식; Commemoration on the 69th Armed Forces Day] in *Moon Jae-in Daetongnyeong Yeonseolmunjim Sanggwon Je 1 Gwon Sang* [문재인 대통령 연설문집 제 1 권 상; Collection of the Speeches of President Moon Jae-in, Vol. 1 Upper Half] (Seoul: The Blue House, July 2018), 386, <https://www1.president.go.kr/dn/5b64172063980>.

⁹³ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 6.9% Jeungaekdoen 43.1 Jowon” [신정부 첫 해, 국방예산 6.9% 증액된 43.1 조원; New Government’s First Year, Defense Budget Increased 6.9% to 43.1 Trillion Won] August 28, 2017, 1.

the peninsula, but during President Trump's visit to South Korea in November 2017 President Moon remarked that both President Trump and he continued to support the strategy to "maximize pressure and sanctions on North Korea until it gives up nuclear weapons and to come to the table for dialogue on its own."⁹⁴ At the same time, however, President Moon's claim that "President Trump requested that I need to talk with him continuously" suggested that there was some U.S. concern regarding ROK adherence to maintaining maximum pressure on the regime in Pyongyang.⁹⁵

ROK and U.S. efforts to maintain strategic alignment were further complicated by the negotiations to renew the Special Measures Agreement (SMA) that covers ROK financial obligations for "the sharing of expenditures incident to the maintenance of the U.S. Armed Forces in the Republic of Korea."⁹⁶ Through the SMA, the ROK provides funds towards labor cost sharing, logistics cost sharing, and ROK-funded construction. It would be misleading to characterize the SMA as simply the ROK government transferring funds to the U.S. government in exchange for stationing U.S. troops on the peninsula; rather, it is the ROK government agreeing to allocate funding and provide in-kind contributions for goods and services used by U.S. forces in Korea (such as payroll

⁹⁴ "Trump: NKorea Will be Met with 'Fire and Fury'," *Associated Press*, August 8, 2017, video, <https://www.youtube.com/watch?v=8p1JlgTuKQk>; The White House, "Remarks by President Trump and President Moon of the Republic of Korea in Joint Press Conference, Seoul, Republic of Korea," November 7, 2017.

⁹⁵ The White House, "Remarks by President Trump and President Moon of the Republic of Korea in Joint Press Conference, Seoul, Republic of Korea," November 7, 2017.

⁹⁶ Special Measures Agreement, US-ROK, March 8, 2019, *Treaties and Other International Acts Series* no. 19-405, art. I, <https://www.state.gov/wp-content/uploads/2019/06/19-405-Korea-SMA.pdf>.

for some South Korean employees on U.S. installations, various logistics services, and some facilities construction and maintenance). The previous SMA had been signed in February 2014 with a period of effectiveness through 2018, so negotiations for a new SMA to take effect in 2019 began in March 2018.⁹⁷ President Trump had previously expressed the opinion that the ROK should pay for the expense of the U.S. deployment of THAAD to South Korea, suggesting that the United States might also demand that the ROK make greater monetary contributions to the SMA.⁹⁸ North Korean propaganda, almost always eager to exploit potential divisions between the ROK and the United States, quickly stepped into the fray to argue that the SMA was a U.S. tool to “dominate” and “plunder” Korea.⁹⁹

The SMA negotiations in 2018 became contentious as the U.S. negotiators reportedly pressed for the addition of SMA funding to cover operational expenses and combined exercise costs in addition to the established categories of labor cost sharing,

⁹⁷ Special Measures Agreement, US-ROK, February 2, 2014, *Treaties and Other International Acts Series* no. 14-618, art. II, <https://www.state.gov/wp-content/uploads/2019/02/14-618-Republic-of-Korea-Defense-SMA-w-Imple-Arrang-and-Notes.pdf>; Ankit Panda, “US, South Korea to Negotiate Alliance Cost-Sharing,” *The Diplomat*, March 6, 2018, <https://thediplomat.com/2018/03/us-south-korea-to-negotiate-alliance-cost-sharing>.

⁹⁸ Stephen J. Adler, Jeff Mason, and Steve Holland, “Exclusive: Trump vows to fix or scrap South Korea trade deal, wants missile system payment,” *Reuters*, April 27, 2017, <https://www.reuters.com/article/us-usa-trump-southkorea-exclusive/exclusive-trump-vows-to-fix-or-scrap-south-korea-trade-deal-wants-missile-system-payment-idUSKBN17U09M>.

⁹⁹ Elizabeth Shim, “North Korea accuses U.S. of ‘highway robbery’ in defense deal with South,” *United Press International*, April 25, 2018, https://www.upi.com/Top_News/World-News/2018/04/25/North-Korea-accuses-U.S.-of-highway-robbery-in-defense-deal-with-South/5251524662445.

logistics cost sharing, and ROK-funded construction.¹⁰⁰ ROK and U.S. negotiators failed to reach an agreement on the new SMA prior to the 2014 SMA's expiration at the end of 2018. In a January 2019 poll, a majority of South Korean citizens continued to oppose an increase of ROK funding towards the SMA even if it entailed a partial or complete reduction of U.S. forces in South Korea.¹⁰¹ Throughout much of 2018, the ROK and the United States were also renegotiating their Free Trade Agreement, and the combination of President Trump's threats to withdraw from the trade agreement and the U.S. demands for greater ROK payments to the SMA seems to have given many South Koreans the impression that Washington was simply trying to squeeze its Korean allies for every possible penny.¹⁰²

President Moon's administration continued to emphasize the importance of OPCON transition throughout 2018. The MND's initial announcement of the DR 2.0 agenda in July 2018 described many of the military structure reform initiatives as

¹⁰⁰ Kim Ji-eun, "South Korean government responds to Trump's calls for SK to pay for joint military exercises," *Hankyoreh*, October 2, 2018, http://english.hani.co.kr/arti/english_edition/e_international/864173.html.

¹⁰¹ Park Gwang-su, "10 Myeong Jung 6 Myeong 'Juhanmigun Cheolsuhaedo Mibangwibi Insang Bandae,'" [10 명 중 6 명 "주한미군 철수해도 ㅁ 방위비 인상 반대"; 6 out of 10 People 'Oppose Increase of U.S. Defense Costs even if U.S. Forces in Korea Withdraw'] *Joongang Ilbo*, January 28, 2019, <https://news.joins.com/article/23329156>.

¹⁰² Simon Lester, Inu Manak, and Kyoungwha Kim, "Trump's First Trade Deal: The Slightly Revised Korea-U.S. Free Trade Agreement," *Free Trade Bulletin* no. 73, <https://www.cato.org/publications/free-trade-bulletin/trumps-first-trade-deal-slightly-revised-korea-us-free-trade>; Chun In-bum, "What the military cost-sharing dispute could mean for the U.S.-ROK alliance," *NK News*, January 24, 2019, <https://www.nknews.org/2019/01/what-the-military-cost-sharing-dispute-could-mean-for-the-u-s-rok-alliance>.

supporting the expeditious acquisition of capabilities required for COTP.¹⁰³ The MND's description of the 2019 budget request also emphasized the acquisition of critical military capabilities necessary to "lead the combined defense" in support of OPCON transition.¹⁰⁴ Of further significance, at the 50th SCM in October 2018 the U.S. Secretary of Defense and ROK Minister of Defense "decided to maintain the current CFC structure and reaffirmed the mutual commitment that the future CFC is to have an ROK four-star general as the Commander and a U.S. four-star general as the Deputy Commander."¹⁰⁵ The maintenance of the existing combined command structure certainly reduced some of the complexity of OPCON transition because the CFC will continue to be the organization responsible for exercising wartime OPCON of both ROK and U.S. forces on the peninsula. OPCON transition has effectively become a matter primarily concerning the operations and composition of the CFC, to include the nationality of its commander, rather than a major shift in the command and control structure of alliance forces on the peninsula.

In the National Security Strategy published by the ROK government at the close of 2018, the ROK relationship with the United States is described as both a source of

¹⁰³ ROK MND, "Moon Jae-in Jeongbuui Gukbangaehyeok 2.0" [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration's Defense Reform 2.0] July 27, 2018, 5.

¹⁰⁴ ROK MND, "Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowon" [국방예산, 전년 대비 8.2% 증가한 46.7 조원; Defense Budget, Increases by 8.2% from Last Year to 46.7 Trillion Won] August 27, 2018, 5.

¹⁰⁵ "Joint Communiqué of the 50th U.S.-ROK Security Consultative Meeting," October 31, 2018, <https://media.defense.gov/2018/Oct/31/2002057967/-1/-1/1/50TH-SCM-JOINT-COMMUNIQUE.PDF>.

strength and tension. In describing the effects of the United States on the ROK's security environment, the National Security Strategy asserted that the United States and China are engaged in a "strategic competition" that is giving rise to uncertainty in the regional order of Northeast Asia.¹⁰⁶ Referring to the effects of the United States, China, Japan, and Russia on South Korea's security environment, the strategy stated, "Arms competitions and these types of efforts by regional states to expand their influence makes our [ROK] security costs increase and can become a hinderance to Northeast Asian cooperation and the resolution of the North Korean nuclear problem."¹⁰⁷ Such statements seem to restate the proverb that Korea is a "shrimp among whales" of larger regional powers. The benefits of the ROK's relationship with the United States were acknowledged and the desire for a change to that relationship were expressed when the National Security Strategy described the impetus for COTP: "For over 60 years, we have achieved economic growth and national development on the foundation of the ROK-US alliance. Now, however, we must develop a future-oriented ROK-US alliance while supporting peace and prosperity on the Korean Peninsula through strength on the basis of our independent defense capabilities."¹⁰⁸ The National Security Strategy recognized the benefits that have come from the ROK-US alliance and emphasized the importance of the United States as an ally, but it also clearly indicated the desire of President Moon's

¹⁰⁶ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 12.

¹⁰⁷ Ibid., 13.

¹⁰⁸ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy], 73.

administration to transform the nature of the ROK-US relationship so that South Korea is less dependent on the United States for its security.

The evaluation of the security environment in DR 2.0 echoed many of the themes of the National Security Strategy. While DR 2.0 emphasized the importance of the United States as an ally of the ROK by referring to the ROK-US alliance as “the basis” for South Korea’s continued security, it also described the United States as a power in relative decline: “While the US-led international order will continue, the trend towards global multipolarity will accelerate with the rise of China and emerging countries.”¹⁰⁹ DR 2.0 not only recognized the United States’ decline from its perch as the world’s only superpower, but it also criticized some of the features of President Trump’s own security strategy for the United States: “Security uncertainty is deepening as existing cooperative relationships are being weakened by foreign policies of ‘Our country first’ and diplomacy through strength.”¹¹⁰ DR 2.0 did not explicitly identify the United States as one of the global powers exercising such uncertainty-inducing foreign policy, but the language of its criticism resembled President Trump’s “America First” National Security Strategy and its focus on “peace through strength.”¹¹¹

The *2018 Defense White Paper*, published in January 2019, also described the United States as engaged in a “strategic competition” with China that is “creating further

¹⁰⁹ ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 26.

¹¹⁰ *Ibid.*, 16.

¹¹¹ The White House, *National Security Strategy of the United States of America* (Washington D.C.: The White House, 2017), ii.

uncertainties and volatility in the regional security of Northeast Asia.”¹¹² As part of that strategic competition, the United States is working to build “an expanded security network” in the region, to include the promotion of multilateral cooperation such as “the Korea – United States – Japan, United States – Japan – Australia, and United States – Japan – Australia – India relationships.”¹¹³ Elsewhere in its strategic objectives the ROK has highlighted the importance of multilateral cooperation as a middle power, and the *2018 Defense White Paper*’s inclusion of South Korea in the web of bilateral and multilateral security relationships being built by the United States in its strategic competition with China suggests that the ROK government is at least complicit with U.S. strategic goals vis-à-vis China. Throughout President Moon’s National Security Strategy, DR 2.0, and the *2018 Defense White Paper* the ROK continuously expresses its commitment to the ROK-US alliance, but all three documents also describe U.S. actions in Northeast Asia as contributing to uncertainty that poses a challenge for the ROK’s security.

ROK and U.S. negotiators finally struck a deal in the SMA negotiations in February 2019, agreeing to a one-year arrangement in which the ROK would pay just over one trillion won, an 8.2 percent increase from the terms of the previous SMA. The renegotiated SMA still included the categories of labor cost sharing, logistics cost sharing, and ROK-funded construction, without adding additional categories for

¹¹² ROK MND, *2018 Defense White Paper*, 12.

¹¹³ *Ibid.*, 14.

combined exercise costs or operational support.¹¹⁴ The ROK Ministry of Foreign Affairs, perhaps sensing that portions of the electorate would be disappointed by the ROK government's yielding to U.S. demands, quickly explained that the 8.2 percent increase merely amounted to "the same level as its [the ROK] defense budget increase for 2019."¹¹⁵ The one-year effective duration of the 2019 SMA guaranteed that another SMA would have to be renegotiated for 2020, and those negotiations became similarly acrimonious as President Trump's administration reportedly demanded that the ROK increase its SMA contributions fivefold. As 2019 came to a close and the effective SMA expired, the two allies had still failed to reach a deal on a new SMA for 2020.¹¹⁶

Despite the concerns raised in the ROK National Security Strategy and other policy documents about U.S. actions creating uncertainty in the ROK's security environment and the struggle of renegotiating the 2019 SMA, President Moon emphasized continued commitment to the ROK-US alliance. President Moon visited Washington for a summit in April 2019, six weeks after President Trump and Chairman Kim had failed to reach an agreement at their summit in Hanoi. Speaking in the Oval Office, President Moon reiterated "that the Republic of Korea is absolutely on the same

¹¹⁴ Special Measures Agreement, US-ROK, March 8, 2019, *Treaties and Other International Acts Series* no. 19-405, art. I.

¹¹⁵ ROK Ministry of Foreign Affairs, "ROK and U.S. Reach Agreement on 10th Special Measures Agreement," February 10, 2019, http://www.mofa.go.kr/eng/brd/m_5676/view.do?seq=320383.

¹¹⁶ Josh Smith, "Seoul, Washington fail to agree on cost of U.S. troops; U.S. 'not focused on' \$5 billion demand," *Reuters*, December 18, 2019, <https://www.reuters.com/article/us-southkorea-usa/seoul-washington-fail-to-agree-on-cost-of-u-s-troops-u-s-not-focused-on-5-billion-demand-idUSKBN1YM0WP>.

page [as the United States] when it comes to the end state of the complete denuclearization of North Korea. . . . There will be no daylight until we achieve our ultimate goal.”¹¹⁷ The possibility of divergence between ROK and U.S. policies towards the DPRK remained in the headlines throughout 2019, however, as some South Korean businesses were caught violating United Nations sanctions measures and the ROK government itself proposed aid and economic policies towards the DPRK that seemed in tension with sanctions and the maximum pressure campaign.¹¹⁸

The transition of wartime OPCON authorities from the United States to the ROK remained a point of emphasis in MND policy rhetoric for the remainder of 2019. The MND’s statements on the 2020 defense budget continued to emphasize the acquisition and strengthening of critical military capabilities necessary for the ROK military to lead the combined defense.¹¹⁹ At the 51st SCM in November 2019, the ROK Minister of

¹¹⁷ The White House, “Remarks by President Trump and President Moon Jae-in of the Republic of Korea Before Bilateral Meeting,” April 11, 2019, <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-president-moon-jae-republic-korea-bilateral-meeting>.

¹¹⁸ Andrew Jeong and Dasl Yoon, “South Korea Detained Domestic Ship Over Suspected North Korean Sanctions Violation,” *Wall Street Journal*, April 3, 2019, <https://www.wsj.com/articles/south-korea-detained-domestic-ship-over-suspected-north-korean-sanctions-violation-11554303194>; Noh Ji-won, “Ships carrying S. Korean rice to deliver food aid to North Korea this month,” *Hankyoreh*, July 3, 2019, http://english.hani.co.kr/arti/english_edition/e_northkorea/900363.html; “Moon hints at new approach to restart Mount Kumgang tour program,” *Yonhap News Agency*, October 25, 2019, <https://en.yna.co.kr/view/AEN20191025013951315>.

¹¹⁹ ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019, 6.

Defense also “emphasized that the ROK military will continue to acquire defense capabilities necessary to command the future combined defense system and to pursue wartime OPCON transition in a systematic as well as proactive manner.”¹²⁰ The Minister of Defense further underscored the importance of completing OPCON transition in a December 2019 meeting with the ROK JCS and other military officials. Having completed an evaluation of the ROK-led Future CFC’s Initial Operating Capability in 2019, the Minister of Defense stated that in 2020 “the most important task of our military is the Full Operational Capability evaluation of the Future CFC. . . . The entire military’s efforts will be integrated for a successful evaluation.”¹²¹ As the year came to an end with the DPRK resuming some missile tests and the U.S. once again pressing for greater SMA concessions, the ROK government continued to emphasize the importance of completing OPCON transition.

China

As President Moon entered office in May 2017, South Korea’s relationship with China was strained by the U.S. deployment of THAAD to the Korean Peninsula. During his campaign, Moon Jae-in had argued that the THAAD deployment “aggravated foreign

¹²⁰ “Joint Communiqué of the 51st ROK-U.S. Security Consultative Meeting,” November 16, 2019, <https://www.defense.gov/Newsroom/Releases/Release/Article/2018651/joint-communicu-of-the-51st-rok-us-security-consultative-meeting>.

¹²¹ ROK MND, “Gukbangbu, '2019-2cha Jeonjakgwon Jeonhwan Chujinpyeonggahoeui' Gaechoe” [국방부, 2019-2 차 전작권 전환 추진평가회의 개최; MND Convenes ‘OPCON Transition Progress Evaluation Meeting 2-2019’] December 16, 2019, 3, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11919&num=1.

relations,” referring to Chinese responses to the deployment.¹²² The Chinese Ministry of Foreign Affairs had stated its opposition to the THAAD deployment as soon as the ROK and the United States had agreed upon the deployment in July 2016, arguing that efforts to deploy THAAD were “complicating the regional situation or undermining China’s strategic security interests.”¹²³ The Chinese Ministry of Foreign Affairs continued to regularly make statements condemning the THAAD deployment on the grounds that “THAAD disrupts regional strategic balance,” with the most specific Chinese grievance being the X-band radar that the THAAD system uses to detect and track missile threats: “Its [the X-band radar’s] scope of surveillance and early warning goes far beyond the Korean Peninsula, penetrates into the hinterland of the Asian continent, shadows great swathes of Chinese territories and far exceeds the ROK’s needs to deal with external nuclear threat.”¹²⁴

The Chinese response to the THAAD deployment extended beyond statements of opposition by the Ministry of Foreign Affairs to include a “campaign of economic coercion” that targeted certain sectors of the ROK economy and specific ROK firms.¹²⁵

¹²² Anna Fifield, “Interview with Moon Jae-in, set to become South Korea’s next president.”

¹²³ Foreign Ministry of the People’s Republic of China, “Foreign Ministry Spokesperson Hong Heli’s Regular Press Conference on July 8, 2016,” July 8, 2016, <https://www.fmprc.gov.cn/ce/cedk/eng/fyrth/t1378753.htm>.

¹²⁴ Foreign Ministry of the People’s Republic of China, “Foreign Ministry Spokesperson Hua Chunying’s Regular Press Conference on March 17, 2017,” March 17, 2017, <https://www.fmprc.gov.cn/ce/cedk/eng/fyrth/t1446684.htm>.

¹²⁵ Darren J. Lim and Victor Ferguson, “Chinese Economic Coercion during the THAAD Dispute,” *Open Forum*, December 28, 2019, <http://www.theasanforum.org/chinese-economic-coercion-during-the-thaad-dispute>.

By August of 2017, 74 of 112 South Korean-owned Lotte Mart department stores in China had been forcibly closed by government officials for a variety of contrived reasons such as fire safety violations. Within South Korea, the number of tourists visiting from China sharply declined as China's National Tourism Administration issued travel warnings discouraging travel to South Korea. The number of Chinese tourists visiting South Korea dropped by nearly 50 percent in 2017, impacting commercial sectors such as duty-free shopping, hotels, and medical clinics that cater to foreign patients. The economic impact of the reduction in tourism has been estimated at \$15.6 billion of lost revenue in the South Korean economy.¹²⁶

Maintenance of an amicable economic relationship with China is particularly important for South Korea, given the degree of trade between the two countries. China is South Korea's largest trading partner and the largest market for South Korean exports. In 2016, South Korea exported \$113.1 billion in goods to China compared with \$89.0 billion in exports to the United States.¹²⁷ Although South Korean exports to China actually increased during the period of China's retaliation for THAAD, reaching \$128.5 billion in 2017 and \$141.4 billion in 2018, China's campaign of economic coercion against specific firms and segments of the South Korean economy continued to receive significant attention in the South Korean press.¹²⁸

¹²⁶ Ibid.

¹²⁷ "Regional Current Account," Korean Statistical Information Service, last modified December 5, 2019, http://kosis.kr/statHtml/statHtml.do?orgId=301&tblId=DT_022Y015&conn_path=I2&language=en.

¹²⁸ "Regional Current Account," Korean Statistical Information Service; Darren J. Lim and Victor Ferguson, "Chinese Economic Coercion during the THAAD Dispute."

China's coercive economic measures subsided after the ROK and Chinese governments arrived at an understanding on October 30, 2017. As described by the ROK Ministry of Foreign Affairs, the two governments reiterated their positions on the THAAD issue but nonetheless "decided to push for the further development of the strategic cooperative partnership" between the two countries.¹²⁹ On the same day that the ROK Ministry of Foreign Affairs announced the agreement with China, ROK Minister of Foreign Affairs Kang Kyung-hwa told the ROK National Assembly's Foreign Affairs and Unification Committee that the administration was not considering any additional THAAD deployments. In addition, Minister Kang stated that "there is no change to our existing position that we will not participate in the U.S. missile defense system" and that "trilateral ROK-US-Japan security cooperation will not develop into a military alliance."¹³⁰ These three assertions by Minister Kang came to be known as the "Three Noes" in the South Korean press, and they were sufficient for beginning to mend the

¹²⁹ ROK Ministry of Foreign Affairs, "Hanjung Gwangye Gaeseon Gwallyeon Yanggukgan Hyeobui Gyeolgwa" [한중 관계 개선 관련 양국간 협의 결과; Results of the Consultation between both Countries related to the Improvement of the ROK-China Relationship] October 31, 2017, http://www.mofa.go.kr/www/brd/m_4080/down.do?brd_id=235&seq=367200&data_tp=A&file_seq=1; "S. Korea, China agree to bring exchange, cooperation back on 'normal' track," *Yonhap News Agency*, October 31, 2017, <https://en.yna.co.kr/view/AEN20171031004251315>.

¹³⁰ Kim Bong-gi, "Kang Kyung-hwa 'Sadeu 'Chuga Baechi' Geomtoanhae... 'MiMD Bulcham' Ipjang Byeonhwa Eopda,' " [강경화 "사드 '추가 배치' 검토안해... 'MD 불참' 입장 변화없다"; Kang Kyung-hwa "Not Considering 'Additional Deployment' of THAAD... No Change to Position of Not Participating in U.S. Missile Defense"] *Chosun Ilbo*, October 30, 2017, https://news.chosun.com/site/data/html_dir/2017/10/30/2017103001386.html.

ROK-China relationship.¹³¹ At the Chinese Ministry of Foreign Affairs press briefing later that day on October 30th, the Chinese spokeswoman referenced Minister Kang's "Three Noes," saying, "We value these three aspects of the remarks by the ROK."¹³²

The ROK's National Security Strategy published in December 2018 does not contain any explicit references to tension with China over the THAAD deployment, although it does note that the October 2017 agreement on "the improvement of the ROK-China relationship" provided an opportunity for strengthening the "strategic cooperative partnership" between the two countries.¹³³ When describing China's influence on the ROK's security environment, the National Security Strategy asserted that the strategic competition between the United States and China is increasing "uncertainty in the regional order."¹³⁴ Additionally, the National Security Strategy highlighted China's efforts to rapidly modernize its air and naval forces and expand its long-range power

¹³¹ Kim Bong-gi, "Kang Kyung-hwa 'Sadeu 'Chuga Baechi' Geomtoanhae... 'MiMD Bulcham' Ipjang Byeonhwa Eopda,' " [강경화 "사드 '추가 배치' 검토안해... 'MD 불참' 입장 변화없다"; Kang Kyung-hwa "Not Considering 'Additional Deployment' of THAAD... No Change to Position of Not Participating in U.S. Missile Defense"]; Troy Stangarone, "Did South Korea's Three Noes Matter? Not So Much," *The Diplomat*, October 30, 2019, <https://thediplomat.com/2019/10/did-south-koreas-three-noes-matter-not-so-much>.

¹³² Foreign Ministry of the People's Republic of China, "Foreign Ministry Spokesperson Hua Chunying's Regular Press Conference on October 30, 2017," October 30, 2017, <https://www.fmprc.gov.cn/ce/cedk/eng/fyrth/t1505871.htm>.

¹³³ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 85.

¹³⁴ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy], 12.

projection capabilities.¹³⁵ The National Security Strategy pointed out China's military modernization efforts and growing power projection capabilities without directly associating those efforts with increased uncertainty or other challenges for South Korea's security environment. Rather, the uncertainty in the security environment derives from the strategic competition between the United States and China.

While the 2018 National Security Strategy did not point out any security challenges stemming specifically from China, the *2018 Defense White Paper* did explicitly identify challenges in the ROK's security relationship with China. When discussing the ROK's security cooperation relationships with regional countries, the White Paper noted that China had opposed the THAAD deployment and that "most defense exchanges and cooperation between the ROK and China . . . were suspended" as a result of the decision to deploy THAAD.¹³⁶ The White Paper went on to describe efforts to "bolster trust" and restore the relationship between the ROK and China, but it then noted the continued challenge "caused by Chinese military aircraft's [*sic*] ingress into the Korea Air Defense Identification Zone."¹³⁷ There were at least six such instances of Chinese military aircraft entering into the ROK's proclaimed Air Defense Identification Zone without prior coordination in 2018 alone, with the ROK repeatedly scrambling its own interceptor aircraft but otherwise unable to prevent the incursions.¹³⁸

¹³⁵ Ibid.

¹³⁶ ROK MND, *2018 Defense White Paper*, 186.

¹³⁷ Ibid., 187.

¹³⁸ Elizabeth Shim, "Chinese aircraft trespasses South Korea, Japan airspace," *United Press International*, January 29, 2018, https://www.upi.com/Top_News/World-News/2018/01/29/Chinese-aircraft-trespases-South-Korea-Japan-

Japan

The DPRK's missile and nuclear testing in 2016 and 2017 posed a shared security challenge for the ROK and Japan that stimulated cooperation between the two governments. DPRK missile tests generally launch towards the east from the Korean Peninsula, flying in the direction of Japan. In August 2016, a DPRK missile had even splashed down inside of Japan's Exclusive Economic Zone.¹³⁹ In November 2016, the ROK and Japan agreed to the General Security of Military Information Agreement (GSOMIA) to establish a framework for the direct exchange of military information concerning DPRK missile and nuclear threats. While various constituencies in the ROK

airspace/3221517236134/; Laura Zhou, "Chinese military plane accused of entering South Korea's air defence identification zone," *South China Morning Post*, February 28, 2018, <https://www.scmp.com/news/china/diplomacy-defence/article/2135091/chinese-military-plane-accused-entering-south-koreas>; Joori Roh, "South Korea says scrambled jets to intercept Chinese reconnaissance flight," *Reuters*, April 28, 2018, <https://www.reuters.com/article/us-southkorea-china-airspace/south-korea-says-scrambles-jets-to-intercept-chinese-reconnaissance-flight-idUSKBN1HZ09A>; ROK MND, "Jung Gunyonggi KADIZ Jinip Gwallyeon Juhan Jungguk Gukbangmugwan Chochi" [군용기 KADIZ 진입 관련 주한 중국 국방무관 조치; Summons of Chinese Military Attaché in Korea related to a Chinese Military Aircraft's Entry into the KADIZ] July 27, 2018, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11132&num=1; ROK MND, "Jungguk Gunyonggi KADIZ Jinip Gwallyeon Juhan Jungguk Gukbangmugwan Chochi" [중국 군용기 KADIZ 진입 관련 주한 중국 국방무관 조치; Summons of Chinese Military Attaché in Korea related to a Chinese Military Aircraft's Entry into the KADIZ] August 29, 2018, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11198&num=1; ROK MND, "Gukbangbu, Jungguk Gunyonggi KADIZ Jinipe Daehae Junggukcheuge Eomjunghangui" [국방부, 중국 군용기 KADIZ 진입에 대해 중국측에 엄중항의; MND, Sternly Protests to the Chinese side over the Entry of Chinese Military Aircraft into the KADIZ] November 26, 2018, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11383&num=1.

¹³⁹ "Chronology of US-North Korean Nuclear and Missile Diplomacy," Arms Control Association.

and elsewhere had argued for such an arrangement going back to 1989, the two sides had never been able to reach an agreement. By November 2016, however, the conditions were ripe for the administrations of Park Geun-hye and Abe Shinzo to finally make an agreement, with the ROK MND arguing that the application of Japan's "quantitatively and qualitatively excellent surveillance and detection assets" would enable "responding more effectively to DPRK nuclear and missile threats that are advancing, accelerating, and modernizing."¹⁴⁰ The ROK MND's announcement of the GSOMIA acknowledged the challenge of cooperating with Japan despite Japanese "cases of the distortion of history and claims of sovereignty over the islands of Dokdo" but asserted that the agreement will "help our national security."¹⁴¹

Prior to becoming President, Moon Jae-in had argued that the Park administration did not have the authority to agree to the GSOMIA, but once elected he did not cancel the agreement with Japan.¹⁴² Rather, President Moon expressed a hope to increase the ROK's security cooperation with Japan. In a joint statement with President Trump in

¹⁴⁰ ROK MND, "Hanil Gunsabimiljeongbobohohyeopjeong Chegyeol" [한일 군사비밀정보보호협정 체결; Conclusion of the ROK-Japan General Security of Military Information Agreement] November 23, 2016, 3, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_9799&num=1.

¹⁴¹ Ibid., 4.

¹⁴² "Moon Jae-in, 'Park Geun-hye Daetongnyeongi Hanilgunsajeongbobohohyeopjeong Chegyeolhal Gwonhan Itseumnikka?'" [문재인, "박근혜 대통령이 한일군사정보보호협정 체결할 권한 있습니까?"; Moon Jae-in, 'Does President Park Geun-hye have the Authority to Conclude the ROK-Japan General Security of Military Information Agreement?'] Moon Jae-in Official Channel, November 26, 2016, video, <https://www.youtube.com/watch?v=wm2KDuLuFqQ>.

June 2017, President Moon and President Trump “decided to further develop this [US-ROK-Japan trilateral] cooperation, using established bilateral and trilateral mechanisms” and “decided to discuss further ways to enhance trilateral cooperation together with Prime Minister Abe” at the upcoming G20 summit scheduled for July 2017.¹⁴³ At their meeting at the G20 summit, the three leaders jointly “committed to continue to cooperate to apply maximum pressure on the DPRK to change its path” while also committing “to continue advancing trilateral security cooperation in the face of the threat posed by the DPRK.”¹⁴⁴ In a separate bilateral meeting between President Moon and Prime Minister Abe at the G20, President Moon noted that South Korea and Japan “not only share basic values and strategic interests, but are also the closest friends geographically and culturally.”¹⁴⁵

Despite common strategic interests and cultural affinities, the relationship between South Korea and Japan is fraught with tension over conflicting interpretations of history and what some observers have called a South Korean “anti-Japan identity.”¹⁴⁶ The ROK’s 2018 National Security Strategy described Japan as working to strengthen its

¹⁴³ The White House, “Joint Statement between the United States and the Republic of Korea,” June 30, 2017.

¹⁴⁴ U.S. Department of State, “Joint Statement from the United States of America, Republic of Korea, and Japan,” July 7, 2017, <https://kr.usembassy.gov/070717-joint-statement-united-states-america-republic-korea-japan>.

¹⁴⁵ The Blue House, “Hanil Jeongsanghoedam Gwallyeon Park Su-hyeon Daebyeonin Beuriping” [한·일 정상회담 관련 박수현 대변인 브리핑; Spokesperson Park Su-hyeon’s Briefing regarding the ROK-Japan Summit] July 7, 2017, <https://www1.president.go.kr/articles/230>.

¹⁴⁶ Leif-Eric Easley and Kyuri Park, “South Korea’s Mismatched Diplomacy in Asia: Middle Power Identity, Interests, and Foreign Policy.”

security partnership with the United States while also strengthening its own military forces through increased defense spending.¹⁴⁷ The National Security Strategy also employed similar language to President Moon’s statement at the 2017 G20 summit, asserting that “As Japan is our close neighbor geographically and culturally, it is a partner that we must cooperate with for global peace and prosperity.”¹⁴⁸ Nonetheless, the National Security Strategy noted that “historical problems” between the two countries continue to hamper relations, stating that the ROK will “respond firmly to unjust [Japanese] claims regarding Dokdo and the distortion of history.”¹⁴⁹

The *2018 Defense White Paper* repeated many of the same themes as the National Security Strategy, noting that the ROK and Japan “are geographically and culturally close neighbors as well as partners cooperating for global peace and prosperity.”¹⁵⁰ The problems of history remain inescapable, however, as after describing high-level defense policy engagements between the two countries the White Paper claimed that “some Japanese political leaders’ perception of history and claims of dominion over Dokdo Island have become obstacles to the forward-looking development of the relationship between the two countries.”¹⁵¹ The *2018 Defense White Paper* did not include any mention of the GSOMIA in its descriptions of defense exchanges and cooperation

¹⁴⁷ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 13.

¹⁴⁸ *Ibid.*, 86.

¹⁴⁹ *Ibid.*, 87.

¹⁵⁰ ROK MND, *2018 Defense White Paper*, 187.

¹⁵¹ ROK MND, *2018 Defense White Paper*, 188.

between the ROK and Japan; the only mention of the GSOMIA in the entire White Paper is in an appendix on the activities of the National Assembly's National Defense Committee.¹⁵²

Despite the commitments of President Moon and Prime Minister Abe to advance security cooperation between their two countries, in December 2018 tensions flared between Seoul and Tokyo over competing narratives regarding a ROK Navy ship's use of a targeting radar in the direction of a Japanese Maritime Self-Defense Force maritime patrol aircraft as both forces were searching for a distressed North Korean fishing boat in the waters near Dokdo.¹⁵³ The incident eventually receded from headlines, but relations between the ROK and Japan were strained for the remainder of 2019. The climax of the antipathy came in August 2019 when President Moon's administration announced that it had decided to end the GSOMIA with Japan in response to the Japanese government's removal of South Korea from a "White List" of countries that were subject to reduced controls for Japanese exports and technology transfers.¹⁵⁴ While Japanese leaders claimed that the removal of South Korea from the White List was motivated by concern

¹⁵² Ibid., 187-88, 410.

¹⁵³ Jeff Jeong, "Is 'radar feud' sign of future military confrontation between South Korea and Japan?" *Defense News*, December 26, 2018, <https://www.defensenews.com/global/asia-pacific/2018/12/26/is-radar-feud-sign-of-future-military-confrontation-between-south-korea-and-japan>.

¹⁵⁴ The Blue House, "Jisomia Gwallyeon Kim Yu-geun NSC Samucheojang Jeongbu Balpyomun" [지소미아 관련 김유근 NSC 사무처장 정부 발표문; Announcement by NSC Secretary General Kim Yu-geun related to GSOMIA] August 22, 2019, <https://www1.president.go.kr/articles/6970>; Japan Ministry of Economy, Trade and Industry, "The Cabinet Approved Partial Amendment to the Export Trade Control Order," August 2, 2019, https://www.meti.go.jp/english/press/2019/0802_001.html.

that some Japanese materials were illicitly entering North Korea through South Korea despite the sanctions regime, many South Koreans viewed their country's removal from the White List as retaliation for the judgments of South Korean courts against some Japanese firms who had forcibly employed Koreans during World War II.¹⁵⁵ With South Korea's intended withdrawal from the GSOMIA, the problems of history once again proved inescapable, escalating beyond political rhetoric and trade policy to impact security cooperation as well.

President Moon's administration ultimately decided not to withdraw from the GSOMIA, announcing on November 22nd that it had instead decided to "suspend the effectiveness of the notice to terminate GSOMIA" that it had given Japan nearly three months earlier.¹⁵⁶ Washington had certainly lobbied for its two Northeast Asian allies to maintain the agreement. After a meeting with the ROK Minister of Defense in Seoul on November 15, 2019, Secretary of Defense Mark Esper commented that "the only ones who benefit from expiration of GSOMIA and continued friction between Seoul and

¹⁵⁵ Donald Kirk, "Japan Ejects South Korea from Export 'White List' as Trade Relations Fray," *Forbes*, August 2, 2019, <https://www.forbes.com/sites/donaldkirk/2019/08/02/japan-ejects-south-korea-from-export-white-list-as-trade-relations-fray/#6480eb0d6eea>; J. James Kim and Kang Chungku, "South Korean Attitudes about ROK-Japan Relations on the Rocks," Issue Brief, The Asan Institute for Policy Studies, October 14, 2019, <http://en.asaninst.org/contents/south-korean-attitudes-about-rok-japan-relations-on-the-rocks>.

¹⁵⁶ The Blue House, "Jisomia (GSOMIA) Gwallyeon Kim Yu-geun NSC Samucheojang Jeongbu Beuriping" [지소미아 (GSOMIA) 관련 김유근 NSC 사무처장 브리핑; Briefing by NSC Secretary General Kim Yu-geun related to GSOMIA] November 22, 2019, <https://www1.president.go.kr/articles/7602>.

Tokyo are Pyeongyang and Beijing.”¹⁵⁷ The U.S. Senate had even weighed in on the issue on November 21st with a resolution “reaffirming the importance of the GSOMIA between the Republic of Korea and Japan.”¹⁵⁸ Some segments of the liberal press in South Korea argued that President Moon’s administration had “betrayed its principles by not scrapping the agreement as originally planned,” but as 2019 came to a close Japan and the ROK still maintained an agreement to directly exchange military information on their common North Korean threat despite the contentious relationship between the two governments..¹⁵⁹

Russia

The ROK’s 2018 National Security Strategy and the *2018 Defense White Paper* both included Russia in their discussions of regional states influencing the security environment. The National Security Strategy described Russia as a state making efforts to “restore its role and status as a superpower by involving itself in major international

¹⁵⁷ “US urges Japan, S Korea to share intel” *Associated Press*, November 19, 2019, video, <https://www.youtube.com/watch?v=pH49qDD7Hnc>; Phil Stewart and Joyce Lee, “Pentagon’s Esper says it is crucial South Korea pays more for U.S. troops,” *Reuters*, November 14, 2019, <https://www.reuters.com/article/us-southkorea-usa-esper/pentagons-esper-says-it-is-crucial-south-korea-pays-more-for-u-s-troops-idUSKBN1XP0FB>.

¹⁵⁸ A resolution reaffirming the importance of the General Security of Military Information Agreement between the Republic of Korea and Japan, and for other purposes, S. Res. 435, 116th Cong., 1st sess., *Congressional Record* 165, no. 187, daily ed. (November 21, 2019): S6770.

¹⁵⁹ Yoo Kang-moon, “S. Korea succumbs to U.S. pressure to extend GSOMIA,” *Hankyoreh*, November 25, 2019, http://english.hani.co.kr/arti/english_edition/e_international/918428.html.

problems such as Syria and Ukraine.”¹⁶⁰ The National Security Strategy also described Russia as “an important partner state for peace on the Korean Peninsula” thanks to the potential economic benefits of cooperation among the ROK, DPRK, and Russia.¹⁶¹ Cooperation among the three states could allow the construction of a “supergrid” connecting Russian surplus electricity with markets in South Korea and Japan as well as a pipeline that could enable South Korea to inexpensively import Russian national gas.¹⁶² Collaboration among Seoul, Pyeongyang, and Moscow could also lead to cooperative railroad projects, presumably opening an inexpensive land route for South Korean exports to reach Europe.¹⁶³

The *2018 Defense White Paper* contained many of the same themes in describing Russia’s place in the security environment, anticipating that Russia will “continue expanding its military influence in the Asia-Pacific region.”¹⁶⁴ Russia’s “amicable relationship” with the DPRK and “strategic cooperative partnership” with the ROK also give it a role as “an important party for cooperation with regard to peace on the Korean Peninsula.”¹⁶⁵ While the White Paper discussed Moscow’s measures for “strengthening the readiness posture in the Russian Far East region,” such as conducting large-scale

¹⁶⁰ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 13.

¹⁶¹ *Ibid.*, 88-89.

¹⁶² *Ibid.*, 58.

¹⁶³ *Ibid.*, 89.

¹⁶⁴ ROK MND, *2018 Defense White Paper*, 13.

¹⁶⁵ *Ibid.*, 26, 188.

exercises and upgrading air defense systems, the White Paper did not describe any Russian actions as creating uncertainty or other challenges in the security environment.¹⁶⁶

Although the ROK JCS had earlier publicized the intrusions of Russian military aircraft into the ROK's Air Defense Identification Zone in 2018, the *2018 Defense White Paper* did not mention such Russian incursions.¹⁶⁷ The White Paper noted that the ROK and Russia agreed on the "installation of hotlines" between their air forces, but it did not give a reason for why the hotlines were necessary.¹⁶⁸ While the *2018 Defense White Paper* explicitly identified the challenge of airspace violations by Chinese military aircraft, it did not identify a corresponding challenge stemming from similar violations by Russian military aircraft.¹⁶⁹

Domestic Factors

While the activities of other states in the region and the ROK's relationships with those states define much of the context of South Korea's current security environment, internal conditions within South Korea also affect the ROK's capacity and strategies for responding to security challenges. Among ROK policy documents, DR 2.0 has been the most explicit in identifying these domestic factors: an intensifying shortage of military

¹⁶⁶ ROK MND, *2018 Defense White Paper*, 20-21.

¹⁶⁷ "S. Korea summons Russian military envoy over violation of air defense zone," *Yonhap News Agency*, July 14, 2018, <http://yna.kr/AEN20180714002052315>.

¹⁶⁸ ROK MND, *2018 Defense White Paper*, 189.

¹⁶⁹ *Ibid.*, 187.

manpower due to a demographic cliff, increasing public demands regarding service member rights and welfare, loss of public trust in the military due to military involvement in politics and corruption in the defense industry, limits on defense fiscal resources, and rapid changes on the battlefield due to technologies associated with the 4th industrial revolution.¹⁷⁰ While defense fiscal resources will be analyzed in more detail later in this paper, brief consideration of some of the other domestic factors impacting the ROK's security environment will help provide context for later discussion of ROK security strategy objectives.

The “demographic cliff” denotes the challenges associated with a falling birthrate and potential population decline. South Korea's fertility rate has dropped precipitously since the 1970s, with the average number of births per woman falling from 4.53 in 1970 to only 0.98 in 2018.¹⁷¹ As the South Korean population ages and fewer children are born, the margins by which the South Korean population continues to grow have also shrunk significantly. In 2018, the South Korean population of over 51 million people only grew by 28,000 after accounting for births and deaths.¹⁷² A ROK government report

¹⁷⁰ ROK MND, *Gukbanggaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 18.

¹⁷¹ ROK Ministry of Economy and Finance, “Preliminary Results of Birth and Death Statistics in 2018,” Statistics Korea, February 27, 2019, 1, <http://kostat.go.kr/portal/eng/pressReleases/8/10/index.board?bmode=download&bSeq=&aSeq=375520&ord=1>.

¹⁷² Ibid., 4; ROK Ministry of Economy and Finance, “Jangnae Ingu Teukbyeol Chugye: 2017-2067 Nyeon” [장래인구특별추계: 2017-2067 년; Special Estimate of the Future Population: 2017–2067] Statistics Korea, March 28, 2019, 1, http://kostat.go.kr/portal/korea/kor_nw/1/2/1/index.board?bmode=download&bSeq=&aSeq=373873&ord=7.

published in 2019 estimated that the population will begin to decline in absolute numbers in 2028, and by 2067 the South Korean population will measure only 39 million people.¹⁷³ Some of the defense implications of a shrinking population are straightforward: there are fewer people available to fill military formations and operate military systems and equipment.

The loss of public trust in the military due to military involvement in politics and corruption in the defense industry has implications for civil-military relations. Much of the aging South Korean population still remembers the military coups by Park Chung-hee in 1963 and Chun Doo-hwan in 1979, both of which suppressed liberal opposition politicians and political parties.¹⁷⁴ Perhaps it should not be a surprise when contemporary liberal politicians express concern over perceived military interference in domestic ROK political affairs. Recent examples of ROK military involvement in domestic politics are relatively easy to find. The Psychological Warfare Team of the ROK's Cyber Command, established to target North Korean and other foreign threats, was found to have interfered in the ROK's 2012 presidential election by posting nearly 13,000 online comments about certain South Korean politicians and parties in various internet forums.¹⁷⁵ Furthermore,

¹⁷³ ROK Ministry of Economy and Finance, “Jangnae Ingu Teukbyeol Chugye: 2017-2067 Nyeon” [장래인구특별추계: 2017-2067 년; Special Estimate of the Future Population: 2017–2067] March 28, 2019, 1.

¹⁷⁴ Bruce Cumings, *Korea's Place in the Sun: A Modern History* (New York, NY: Norton Press, 1997), 347-82.

¹⁷⁵ ROK MND, “Gukgun Saibeo Saryeongbu ‘Daetgeul Uihok’ Sageon Susa Gyeolgwa” [국군사이버사령부 ‘댓글 의혹’ 사건 수사결과; Results of the Investigation of the Military Cyber Command ‘Online Comments Suspicion’ Incident] August 19, 2014, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_7877&num=1; ROK MND, “Gukgun Saibeo Saryeongbu ‘Daetgeul Uihok’ Sageon Susa

reports that the military's Defense Security Command had considered implementing martial law during the "Candlelight Revolution" that opposed Park Geun-hye in 2017 also prompted anxiety among many South Koreans, to include President Moon, that the military was too involved in political affairs.¹⁷⁶ Although democratic institutions had flourished in South Korea since the end of the authoritarian regimes installed by military coups, a continued lack of civil control over the military was a major concern for President Moon's administration.

Security Strategy Objectives

2018 National Security Strategy

The National Security Strategy published by President Moon's administration in December 2018 articulated three overarching security objectives in order to achieve the administration's vision of a "peaceful and prosperous Korean Peninsula." These objectives are the "peaceful resolution of the North Korean nuclear issue and the establishment of a permanent peace," "contribution to peace and prosperity in Northeast Asia and the world," and "realization of a society that protects people's safety and

Gyeongwa" [국군사이버사령부 '댓글 의혹' 사건 수사결과; Results of the Investigation of the Military Cyber Command 'Online Comments Suspicion' Incident] November 4, 2014, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_8038&num=1; "2 ex-chiefs of cyber command charged over online smear campaign," *Yonhap News Agency*, November 4, 2014, <https://en.yna.co.kr/view/AEN20141104006600315>.

¹⁷⁶ The Blue House, "Daetongnyeong Teukbyeol Jisi Gwallyeon Beuriping" [대통령 특별지시 관련 브리핑; Briefing related to the President's Special Order] July 10, 2018, <https://www1.president.go.kr/articles/3764>.

lives.”¹⁷⁷ The National Security Strategy then identified four tenets that describe how those security objectives are to be achieved: “taking the initiative for a peaceful and prosperous Korean Peninsula,” “ensuring strong national security through steadfast defense,” “pursuing a well-balanced and cooperative diplomacy,” and “ensuring public safety and protecting the people’s rights.”¹⁷⁸ While those four tenets describe how to achieve the objectives, the National Security Strategy also defined five tasks describing what must be done in order to achieve the objectives: “working toward the denuclearization of the Korean Peninsula and the establishment of a permanent peace, developing a sustainable inter-Korean relationship and achieving mutual prosperity, taking the initiative in strengthening national defense capabilities based on the ROK-US alliance, pursuing pragmatic diplomacy that focuses on the interests of the people and the nation, and reinforcing the national crisis management system for a safer Republic of Korea.”¹⁷⁹

2018 NDP

While the ROK MND does not make public any versions of the NDP, Defense White Papers have included descriptions of the NDP in effect at the time of the White Paper’s publication. Additionally, the MND has confirmed that it completed a new NDP

¹⁷⁷ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 25-27; ROK MND, *2018 Defense White Paper*, 39.

¹⁷⁸ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 27-31; ROK MND, *2018 Defense White Paper*, 40-41.

¹⁷⁹ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 32; ROK MND, *2018 Defense White Paper*, 44.

in 2018.¹⁸⁰ As described in the *2018 Defense White Paper*, the NDP employs a framework of objectives and tenets similar to the National Security Strategy. The three national defense objectives are: “protecting the nation from external military threats and attacks,” “supporting a peaceful unification of the Korean Peninsula,” and “contributing to regional stability and world peace.”¹⁸¹ The NDP’s six tenets that provide “policy direction” to support those objectives are: “establishing a robust national defense posture against omnidirectional security threats; developing a mutually complementary and robust ROK–US alliance, as well as promoting exchanges and cooperation for national defense; building a strong military that supports peace on the Korean Peninsula by thoroughly implementing national defense reforms; establishing a transparent and efficient national defense management system; instilling a high-morale military culture with public companionship and confidence; and inter-Korean military confidence building and arms control.”¹⁸²

JMS

Like the NDP, the ROK MND and JCS do not publish any versions of the JMS, but the Defense White Paper does provide a summary. The *2018 Defense White Paper* stated that the objective of the JMS is to “deter provocations and invasions from external

¹⁸⁰ ROK MND, “Daehanmingugeul Jikineun Teunteunhan Gukbangseolgyedo '20-'24 Gukbangjunggyeohoeng Surip” [대한민국을 지키는 튼튼한 국방설계도 '20-24 국방중기계획 수립; Establishment of the '20-'24 Midterm Defense Plan as a Strong National Defense Blueprint Protecting the Republic of Korea] August 14, 2019, 1.

¹⁸¹ ROK MND, *2018 Defense White Paper*, 43-44.

¹⁸² *Ibid.*, 44-46.

forces and, if deterrence fails, achieve an early victory ‘with the least damage possible, within the shortest time possible.’ ”¹⁸³ The *2018 Defense White Paper* did not describe any tenets or tasks within the JMS, but it did provide a brief explanation of the aims of military force development, saying that the ROK military “will build the ability to lead and carry out combined operations by reforming the military structure . . . to be prepared for wartime OPCON transition.”¹⁸⁴

DR 2.0

The ROK MND initiated the design of a new Defense Reform plan in August 2017, a few months after President Moon’s election.¹⁸⁵ In July 2018, the MND announced the broad outlines of the Defense Reform plan, now known as DR 2.0, along with some of DR 2.0’s specific reform initiatives.¹⁸⁶ By December 2018 the MND completed its design of DR 2.0, and shortly thereafter it published *Gukbangaehyeok 2.0* [Defense Reform 2.0] in order to describe DR 2.0 and its reform initiatives to the public.¹⁸⁷ DR 2.0 defined three objectives of defense reform: “a military capable of

¹⁸³ ROK MND, *2018 Defense White Paper*, 46-47.

¹⁸⁴ *Ibid.*, 47.

¹⁸⁵ ROK MND, “Gukbangbu, ‘Gukbangaehyeok 2.0’ Chujineul Wihan Silmujojik Gadong” [국방부, 국방개혁 2.0 추진을 위한 실무조직 가동; MND, Operation of Working Group for Advancing “Defense Reform 2.0”] August 31, 2017.

¹⁸⁶ ROK MND, “Moon Jae-in Jeongbuui Gukbangaehyeok 2.0” [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration’s Defense Reform 2.0] July 27, 2018.

¹⁸⁷ ROK MND, “2019 Nyeon Gukbangbu Eommubogo” [2019 년 국방부 업무보고; 2019 MND Task Report] December 20, 2018, 2,

taking the initiative in responding to omnidirectional security threats, an elite military powered by advanced technologies, and a military managed in a way that befits a developed country.”¹⁸⁸ Three tenets support the accomplishment of those objectives: “enhance the strength and foundation for retaining self-reliant national defense capabilities,” “use the scientific and technological advancements of the Fourth Industrial Revolution to overcome resource shortage and adapt to future battlefields,” and “gain public support by pursuing a reform that goes in line with the needs of the nation and the society.”¹⁸⁹

In addition to the objectives and tenets identified above, the MND has announced several reform initiatives that constitute the tasks of DR 2.0. The initiatives are categorized into four areas of defense reform: military structure, aiming to “develop military structure on the basis of advanced technology that can respond to omnidirectional security threats;” defense operations, designed to “establish an advanced defense operations system through openness, trustworthiness, and efficiency;” barracks culture, in order to “realize welfare and human rights that meet the expectations of the people to create a barracks culture that is full of morale;” and finally defense industry, seeking to “strengthen efficiency, transparency, and expertise to secure international

<http://www.korea.kr/common/download.do?tblKey=EDN&fileId=186233772>; ROK MND, *Gukbanggaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0].

¹⁸⁸ ROK MND, *Gukbanggaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 20; ROK MND, *2018 Defense White Paper*, 50.

¹⁸⁹ ROK MND, *Gukbanggaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 21; ROK MND, *2018 Defense White Paper*, 50-51.

competitiveness.”¹⁹⁰ Public statements by MND have indicated that there are just over 40 specific “main projects” (early statements indicated that there were 41 main projects while later statements have indicated that there are 42 main projects) grouped into 15 categories of “large projects” spread across these four areas of defense reform.¹⁹¹ The National Assembly National Defense Committee’s report on the 2019 budget request included an exhaustive list of the 15 large projects with some of the specific main projects also mentioned, but the MND has not published a list that explicitly identifies all 42 main projects.¹⁹² The MND’s *Gukbangaehyeok 2.0* [Defense Reform 2.0] publication listed several reform initiatives with titles that closely correspond to the main projects that are identified in the National Defense Committee’s report on the 2019 budget request, but it included more than 42 specific reform initiatives. Appendix B includes a table of the reform initiatives as announced in *Gukbangaehyeok 2.0* [Defense Reform 2.0].

¹⁹⁰ ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 4-10.

¹⁹¹ ROK MND, “Gukbangbu, ‘Gukbangaehyeok 2.0’ 4 Cha Hoeui Gaechoe” [국방부, 국방 개혁 2.0 4 차 회의 개최; MND, Convenes 4th Meeting for Defense Reform 2.0] December 27, 2017, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_10781&num=1; ROK MND, “Gukbangbu, Gukbangaehyeok 2.0 Chujinjeomgeomhoeui Gaechoe” [국방부, 국방개혁 2.0 추진점검회의 개최; MND, Convenes Defense Reform 2.0 Progress Inspection Meeting] August 28, 2019, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11748&num=1.

¹⁹² ROK National Assembly, *2019 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2019 년도 국방위원회 소관 예산안 예비심사보고서; 2019 National Defense Committee Planned Budget Preliminary Review Report] November 14, 2018, 62-78.

Themes Across Strategic Objectives

Across the objectives, tenets, and tasks of the four strategic documents discussed above, there are recurring themes and emphases that are particularly relevant when analyzing the ROK defense budget. These themes include increased ROK autonomy within the security environment, the use of technology to mitigate the reduction of available manpower, the establishment of a more balanced or joint force, and engagement with international partners to advance security interests.

Increased Autonomy

The ROK's 2018 National Security Strategy emphasized that the ROK must take a leading role in assuring its own security rather than allowing its fate to be decided by other powers. The emphasis on increased autonomy is most explicit in the tenet of "taking the initiative for a peaceful and prosperous Korean Peninsula," but it is also apparent in statements such as, "On the basis of close ROK-US cooperation, through collaboration with regional states, we will lead the resolution of the Korean Peninsula's problems."¹⁹³ The National Security Strategy also underlined the ROK's role in leading denuclearization efforts, stating the government will "take charge of a leading role for the realization of denuclearization, upon the foundation of close ROK-US cooperation."¹⁹⁴ The need for the ROK military to assume a leading role on the peninsula was also heavily

¹⁹³ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 27.

¹⁹⁴ *Ibid.*, 38.

emphasized, with the National Security Strategy invoking the language of “our military’s leadership of the ROK-US combined defense” at least five times.¹⁹⁵

Although the ROK MND does not release public versions of the NDP or JMS, the descriptions of those documents in the *2018 Defense White Paper* also stressed the importance of increased ROK autonomy. The NDP specifies a vision that includes “acquiring an ROK-led war capability” and “countering enemy provocations through ROK-led defense capabilities.”¹⁹⁶ The operating concept described in the JMS includes “the ability to take the initiative in deterring and responding to omnidirectional threats upon the robust foothold of (*sic*) ROK-US alliance,” and then goes on to state that “the ROK Armed Forces will build the ability to lead and carry out combined operations.”¹⁹⁷ This emphasis on increased autonomy is also apparent in DR 2.0. In the MND’s public statements regarding DR 2.0’s reform initiatives, the first initiative described is the reorganization of the ROK military command structure in association with the transition of wartime OPCON authorities.¹⁹⁸

While these strategic documents clearly emphasize a goal of increased autonomy for the ROK and the need for the ROK to take an active role in shaping its security environment, the statements above also often include a caveat that the ROK’s increased

¹⁹⁵ Ibid., 72-76.

¹⁹⁶ ROK MND, *2018 Defense White Paper*, 43.

¹⁹⁷ Ibid., 47.

¹⁹⁸ ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 26; ROK MND, “Moon Jae-in Jeongbuui Gukbangaehyeok 2.0” [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration’s Defense Reform 2.0] July 27, 2018, 5.

leadership role includes continued cooperation in the ROK-US alliance. As described by these strategic documents, increased ROK autonomy does not entail the decline of the ROK-US alliance; rather, increased ROK autonomy would make the ROK a more equal partner within the alliance and enable the alliance's transformation "in a mutually reinforcing and forward-looking manner to effectively manage common security threats and to extend the Alliance's contribution to peace and prosperity of not only the Korean Peninsula but also the region and the world."¹⁹⁹

Use of Technology to Mitigate the Reduction of Available Manpower

Another theme of importance in the strategic documents is the use of technology to mitigate the reduction in available military manpower. The "demographic cliff" discussed above, in conjunction with the reduction of conscription periods to as short as 18 months, necessitates a smaller force: with the pool of eligible conscripts growing smaller and those conscripts staying in the military for a shorter period of time, it is inevitable that the number of active military members must decline as well.²⁰⁰ During the National Assembly National Defense Committee's review of the 2020 defense budget request in late 2019, the committee examined the MND's plan for reorganizing manpower structure, which included a reduction in the number of active service members from 579,000 in 2019 to 500,000 by 2022. This drop includes reductions of 83,000

¹⁹⁹ ROK MND, *2018 Defense White Paper*, 175.

²⁰⁰ ROK MND, "18.10.1 Jeonyeokjabuteo Byeong Bongmugigan Danchuk Sihaeng" [18.10.1 전역자부터 병 복무기간 단축 시행; Implementation of Reduced Service Periods for Conscripts Beginning with those Discharged on October 1, 2018], July 27, 2018, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11126&num=1.

conscripts and 4,000 officers, but there is an addition of 8,000 non-commissioned officers.²⁰¹

The National Security Strategy and DR 2.0 both envision technology as a key element in maintaining the readiness of the ROK military despite the reduction in forces. In its description of how the ROK will respond to changes in the security environment, the National Security Strategy stated, “In order to be able to respond to simultaneous omnidirectional security threats, we will apply technologies of the 4th industrial revolution to all areas of national defense and develop military force structure on the basis of advanced technology.”²⁰² DR 2.0 was more explicit, including the use of “scientific and technological advancements of the Fourth Industrial Revolution to overcome resource shortage and adapt to future battlefields” as one of its tenets.²⁰³ Several reform initiatives in the “large task” categories of “reorganizing to a force structure centered on advanced technology capabilities” and “develop military capabilities and a management system of the 4th industrial revolution” support this tenet. Specific initiatives include developing military applications of virtual reality and artificial

²⁰¹ ROK National Assembly, *2020 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2020 년도 국방위원회 소관 예산안 예비심사보고서; 2020 National Defense Committee Planned Budget Preliminary Review Report] November 7, 2019, 55.

²⁰² ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 71.

²⁰³ ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 21; ROK MND, *2018 Defense White Paper*, 50-51.

intelligence technologies, as well as establishing strategic deterrence through the use of unmanned systems in conjunction with precision weapons.²⁰⁴

Establishment of a More Balanced Force

The 2018 National Security Strategy and DR 2.0 also underscored the importance of developing the ROK military into a more joint force with “balance” across the services. The National Security Strategy argued that several military structure changes are required in order to prepare for “diversified security threats” even as military tensions between the DPRK and ROK subsided.²⁰⁵ The National Security Strategy continued, “Specifically, we will reorganize the command structure [of the military] in order to actually strengthen jointness by simultaneously promoting the balanced development of the Army, Navy, and Air Force along with our military’s leadership of the ROK-US combined defense in conjunction with wartime OPCON transition.”²⁰⁶ The existing force structure dominated by the ROK Army is insufficient for responding to the variety of potential security threats that the National Security Strategy anticipated.

DR 2.0, which also explicitly advocated “balanced growth between branches and specialties,” included several reform initiatives that promote the development of the Navy

²⁰⁴ ROK MND, *Gukbanggaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 30, 38.

²⁰⁵ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 70.

²⁰⁶ *Ibid.*, 71.

and Air Force at the relative expense of the Army.²⁰⁷ DR 2.0's initiative to "Organize the Balance of the Military Services and Joint Units in Order to Strengthen Jointness" entails that colonel and general officer positions within the JCS will be filled by the Army, Navy, and Air Force at a ratio of 1:1:1, rather than the existing ratio of 2:1:1 dominated by the Army.²⁰⁸ That same reform initiative includes a provision for the commanding generals of 20 units that report directly to the ROK MND to be composed of generals from the Army, Navy, and Air Force at a ratio of 1:1:1, a significant change from the July 2018 ratio of 16:3:1.²⁰⁹

DR 2.0's force reduction initiative and its target of reducing the size of the ROK active duty military to 500,000 by 2022, discussed above, also promotes balance among the services by eliminating positions almost exclusively from the Army. When the MND gave its first public description of DR 2.0's reform initiatives in the summer of 2018, it stated that the military would shrink from its 2018 size of 618,000 troops down to

²⁰⁷ ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 21; ROK MND, *2018 Defense White Paper*, 50.

²⁰⁸ ROK MND, "Yuk.Hae.Gong Dongilbiyul Pyeonseong, Dongilgun Yeonsokbojik Geumji" [육.해.공 동일비율 편성, 동일군 연속보직 금지; Establishment of Equal Ratios for Army, Navy, Air Force, Prohibition of Consecutive Tours at the Same Force] July 24, 2018, 2, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_11127&num=1; ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 37.

²⁰⁹ ROK MND, "Yuk.Hae.Gong Dongilbiyul Pyeonseong, Dongilgun Yeonsokbojik Geumji" [육.해.공 동일비율 편성, 동일군 연속보직 금지; Establishment of Equal Ratios for Army, Navy, Air Force, Prohibition of Consecutive Tours at the Same Force] July 24, 2018, 2; ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 37.

500,000 active troops by eliminating 118,000 positions from the Army.²¹⁰ A month after making that announcement on DR 2.0, the MND announced its 2019 budget request and clarified that 117,000 of the 118,000 positions to be eliminated were conscripts, although that plan was later modified slightly to eliminate additional officer positions and recruit more non-commissioned officers.²¹¹

Diminishing the ROK Army's presence within the JCS and reducing the sheer size of the ROK Army are two methods to promote "balance" among the services of the ROK military, but DR 2.0's initiative to "Adjust the Quota of General Officers" also reduces the influence of the ROK Army relative to the Navy and Air Force.²¹² The plan includes reducing the number of general officers in the entire military from 436 in 2017 to only 360 by 2022. MND's statements about this reduction have emphasized that some general officer positions are being eliminated due to unit consolidation (such as the First ROK Army and Third ROK Army's merger into Ground Operations Command) and the conversion of some general officer positions to civilian public servants.²¹³ Additionally,

²¹⁰ ROK MND, "Moon Jae-in Jeongbuui Gukbangaehyeok 2.0" [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration's Defense Reform 2.0] July 27, 2018, 6.

²¹¹ Ibid., 7; ROK National Assembly, *2020 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2020 년도 국방위원회 소관 예산안 예비심사보고서; 2020 National Defense Committee Planned Budget Preliminary Review Report] November 7, 2019, 55.

²¹² ROK MND, *Gukbangaehyeok 2.0* [국방개혁 2.0; Defense Reform 2.0] 37.

²¹³ Ibid., 18; ROK MND, "Moon Jae-in Jeongbuui Gukbangaehyeok 2.0" [문재인 정부의 국방개혁 2.0; Moon Jae-in Administration's Defense Reform 2.0] July 27, 2018, 7.

the MND has stated that 66 of the 76 eliminated positions are from the Army, while the Navy and Air Force are each losing only five general officers.²¹⁴ Both the reduction of total troops and the reduction of general officers focus principally on reductions within the Army.

The Army is by far the largest service in the ROK military, measuring 464,000 troops at the end of 2018 compared to only 70,000 within the Navy and Marine Corps and 65,000 in the Air Force.²¹⁵ Even after DR 2.0's reduction of Army conscripts, the Army will still compose the preponderance of manpower within the ROK military. However, the reform initiatives to evenly distribute billets in the JCS across the services and eliminate a large number of Army general officer positions, along with the reduction of standing Army troops, cumulatively illustrate the focus of President Moon's administration on creating a more balanced force that is somewhat less dominated by the Army.

Engagement with International Partners

Engagement with international partners is a prominent theme in the 2018 National Security Strategy, the NDP, and the JMS. The National Security Strategy explicitly identified the ROK as a middle power working to further its national interests through proactive engagement in the international community, rhetorically in line with Sook-Jong

²¹⁴ “Gukbanggaehyeok 2.0 4 Dae Gwaje - Janggun Su Gamchuk” [국방개혁 2.0 4 대 과제 - 장군 수 감축; Defense Reform 2.0's 4 Large Tasks – Reduction in Number of Generals] *Gukbank TV*, July 30, 2018, video, https://youtu.be/Fe6r_qpbDB0.

²¹⁵ ROK MND, *2018 Defense White Paper*, 55-58.

Lee's description of middle powers exercising "middle powermanship" through engagement in "inter- or non-governmental transnational networks" to contribute to solutions to shared global challenges.²¹⁶ The National Security Strategy stated, "We will actively seek a role as a responsible middle power through expanding contributions to efforts to resolve global security issues that are facing the international community."²¹⁷ Middle power engagement in the international community is instrumental in consolidating international support for ROK attempts to establish peace on the Korean Peninsula: "The government will concentrate on multilateral efforts on the basis of cooperation with the international community in order to achieve peace through the resolution of the North Korean nuclear problem."²¹⁸ The National Security Strategy also prescribed that the ROK must expand its efforts to engage international partners, and in a section titled "Expanding the International Role of a Middle Power" it went on to state, "While we will strengthen our status by expanding appointments of chairpersons and memberships in international institutions, we will also strengthen our influence by actively supporting our citizens' entry into international institutions."²¹⁹

The NDP and JMS, as described in the *2018 Defense White Paper*, make clear that the ROK military also has a role in supporting South Korea's middle power

²¹⁶ Sook-jong Lee, "South Korea as New Middle Power Seeking Complex Diplomacy," 2.

²¹⁷ ROK Office of National Security, *Gukgaanbojeollyak* [국가안보전략; National Security Strategy] 26.

²¹⁸ *Ibid.*, 28.

²¹⁹ *Ibid.*, 95.

engagement with international partners. When describing how the military will support the NDP's objective of contributing to regional stability and world peace, the White Paper stated that the ROK Armed Forces will promote "amicable and cooperative relationships with the surrounding nations, and by proactively participating in international peacekeeping operations as well as defense cooperative exchange."²²⁰ Furthermore, the NDP calls for an increase in such engagement, stating that the ROK military will "expand the overseas dispatch of Korean troops to shape a more favorable strategic environment for the ROK."²²¹ The *2018 Defense White Paper's* description of the JMS echoed the same theme: "The ROK Armed Forces will work closely with the (*sic*) regional partners during peacetime to shape a favorable strategic environment."²²²

Apart from its descriptions of the NDP and JMS, the *2018 Defense White Paper* articulated a goal of increased international engagement in various other sections of the document as well. In the portion of the White Paper that described the training executed by each service of the ROK military, the Army, Navy, Air Force, and Marine Corps all highlighted the number of multilateral exercises that they conducted outside of South Korea.²²³ The ROK Marine Corps even added that it is "working on expanding its participation in overseas multilateral combined trainings."²²⁴ Additionally, in the chapter

²²⁰ ROK MND, *2018 Defense White Paper*, 43.

²²¹ ROK MND, *2018 Defense White Paper*, 45.

²²² *Ibid.*, 47.

²²³ *Ibid.*, 100-106.

²²⁴ *Ibid.*, 105.

of the White Paper that described ROK peacekeeping operations, overseas deployments, and other international engagements, the MND stated, “Multilateral security cooperation activities have recently intensified because of the growing unconventional and transnational threats that cannot be coped with alone by a single nation.”²²⁵

The Defense Budget

Defense Budget Trends

The defense budgets requested by President Moon’s administration and approved by the National Assembly in 2017, 2018, and 2019 (for execution in 2018, 2019, and 2020, respectively) have grown by larger margins than the budgets of the preceding years (see table 2 and figure 3). The annual increases of 7 percent, 8.4 percent, and 7.2 percent during this period have resulted in an approved defense budget for 2020 of over ₩50 trillion (approximately \$44 billion).²²⁶ While this amount may pale in comparison to the U.S. defense budget, it represents a major portion of the ROK’s economic capacity: in 2018 the ROK’s defense budget amounted to 2.38 percent of its gross domestic product (GDP).²²⁷ As a point of reference, that is a higher percentage of GDP going to defense

²²⁵ Ibid., 200.

²²⁶ Calculated at an exchange rate of \$1.00 = ₩1135. The ROK National Assembly National Defense Committee uses the same exchange rate in the *2020 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2020 년도 국방위원회 소관 예산안 예비심사보고서; 2020 National Defense Committee Planned Budget Preliminary Review Report] November 7, 2019, 221.

²²⁷ ROK MND, *2018 Defense White Paper*, 157.

spending than any member of the North Atlantic Treaty Organization except the United States.²²⁸

During this period of larger increases to the defense budget, the composition of the budget has also shifted with an increased emphasis on FIP that fund “the purchasing and research and development, including new development, improvement of performance, etc., of weapons systems for enhancing military force, and the installation, etc. of facilities incidental thereto.”²²⁹ The force operating costs budget, also sometimes referred to as the O&M budget but which also includes most payroll expenses, continues to make up a majority of the defense budget, but the portion of the budget allocated to FIP has steadily grown in the budgets leading up to 2020. After hovering around 30 percent of defense spending through 2017, the FIP budget has garnered a larger share each year, reaching over 33 percent of the 2020 defense budget. While both O&M and FIP continue to grow in absolute terms, an increasing share of defense spending is being allocated to the development and procurement of weapons systems through the FIP budget. Appendix A includes a table of all ROK defense budget programs along with appropriated funding for the years 2013 through 2020.

²²⁸ North Atlantic Treaty Organization, “Defence Expenditure of NATO Countries (2012-2019)” (Brussels: NATO, 2019), 3, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2019_06/20190625_PR2019-069-EN.pdf.

²²⁹ Defense Acquisition Program Act, (2006) art. 3, para. 1 (Republic of Korea), http://elaw.klri.re.kr/eng_service/lawView.do?hseq=46900&lang=ENG. The Korean term “Bangwiryeokgaeseon” [방위력개선] is translated as Force Improvement in the English translation of the legislation noted above; however, the ROK MND White Papers often translate the term as Force Enhancement.

Year	National Assembly Confirmed Defense Budget (₩)	O&M Budget, including Payroll (₩)	O&M Budget (%)	FIP Budget (₩)	FIP Budget (%)
2013	34,345,275,036,000	24,228,972,461,000	70.55	10,116,302,575,000	29.45
2014	35,705,619,422,000	25,195,966,463,000	70.57	10,509,652,959,000	29.43
2015	37,455,990,939,000	26,442,028,431,000	70.59	11,013,962,508,000	29.41
2016	38,799,549,371,000	27,159,740,057,000	70.00	11,639,809,314,000	30.00
2017	40,334,649,019,000	28,137,698,001,000	69.76	12,196,951,018,000	30.24
2018	43,158,119,468,000	29,637,827,477,000	68.67	13,520,291,991,000	31.33
2019	46,697,085,000,000	31,323,761,000,000	67.08	15,373,324,000,000	32.92
2020	50,152,700,149,000	33,472,258,149,000	66.74	16,680,442,000,000	33.26

Source: Data is adapted from the National Assembly, “Jeongbuisongjeongbo,” [정부이송정보; Government Transfer Report] that is generated after each annual budget is approved (see Appendix A for each year’s detailed source information).

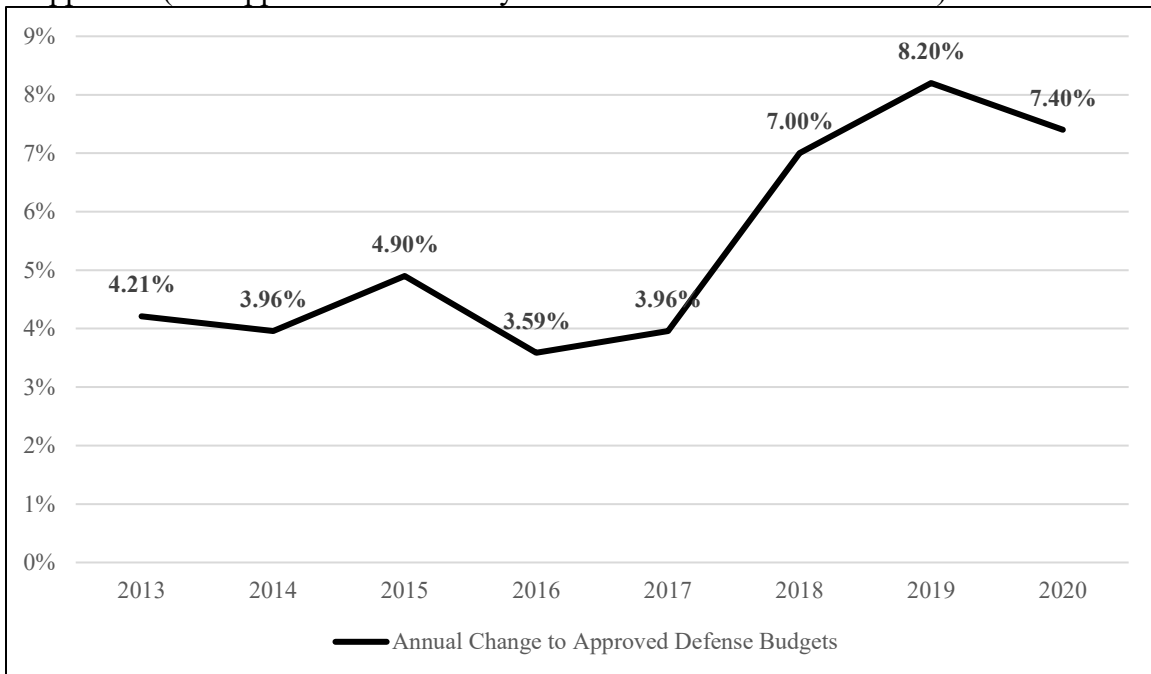


Figure 3. Annual Change to Approved Defense Budgets

Source: Data is adapted from the National Assembly, “Jeongbuisongjeongbo,” [정부이송정보; Government Transfer Report] that is generated after each annual budget is approved (see Appendix A for each year’s detailed source information).

Stated Defense Budget Priorities

The ROK MND publishes statements to the press that describe defense budgets, both when the administration submits its consolidated budget request to the National Assembly (usually in September) and when the National Assembly approves the budget (usually in December). Each of these statements provides an overview of the defense budget and describes its major components and objectives. Within these statements, the MND highlights several areas as priorities within the defense budget and emphasizes the funding of programs that support those priorities.

FIPs

Major emphases of the FIP budget include the development and acquisition of forces to deter and counter nuclear and missile threats (a category of capabilities better known in English by its previous monikers of Triad System, 3-Axis System, 3K, and K3), capabilities required to support OPCON transition, forces to support defense reform initiatives, support to defense research and development, and support to the ROK domestic defense industry. The MND occasionally emphasizes other categories of programs in its statements, such as programs to respond to transnational and nonmilitary threats in the statement on the 2020 budget and programs to strengthen independent defense capabilities and prepare for total war in the 2018 budget, but the MIND consistently emphasizes the categories listed above in its statements on the budgets for 2018, 2019, and 2020.²³⁰

²³⁰ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 7.0% Jeungaekdoen 43.2 Jowon Hwakjeong” [신정부 첫 해, 국방예산 7.0% 증액된 43.2 조원으로 확정; New Government’s First Year, Confirmed Defense Budget Increased 7.0% to 43.2 Trillion

The priority of building “forces to deter and counter nuclear and missile threats” has evolved since 2012. Following the DPRK’s artillery bombardment of Yeonpyeong island in 2010, at the 44th SCM in October of 2012 held by the U.S. Secretary of Defense and the ROK Minister of National Defense, the Minister stated that the ROK would “improve deterrent and defensive capabilities against North Korean missile threats, including . . . Korea Air and Missile Defense” (KAMD) along with improvements to intelligence, surveillance, and reconnaissance and Alliance interoperability.²³¹ KAMD is designed to provide a “multilayered defense system” that can detect and intercept missiles fired at the ROK.²³² KAMD initially focused explicitly on “missiles launched by North Korea,” but after rapprochement efforts with the DPRK in 2018 the concept was

Won] December 6, 2017; ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong” [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018; ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019.

²³¹ “Joint Communique of the 44th U.S. – ROK Security Consultative Meeting,” October 24, 2012, <http://archive.defense.gov/news/44thSCMJointCommunique.pdf>; Noh Ji-won, “Defense Ministry changes terminology for “three-axis system” of military response,” *Hankyoreh*, January 13, 2019, http://english.hani.co.kr/arti/english_edition/e_national/878208.html. The English version of the 44th SCM’s joint communique does not abbreviate Korea air and missile defense as an acronym; however, the Korean version of the joint communique does abbreviate the Korean term into the Romanized acronym KAMD: http://www.mnd.go.kr/common/download.action?siteId=mnd&fileSeq=o_1130000001196.

²³² ROK MND, *2018 Defense White Paper*, 70.

“expanded and enhanced” in order to “counter omnidirectional security threats.”²³³

Specific acquisition programs that support the KAMD concept include Ballistic Missile Early Warning Radar (see Appendix A, line 684), upgrades to the *Cheolmae-II* medium-range surface-to-air missile (line 713), upgrades to ROK Patriot systems (line 725), and the purchase of Patriot Advanced Capability-3 interceptor munitions (line 724).²³⁴

The ROK developed the Kill-Chain concept as a complement to KAMD, enabling not only the interception of missiles but also “striking North Korean nuclear and missile operations systems.”²³⁵ Kill-Chain and KAMD formed the ROK contribution towards the Alliance’s counter-missile capability, with the ROK Minister of National Defense stating at the 46th SCM in 2014 that the ROK would seek to complete the development of both systems by the mid-2020s.²³⁶ The systems that comprise the Kill-Chain concept consist

²³³ Ibid., 69-70.

²³⁴ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 7.0% Jeungaekdoen 43.2 Jowon Hwakjeong” [신정부 첫 해, 국방예산 7.0% 증액된 43.2 조원으로 확정; New Government's First Year, Confirmed Defense Budget Increased 7.0% to 43.2 Trillion Won] December 6, 2017, 2-4; ROK MND, “'Ganghan Anbo' 'Chaegimgukbang' Guhyeoneul Wihan '19-'23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-’23 중기간 소요재원 총 270.7 조원; Required Resources in the ‘19-’23 Midterm in order to Materialize ‘Strong Security’ and ‘Responsible National Defense’ Total 270.7 Trillion Won] January 10, 2019, 3; U.S. Department of Defense, Defense Security Cooperation Agency, “Republic of Korea – Patriot Advanced Capability (PAC-3) Missiles,” November 5, 2014, <https://www.dsca.mil/major-arms-sales/republic-korea-patriot-advanced-capability-pac-3-missiles>.

²³⁵ ROK MND, *2016 Defense White Paper*, 69.

²³⁶ Ibid., 60; “Joint Communiqué of the 46th ROK-US Security Consultative Meeting,” October 23, 2014.

largely of reconnaissance platforms necessary for the identification of targets and munitions necessary for striking those targets. Specific systems that MND has identified as supporting Kill-Chain include military reconnaissance satellites (see Appendix A, lines 340, 344, 345, 351), a Medium-altitude Unmanned Aerial Vehicle (lines 346, 396), the Global Hawk High-altitude Unmanned Aerial Vehicle (line 442), the Taurus long-range air-to-surface missile (line 698), and a tactical surface-to-surface missile (lines 658, 712).²³⁷ Just as KAMD was “expanded and enhanced” following ROK and DPRK diplomatic engagement in 2018, Kill-Chain was also rebranded at the same time as the “strategic strike system” in order to “counter a full range of asymmetric threats from all sides.”²³⁸

The final category of “forces to deter and counter nuclear and missile threats” consists of the Korea Massive Punishment and Retaliation (KMPR) concept, which directly targets North Korea’s “leadership, including its war headquarters, through deployment of missiles capable of simultaneous, massive-scale precision strikes, and

²³⁷ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 7.0% Jeungaekdoen 43.2 Jowon Hwakjeong” [신정부 첫 해, 국방예산 7.0% 증액된 43.2 조원으로 확정; New Government’s First Year, Confirmed Defense Budget Increased 7.0% to 43.2 Trillion Won] December 6, 2017, 4; ROK MND, “'Ganghan Anbo' 'Chaegimgukbang' Guhyeoneul Wihan '19-'23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-’23 중기간 소요재원 총 270.7 조원; Required Resources in the ‘19-’23 Midterm in order to Materialize ‘Strong Security’ and ‘Responsible National Defense’ Total 270.7 Trillion Won] January 10, 2019, 3.

²³⁸ ROK MND, *2018 Defense White Paper*, 70.

special operations units.”²³⁹ Generally described in the press as a capability to “decapitate” DPRK leadership, KMPR consists of precision strike and special operations capabilities.²⁴⁰ MND has specifically identified high-power missiles, a special operations grenade launcher (see Appendix A, line 495), and upgrades to CH/HH-47D large transport helicopters (line 624) as programs that support KMPR.²⁴¹ The MND repackaged KMPR with Kill-Chain into the “strategic strike system” in the *2018 Defense White Paper*, thereby removing the third-axis of the so-called Triad System.²⁴² Additionally, the MND renamed (but importantly did not eliminate) the KMPR concept as “overwhelming response” in early 2019.²⁴³

²³⁹ Ibid., 71.

²⁴⁰ Robert Beckhusen, “South Korea has a plan to ‘decapitate’ Kim Jong Un,” *The Week*, September 14, 2016, <https://theweek.com/articles/648718/south-korea-plan-decapitate-kim-jong-un>.

²⁴¹ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 7.0% Jeungaekdoen 43.2 Jowon Hwakjeong” [신정부 첫 해, 국방예산 7.0% 증액된 43.2 조원으로 확정; New Government’s First Year, Confirmed Defense Budget Increased 7.0% to 43.2 Trillion Won] December 6, 2017, 4; ROK MND, “‘Ganghan Anbo’ ‘Chaegimgukbang’ Guhyeoneul Wihan ‘19-’23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-’23 중기간 소요재원 총 270.7 조원; Required Resources in the ‘19-’23 Midterm in order to Materialize ‘Strong Security’ and ‘Responsible National Defense’ Total 270.7 Trillion Won] January 10, 2019, 3.

²⁴² ROK MND, *2018 Defense White Paper*, 70.

²⁴³ ROK MND, “‘Ganghan Anbo’ ‘Chaegimgukbang’ Guhyeoneul Wihan ‘19-’23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-’23 중기간 소요재원 총 270.7 조원; Required Resources in the ‘19-’23 Midterm in order to Materialize ‘Strong Security’ and ‘Responsible National Defense’ Total 270.7 Trillion Won] January 10, 2019, 3.

The ROK has adjusted its messaging regarding “forces to deter and counter nuclear and missile threats” as President Moon’s administration has sought diplomatic engagement with the DPRK. The MND’s rhetoric regarding the concept, as articulated in the *2018 Defense White Paper*, no longer cites the DPRK as the specific source of missiles to be intercepted or the location of targets to be struck. The renaming of the concept from the Triad System to “forces to deter and counter nuclear and missile threats,” along with the rebranding and repackaging of Kill-Chain and KMPR as the “strategic strike system” and “overwhelming response,” also seems designed to make the concept less provocative towards the DPRK. However, the acquisition programs that support the concept have remained a stated priority in the defense budgets for 2018, 2019, and 2020. In its statement regarding the 2020 defense budget, the MND even included F-35A (see Appendix A, line 636), *Jangbogo*-III Batch I submarines (line 575), and *Gwanggaeto*-III Batch II destroyers (line 558) as acquisition programs that will provide “forces to deter and counter nuclear and missile threats.”²⁴⁴

A second category of programs that the MND has emphasized in its statements on the defense budgets for 2018, 2019, and 2020 is support to OPCON transition under the COTP. The subject of OPCON transition did not appear in the MND’s statements on the defense budget prior to President Moon taking office, but it is now regularly listed among the MND’s funding priorities. In a statement on the 2018 defense budget request, the

²⁴⁴ ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019, 6.

MND claimed that the budget would acquire critical military capabilities necessary for OPCON transition but did not list any specific programs.²⁴⁵ When describing the approved defense budget for 2019, the MND listed OPCON transition just after the Triad System among the priorities of the FIP budget, specifically listing the military satellite communications system (see Appendix A, lines 348), the Tactical Information Communication Network (lines 339, 378), and the acquisition of combat reserve munitions (line 673) as related programs.²⁴⁶ OPCON transition remained a stated priority within the 2020 defense budget as well, with the MND also identifying the 230mm Multiple Launch Rocket System (line 508) as a supporting program.²⁴⁷ All of the specific programs that the MND has identified as supporting OPCON transition were already in progress before President Moon took office in 2017, but the MND's emphasis on support to OPCON transition within the defense budget reflects the importance that President Moon's administration has assigned to fulfilling the conditions of the COTP.

²⁴⁵ ROK MND, "Sinjeongbu Cheot Hae, Gukbangyesan 6.9% Jeungaekdoen 43.1 Jowon" [신정부 첫 해, 국방예산 6.9% 증액된 43.1 조원; New Government's First Year, Defense Budget Increased 6.9% to 43.1 Trillion Won] August 28, 2017, 3.

²⁴⁶ ROK MND, "Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong" [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, 5.

²⁴⁷ ROK MND, "2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong" [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration's Plan] December 10, 2019, 6.

A third category of programs that the MND has emphasized in its public statements concerning the defense budget is support to defense reform. The current defense reform plan, DR 2.0, entails an “expansion of the area of operations and a reduction in forces” that necessitates “strengthening command and control and maneuver capabilities.”²⁴⁸ Specific programs that the MND has identified as supporting DR 2.0 and its associated force restructuring initiatives include the *Boramae* KF-X aircraft (see Appendix A, line 586), the Amphibious Utility Helicopter (line 600), the KDDX-class destroyer (lines 542, 543, 556), the K-2 tank (line 469), the *Surion* Korea Utility Helicopter (line 602), ground tactical data links (lines 352, 379, 380), the rear area satellite communications system (line 385), the wheeled armored vehicle (line 471), the small tactical vehicle (lines 452, 479), research and development of the small armed helicopter (line 585), and upgrades to identification friend-or-foe equipment (line 623).²⁴⁹ Unlike OPCON transition, which the MND only began to emphasize in budget

²⁴⁸ ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong” [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, 5.

²⁴⁹ Ibid., 5-6; ROK MND, “‘Ganghan Anbo’ ‘Chaegimgukbang’ Guhyeoneul Wihan ‘19-’23 Junggigan Soyojaewon Chong 270.7 Jowon” [‘강한 안보’ ‘책임국방’ 구현을 위한 ‘19-’23 중기간 소요재원 총 270.7 조원; Required Resources in the ‘19-’23 Midterm in order to Materialize ‘Strong Security’ and ‘Responsible National Defense’ Total 270.7 Trillion Won] January 10, 2019, 3; ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019, 6.

statements after President Moon assumed office, budget support to defense reform has been a point of emphasis in previous administrations as well. The MND's statements regarding the 2015, 2016, and 2017 defense budgets all identified support to the previous administration's defense reform plan, Defense Reform 2014-2030, as a priority.²⁵⁰ Like the programs identified as supporting OPCON transition, the programs that the MND associates with support to DR 2.0 existed in the defense budget prior to President Moon's administration developing DR 2.0, or they are follow-on acquisition programs to completed research and development programs or upgrades to completed acquisition programs (see Appendix A). Therefore, these programs were not initiated because of DR 2.0, but rather the MND has emphasized that these programs support DR 2.0 and are aligned with the current administration's defense reform objectives.

The fourth category of programs emphasized in the MND's statements regarding defense budgets is research and development. President Moon regularly mentions South Korea's technological capabilities and research capacity when arguing for the advancement of a "Fourth Industrial Revolution" based on advanced technologies.²⁵¹ The

²⁵⁰ ROK MND, "2015 Nyeondo Gukbangyesan 37 Jo 4,560 Eok Woneuro Hwakjeong" [2015 년도 국방예산 37 조 4,560 억 원으로 확정; 2015 Defense Budget Confirmed at 37.4560 Trillion Won] December 3, 2014, 5, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_8104&num=1; ROK MND, "2016 Nyeondo Gukbangyesan 38 Jo 7,995 Eok Woneuro Hwakjeong" [2016 년도 국방예산 38 조 7,995 억 원으로 확정; 2016 Defense Budget Confirmed at 38.7995 Trillion Won] December 3, 2015, 2; ROK MND, "2017 Nyeondo Gukbangyesan 40 Jo 3,347 Eok Woneuro Hwakjeong" [2017 년도 국방예산 40 조 3,347 억 원으로 확정; 2017 Defense Budget Confirmed at 40.3347 Trillion Won], December 5, 2016, 11.

²⁵¹ Sohn Ji Ae, "President emphasizes 'people-centered fourth industrial revolution'," KOREA.net, ROK Ministry of Culture, Sports and Tourism, Korean

MND points out that research and development spending not only strengthens the military with “Fourth Industrial Revolution–level cutting-edge weapons systems such as unmanned systems and robots,” but also that defense research and development programs advance “national science and technology and contribute towards the promotion of the defense industry and economic growth.”²⁵² Defense budgets explicitly identify programs associated with research and development (see Appendix A), including weapons systems currently in development, operating costs for MND organizations involved in research and development such as the Agency for Defense Development and Defense Agency for Technology and Quality, and programs focused on pure technology (as opposed to system) development. The MND’s emphasis on research and development programs within the budget signals both a priority to build military capabilities and a priority to support domestic development objectives.

Closely related to defense research and development, support to the South Korean domestic defense industry is also regularly identified by the MND as a priority within the defense budget. The statement on the 2018 budget combined support to the defense industry with research and development but did not distinguish separate supporting programs, while the statements on the 2019 and 2020 budgets have listed support to the defense industry as a distinct priority.²⁵³ The programs associated within this category

Culture and Information Service, October 12, 2017, <http://www.korea.net/NewsFocus/policies/view?articleId=149973>.

²⁵² ROK MND, *2018 Defense White Paper*, 128.

²⁵³ ROK MND, “Sinjeongbu Cheot Hae, Gukbangyesan 7.0% Jeungaekdoen 43.2 Jowon Hwakjeong” [신정부 첫 해, 국방예산 7.0% 증액된 43.2 조원으로 확정; New Government’s First Year, Confirmed Defense Budget Increased 7.0% to 43.2 Trillion

aim to “create quality jobs and transition the domestic defense industry to an export-oriented industrial structure.”²⁵⁴ Among the programs that the MND identifies as supporting this priority are marketing support, providing information on overseas markets, and support to the production of more weapon system components domestically (see Appendix A, lines 758 through 765 for related programs). The funding associated with these programs is a miniscule portion of the defense budget (₩78.7 billion in 2020, or 0.47 percent of the total 2020 FIP budget) but its inclusion among the MND’s points of emphasis reflects the MND’s efforts to support domestic economic objectives.

Operations and Maintenance

While the FIP portion of the defense budget focuses on materiel, the O&M portion of the budget covers the daily operating and payroll expenses required to maintain the effectiveness of the ROK military. As such, the level of specificity regarding what is being funded by each O&M program varies widely. Nonetheless, common

Won] December 6, 2017, 6; ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong” [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, 7; ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019, 6-7.

²⁵⁴ ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019, 7.

themes emerge in the MND's descriptions of the O&M portion of the defense budget just as the themes discussed above emerge in descriptions of the FIP portion of the budget. These themes include support to force structure changes inherent with the reduction of the number of standing troops and quality of life improvements for service members.

The MND has emphasized measures to mitigate the reduction of the number of active ROK troops and shortened conscription periods that are part of DR 2.0 in its descriptions of the O&M budget. Chief among these mitigation measures has been the recruitment of additional non-commissioned officers and the hiring of civil servants to fill non-combat positions. The MND has also highlighted funding for O&M programs that apply technology to increase the effectiveness of individual soldiers, to include the Warrior Platform set of individual equipment, experiments with drones, and the application of artificial intelligence and virtual reality to training and other systems.²⁵⁵

The improvement of living conditions for service members is also emphasized in the MND's statements regarding the budget. Budget programs that the MND asserts as bettering the lives of service members include raising monthly pay for conscripts, improvements to the military healthcare system, measures to increase the recruitment and retention of females, and additional educational and self-development opportunities for

²⁵⁵ ROK MND, "Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong" [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, 8; ROK MND, "2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong" [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration's Plan] December 10, 2019, 8.

active service members.²⁵⁶ Many of these programs have titles that correspond with DR 2.0 initiatives (see Appendix B), and in analyzing the 2019 defense budget the National Assembly National Defense Committee reviewed the funding for some DR 2.0 initiatives and identified many of these same budget programs.²⁵⁷ In its press releases, however, the MND has not specifically invoked DR 2.0 when describing programs that improve service member living conditions. O&M programs that support quality of life for service members are a perennial point of emphasis for the MND regardless of the administration or defense reform agenda, which should not be surprising given that many South Korean citizens have personal connections to young men serving as conscripts in the military.²⁵⁸

²⁵⁶ ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong” [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, 9; ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019, 10.

²⁵⁷ ROK National Assembly, *2019 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2019 년도 국방위원회 소관 예산안 예비심사보고서; 2019 National Defense Committee Planned Budget Preliminary Review Report] November 14, 2018, 62-78.

²⁵⁸ ROK MND, “2014 Nyeon Saehae Gukbangyesan 35 Jo 7,057 Eogwoneuro Hwakjeong” [2014 년 새해 국방예산 35 조 7,057 억원으로 확정; 2014 New Year Defense Budget Confirmed at 35.7057 Trillion Won] January 1, 2014, 2-3, http://www.mnd.go.kr/user/newsInFileDown.action?siteId=mnd&newsSeq=I_4248&num=1; ROK MND, “2016 Nyeondo Gukbangyesan 38 Jo 7,995 Eok Woneuro Hwakjeong” [2016 년도 국방예산 38 조 7,995 억 원으로 확정; 2016 Defense Budget Confirmed at 38.7995 Trillion Won] December 3, 2015, 3.

The discussion above surveys the objectives articulated in ROK strategic documents and provides a broad understanding of the ROK defense budget and the specific features of the budget emphasized by the MND. It is now appropriate to turn to the analysis of how those strategic objectives have shaped the ROK defense budgets for 2018, 2019, and 2020.

The Influence of Strategic Objectives on the Defense Budget

Do Strategic Objectives Even Matter?

In its official statements regarding defense budgets, the ROK MND has emphasized that the increases to the defense budgets for 2018, 2019, and 2020 (approved by the ROK National Assembly in 2017, 2018, and 2019) are significantly larger in scope than the annual increases for the defense budgets from 2010 to 2017. Furthermore, the MND has asserted that these increases are required due to changes in the security environment and for the achievement of government policy objectives. In an MND statement in August of 2017 describing the administration's defense budget request for 2018, the MND noted that a large increase to the defense budget was necessary "due to the severe security situation, such as heightened tension among regional states and North Korean nuclear and missile threats."²⁵⁹ The Director General of MND's Programming and Budgeting Bureau, in a description of the Midterm Defense Plan published in 2019 that projects continued growth of the defense budget, also characterized significant

²⁵⁹ ROK MND, "Sinjeongbu Cheot Hae, Gukbangyesan 6.9% Jeungaekdoen 43.1 Jowon" [신정부 첫 해, 국방예산 6.9% 증액된 43.1 조원; New Government's First Year, Defense Budget Increased 6.9% to 43.1 Trillion Won] August 28, 2017, 3.

budget increases as a “strategic move” required by the nature of the security environment:

This sizable allocation [of the budget] demonstrates South Korea’s strategic move to reinforce its national defense amid uncertain security environments, striving for constant development of national defense. In consequence, there is a greater demand for increased defense expenditure to establish a ‘strong military that secures peace through strength.’²⁶⁰

Similarly, an MND statement in December of 2018 declared that the 2019 defense budget would increase by a large margin “in order to guarantee the promotion of conditions” required for the execution of DR 2.0.²⁶¹

The growth of the ROK defense budget during this three-year period certainly is significant in scope, rising by at least 7 percent annually as indicated in table 2. The increases are even more striking when compared against the annual increases to the defense budgets for 2010 to 2017, which averaged only 4.4 percent. The increases to national defense spending in the budgets for 2018, 2019, and 2020, along with the MND’s explanations of those annual increases, give the impression that the ROK government is placing a greater emphasis on the achievement of its security objectives.

While the MND’s statements regarding defense budgets during this three-year period associate defense budget increases with government strategic objectives and changes in the security environment, government statements rarely discuss the defense

²⁶⁰ ²⁶⁰ Lee Young-bin, “A Quantum Leap toward a Military Power, the Dawn of an ‘Era of 50 Trillion Won Defense Budget.’ ”

²⁶¹ ROK MND, “Gukbangyesan, Jeonnyeondaebi 8.2% Jeunggahan 46.7 Jowoneuro Hwakjeong” [국방예산, 전년대비 8.2% 증가한 46.7 조원으로 확정; Defense Budget, Confirmed Increase by 8.2% from the Previous Year to 46.7 Trillion Won] December 8, 2018, 1.

budget in relation to the total government budget. When the defense budget is considered as only one portion of overall government spending, a much different picture emerges regarding the government's emphasis on defense spending and the degree to which the defense budget is influenced by changes in the security environment and ROK strategic objectives. Since at least 2005, defense spending has closely hovered around 10 percent of total government spending, as indicated in table 3. These figures give the impression of a defense budget that is impervious to changing strategic priorities and simply composes around 10 percent of the government budget regardless of changes in the security environment. Through this lens, annual increases to the defense budget are not an indication of the government's emphasis on defense; instead, annual increases to the defense budget simply reflect increases to overall government spending with the defense budget maintaining its 10 percent share of the total.

Table 3. ROK Defense Budgets in relation to Total Government Spending			
Year	National Assembly Confirmed Government Expenditures (₩)	Approved Defense Budget (₩)	Share of Government Spending to Defense (%)
2005	209,600,000,000,000	21,102,600,000,000	10.16
2006	224,100,000,000,000	22,512,900,000,000	10.17
2007	237,100,000,000,000	24,497,200,000,000	10.34
2008	262,800,000,000,000	26,649,000,000,000	10.36
2009	301,800,000,000,000	28,532,600,000,000	10.03
2010	290,800,000,000,000	29,562,700,000,000	10.10
2011	309,100,000,000,000	31,403,100,000,000	10.16
2012	325,400,000,000,000	32,957,600,000,000	10.13
2013	349,000,000,000,000	34,345,275,036,000	10.04
2014	355,800,000,000,000	35,705,619,422,000	10.04
2015	384,700,000,000,000	37,455,990,939,000	9.98
2016	398,500,000,000,000	38,799,549,371,000	10.04
2017	410,100,000,000,000	40,334,649,019,000	10.07
2018	432,700,000,000,000	43,158,119,468,000	10.06
2019	469,600,000,000,000	46,697,085,000,000	9.94
2020	512,300,000,000,000	50,152,700,149,000	9.79

Sources: Data on total government expenditures from 2005 to 2019 is adapted from the ROK National Assembly Budget Office, *Public Finance of Korea 2019 (partially extracted)* (Seoul: National Assembly, 2019), 22, <http://korea.nabo.go.kr/publi/publications.php?ptype=view&idx=6640&page=2&code=publications&category=104>; data for total government expenditures approved for 2020 is from Yonhap News Agency, “National Assembly passes 512.3 tln-won budget bill,” December 10, 2019, <https://en.yna.co.kr/view/AEN20191210009552315>; data for approved defense budgets from 2005 to 2012 is adapted from ROK MND, *2014 Defense White Paper* (Seoul: MND, 2015), 298, http://www.mnd.go.kr/user/mndEN/upload/pblictN/PBLICTNEBOOK_201704260250138940.pdf; data for approved defense budgets from 2013 to 2020 is from the National Assembly, “Jeongbuisongjeongbo,” [정부이송정보; Government Transfer Report] that is generated after each annual budget is approved (see Appendix A for each year’s detailed source information).

The trend of defense budgets composing roughly 10 percent of total government expenditures has been steady since at least 2005, regardless of shifting political agendas associated with changes in the ROK President and the ROK National Assembly.

Objectives such as accelerating COTP, implementing defense reform, or other political

priorities have not significantly impacted the size of the defense budget. Instead, changes in the size of the defense budget are better explained by the government's fiscal policy: defense spending has grown by greater margins when ROK administrations have promoted significant growth in total government expenditures. Likewise, when ROK administrations have pursued less growth in total government expenditures, defense spending has grown by a smaller margin. Defense spending's "piece of the pie," however, has not significantly changed. Larger increases to the defense budget under liberal administrations may initially be "puzzling" because they seem at odds with those same administrations' efforts at rapprochement with the DPRK, but large increases to the defense budget merely coincide with large increases to total government expenditures.²⁶²

The regular growth of the ROK defense budget, in which it maintains a roughly 10 percent share of total government expenditures, appears unaffected not only by changing security strategy objectives but also by changes in the security environment. DPRK actions that might have prompted the ROK government to re-evaluate the portion of its resources allocated to defense include the DPRK's first nuclear test in October 2006, the DPRK sinking of the ROK Navy ship *Cheonan* in March 2010, and the DPRK artillery bombardment of Yeonpyeong Island in November 2010.²⁶³ Even after those events, however, the defense budget did not deviate significantly from a 10 percent share of total government spending. The 7 percent increase to the defense budget for 2018 (up from the 4 percent increase to the defense budget for 2017) is not a reflection of ROK

²⁶² Jae-Jung Suh, "Allied to Race? The US-Korea Alliance and Arms Race," 105.

²⁶³ "Chronology of US-North Korean Nuclear and Missile Diplomacy," Arms Control Association.

anxieties over the possibility of “fire and fury” on the peninsula amidst heightened tension between the U.S. and the DPRK in 2017. Conversely, the 8.2 percent increase to the defense budget for 2019 that was approved even as President Trump, President Moon, and Chairman Kim conducted a series of summits in 2018 is not particularly puzzling. In both cases, the defense budget grew roughly in proportion with the overall government budget, with the size of the defense budget unaffected by changes in the security environment.

While the security environment and security strategy objectives do not significantly affect the size of the defense budget, it would be premature to conclude that security strategy objectives do not influence ROK defense spending. As discussed above and illustrated in table 2, the composition of the defense budget is also changing with a larger proportion of spending going towards FIP. Increasing the share of defense spending going towards FIP has long been a priority stated by the MND in its MDPs, but only under President Moon’s administration has the share of the defense budget appropriated towards FIP actually started to grow above 30 percent (see table 4). The 2008 MDP, projecting defense spending for 2009 – 2013, anticipated raising FIP to 38.63 percent of the 2013 defense budget, but as 2013 approached the projection was adjusted downwards in successive MDPs until the 2013 budget was approved with 29.45 percent of defense spending going towards FIP. A similar pattern emerges for the MDP budget projections for 2014, 2015, 2016, and 2017: projections for those target years made in the MDPs four or five years beforehand (35.31 percent, 37.12 percent, 32.86 percent, and 33.41 percent, respectively) all declined towards 30 percent as the target year approached, and then the approved budget allocated close to 30 percent for FIP spending.

That pattern did not change until the 2018 budget, when the portion of the defense budget allocated to FIP rose to 31.33 percent. FIP's share of the budget rose again in 2019, and in 2020 the FIP portion of the budget reached 33.26 percent (actually exceeding the projection set four years earlier in the 2016 MDP).

The rising share of defense spending going to FIP in order to enable the development and acquisition of new weapons systems, which the MND had long projected but never achieved, suggests that there are substantive changes taking place within the composition of the defense budget. While the size of the defense budget appears to grow independently of changes in the security environment or ROK strategic objectives, changes within the composition of the defense budget may follow from new perceptions of the security environment and the strategic objectives of President Moon's administration.

Table 4. MDP Forecasts of O&M and FIP Spending Compared with Approved Defense Budgets, 2013 - 2020									
		Approved Budget (₩ / %)	Planned in 2018 MDP (₩ / %)	Planned in 2016 MDP (₩ / %)	Planned in 2014 MDP (₩ / %)	Planned in 2012 MDP (₩ / %)	Planned in 2010 MDP (₩ / %)	Planned in 2008 MDP (₩ / %)	
2013	Total	34,345,275,036,000				35,400,000,000,000	35,100,000,000,000	40,900,000,000,000	
	O&M	24,228,972,461,000	70.55			24,400,000,000,000	23,100,000,000,000	25,100,000,000,000	61.4
	FIP	10,116,302,575,000	29.45			11,000,000,000,000	12,000,000,000,000	15,800,000,000,000	38.6
2014	Total	35,706,619,422,000				37,500,000,000,000	37,100,000,000,000		
	O&M	25,195,966,463,000	70.57			25,700,000,000,000	24,000,000,000,000	64.6	
	FIP	10,509,652,959,000	29.43			11,800,000,000,000	13,100,000,000,000	35.4	
2015	Total	37,455,990,939,000			38,500,000,000,000	39,600,000,000,000	39,600,000,000,000		
	O&M	26,442,028,431,000	70.59		26,800,000,000,000	27,000,000,000,000	24,900,000,000,000	63.0	
	FIP	11,013,962,508,000	29.41		11,700,000,000,000	12,500,000,000,000	14,700,000,000,000	37.0	
2016	Total	38,799,549,371,000			41,500,000,000,000	42,300,000,000,000			
	O&M	27,159,740,057,000	70.00		28,400,000,000,000	28,400,000,000,000	67.2		
	FIP	11,639,809,314,000	30.00		13,100,000,000,000	13,900,000,000,000	32.8		
2017	Total	40,334,649,019,000		41,000,000,000,000	44,600,000,000,000	44,900,000,000,000			
	O&M	28,137,698,001,000	69.76	28,300,000,000,000	30,100,000,000,000	29,900,000,000,000	66.7		
	FIP	12,196,951,018,000	30.24	12,700,000,000,000	14,500,000,000,000	15,000,000,000,000	33.3		
2018	Total	43,158,119,468,000		43,200,000,000,000	47,600,000,000,000				
	O&M	29,637,827,477,000	68.67	29,500,000,000,000	31,600,000,000,000	66.4			
	FIP	13,520,291,991,000	31.33	13,700,000,000,000	16,000,000,000,000	33.6			
2019	Total	46,697,085,000,000		46,700,000,000,000	50,600,000,000,000				
	O&M	31,323,761,000,000	67.08	31,300,000,000,000	33,200,000,000,000	65.6			
	FIP	15,373,324,000,000	32.92	15,400,000,000,000	17,400,000,000,000	34.4			
2020	Total	50,152,700,149,000		47,500,000,000,000					
	O&M	33,472,258,149,000	66.74	33,300,000,000,000	66.2				
	FIP	16,680,442,000,000	33.26	17,000,000,000,000	33.8				

Sources: Data for approved defense budgets, to include the allocations towards O&M and FIP, from 2013 to 2020 is adapted from the National Assembly “Jeongbuisongjeongbo” [정부이송정보; Government Transfer Report] that is generated after each annual budget is approved (see Appendix A for each year’s detailed source information). Data for the 2008 MDP is adapted from ROK MND, *Defense White Paper 2008* (Seoul: MND, 2009), 208, http://www.mnd.go.kr/user/mnd/upload/pblict/PBLICTNEBOOK_201505220949411120.pdf; data for the 2010 MDP is adapted from ROK MND, *2010 Defense White Paper* (Seoul: MND, 2011), 227, http://www.mnd.go.kr/user/mnd/upload/pblict/PBLICTNEBOOK_201304110724185440.pdf; data for the 2012 MDP is adapted from ROK MND, *2012 Defense White Paper* (Seoul: MND, 2012), 225, http://www.mnd.go.kr/user/mnd/upload/pblict/PBLICTNEBOOK_201308060946041630.pdf; data for the 2014 MDP is adapted from ROK MND, *2014 Defense White Paper*, 177; data for the 2016 MDP is adapted from ROK MND, *2016 Defense White Paper*, 129; data for the 2018 MDP is adapted from ROK MND, *2018 Defense White Paper*, 162.

Shifts within the Defense Budget and Alignment with Strategic Objectives

Given the increasing share of defense spending going to the development and acquisition of new weapons systems through the budget for FIP, an analysis of the types of systems that are being developed and acquired may yield insight into the alignment (or misalignment) between the ROK’s security strategy objectives and its defense spending. The analysis below identifies trends in spending for aircraft systems, spending on research and development programs, and spending on programs that are associated with international engagement. The fiscal resources that the ROK is allocating towards these efforts provides a richer understanding of the ROK’s implementation of its security strategy than simply reading the ROK’s policy rhetoric.

Increased Funding for Aircraft Systems

The portion of the defense budget devoted to FIP, as formulated in the administration’s budget requests to the National Assembly, is categorized into eight separate categories: command and control and reconnaissance programs, maneuver and

firepower programs, naval programs, aircraft programs, guided weapons programs, defense program policy support, defense program administration support, and internal government transfers to other ministries within the government. See table 5 and figure 4 for a breakdown of defense spending towards each major category since 2013.

The data presented in table 5 and figure 4 shows that the defense budgets for 2018, 2019, and 2020 under President Moon's administration have allocated significantly increased proportions of the FIP budget for aircraft programs relative to the budgets of 2013 through 2017. Whereas spending on aircraft programs hovered between 22 percent and 24 percent of the FIP budget from 2013 to 2017, it grew to 25.5 percent in 2018 and reached 37.9 percent of all FIP spending in 2020. The increasing share of the FIP budget going to aircraft programs, along with the growth in the FIP budget generally, has resulted in the aircraft programs budget more than doubling in absolute terms in only three years, going from 2.9 trillion won in 2017 to 6.3 trillion won in 2020.

While the increasing share of the FIP budget allocated to aircraft programs is particularly striking, it is not the only significant trend to emerge under President Moon's administration. The portion of the FIP budget allocated to maneuver and firepower programs hovered between 18 percent and 22 percent from 2013 to 2017, but then in 2018 it dropped to 17.6 percent and continued to fall through 2019 before reaching only 10.8 percent in 2020. Not only has the budget for maneuver and firepower programs fallen in relation to the remainder of the FIP budget as a percentage, but it has also fallen in absolute terms: in 2017 maneuver and firepower programs were appropriated 2.3 trillion won, but in 2020 only 1.8 trillion won was appropriated for this category of programs.

Table 5. Distribution of FIP Spending Across Program Categories, 2013-2020									
	2013 (₩ / %)	2014 (₩ / %)	2015 (₩ / %)	2016 (₩ / %)	2017 (₩ / %)	2018 (₩ / %)	2019 (₩ / %)	2020 (₩ / %)	
FIP Total	10,116,302,575,000	10,509,652,959,000	11,013,962,508,000				11,639,809,314,000		
C2 and Reconnaissance	1,099,154,000,000	1,099,154,000,000	1,099,154,000,000	10.9	829,863,148,000	7.9	788,265,000,000	7.2	1,328,364,000,000
Maneuver and Firepower	1,956,001,000,000	1,956,001,000,000	1,956,001,000,000	19.3	2,346,250,335,000	22.3	2,302,479,000,000	20.9	2,199,204,000,000
Naval	1,681,516,000,000	1,681,516,000,000	1,681,516,000,000	16.6	1,784,519,260,000	17.0	2,302,479,000,000	16.8	1,665,199,000,000
Aircraft	2,427,319,000,000	2,427,319,000,000	2,427,319,000,000	24.0	2,340,340,286,000	22.3	2,302,479,000,000	22.9	2,587,601,000,000
Guided Weapons	1,640,495,000,000	1,640,495,000,000	1,640,495,000,000	16.2	1,726,021,183,000	16.4	2,302,479,000,000	18.5	2,329,439,000,000
Policy Support	1,209,391,000,000	1,209,391,000,000	1,209,391,000,000	12.0	1,360,394,000,000	12.9	2,302,479,000,000	12.9	1,415,819,000,000
Administration Support	97,840,575,000	97,840,575,000	97,840,575,000	1.0	116,665,747,000	1.1	2,302,479,000,000	0.9	106,566,314,000
Internal Transfers	4,586,000,000	4,586,000,000	4,586,000,000	0.0	5,599,000,000	0.1	2,302,479,000,000	0.1	7,617,000,000
FIP Total	12,196,951,018,000	12,196,951,018,000	12,196,951,018,000		13,520,291,991,000		15,373,324,000,000		16,680,442,000,000
C2 and Reconnaissance	1,126,466,000,000	1,126,466,000,000	1,126,466,000,000	9.2	1,312,508,000,000	9.7	1,292,403,000,000	8.4	1,101,881,000,000
Maneuver and Firepower	2,279,978,000,000	2,279,978,000,000	2,279,978,000,000	18.7	2,378,988,000,000	17.6	2,175,376,000,000	14.2	1,803,222,000,000
Naval	1,912,460,000,000	1,912,460,000,000	1,912,460,000,000	15.7	2,172,753,000,000	16.1	2,258,944,000,000	14.7	2,833,921,000,000
Aircraft	2,907,651,000,000	2,907,651,000,000	2,907,651,000,000	23.8	3,449,747,000,000	25.5	5,217,819,000,000	33.9	6,328,661,000,000
Guided Weapons	2,408,169,000,000	2,408,169,000,000	2,408,169,000,000	19.7	2,556,196,000,000	18.9	2,699,601,000,000	17.6	2,591,688,000,000
Policy Support	1,444,356,000,000	1,444,356,000,000	1,444,356,000,000	11.8	1,534,035,000,000	11.3	1,605,409,000,000	10.4	1,855,895,000,000
Administration Support	109,909,018,000	109,909,018,000	109,909,018,000	0.9	108,289,991,000	0.8	115,562,000,000	0.8	156,631,000,000
Internal Transfers	7,962,000,000	7,962,000,000	7,962,000,000	0.1	7,775,000,000	0.1	8,210,000,000	0.1	8,543,000,000

Sources: Data is adapted from the National Assembly's "Jeongbuisongjeongbo"
 [□ □ □ □ □ □ ; Government Transfer Report] that is generated after each annual budget
 is approved (see Appendix A for each year's detailed source information).

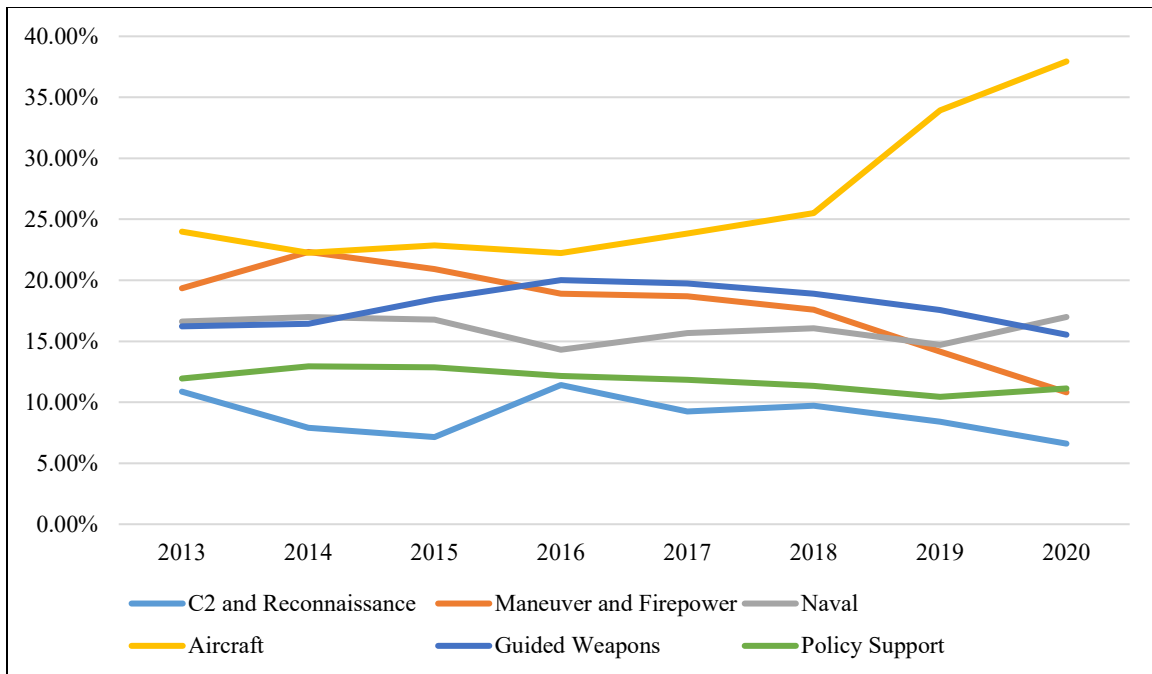


Figure 4. Distribution of FIP Spending Across Program Categories, 2013-2020

Sources: Data is adapted from the National Assembly’s “Jeongbuisongjeongbo” [정부이송정보; Government Transfer Report] that is generated after each annual budget is approved (see Appendix A for each year’s detailed source information).

The specific programs in the category of maneuver and firepower are primarily weapons and systems employed by the ROK Army, to include tanks, several types of vehicles, and artillery (see Appendix A, lines 443 through 530). The increased funding for aircraft programs in conjunction with the decreased funding for maneuver and firepower programs is consistent with the Moon administration’s policy objective of creating a more balanced or joint military force. However, it is important to note that the aircraft programs category includes several platforms employed by the ROK Army, to include continued production of the Korea Utility Helicopter (line 602) and research and development of a small armed helicopter (line 585). Additionally, there are several

munitions programs in the guided weapons category that are used by the ROK Army and continue to receive significant funding, such as the anti-tank Medium-range Infantry Missile (line 711), upgrades to *Cheolmae-II* Surface-to-Air missile systems (lines 682, 713), and upgrades for Patriot systems along with more capable Patriot interceptor munitions (lines 718, 724, 725). Therefore, it would be an oversimplification to simply state that the ROK government is improving the ROK Air Force at the expense of the ROK Army on the basis of the trends of increased funding for aircraft programs and decreased funding for maneuver and firepower programs. Nonetheless, the increased emphasis on funding aircraft programs in conjunction with the declining emphasis on funding maneuver and firepower programs is consistent with the objective of building a more balanced military force.

Spending on Research and Development

The ROK MND's rhetorical emphasis on research and development, discussed above as part of the stated defense budget priorities, can also be correlated to specific programs within the defense budget. The MND's press release regarding the approval of the 2020 defense budget identified "Pioneering defense technologies and leading changes on the battlefield of the future" as one of the priorities for the FIP budget, pointing to dramatic increases in funding for the specific programs of Core Technology Development (see Appendix A, line 729) and Research Infrastructure Improvements at the Agency for Defense Development (line 739) as instances of budgetary support to that

priority.²⁶⁴ However, those are only two specific programs selected from a much wider portfolio of research and development projects. The budget requests submitted by the administration to the National Assembly in the *Seipsechuryesansaeopbyeol* *Seolmyeongseo* [세입세출예산안사업별 설명서; Explanation of Tax Revenue and Tax Expenditure Budget Programs] sub-categorizes each project within the major categories of programs listed above in table 5 as being in a state of research and development, a state of production and procurement, or a foreign military sale acquisition (that taxonomy is not applied to programs that fall under the categories of defense program administrative support or internal government transfers). Table 6 shows the amounts budgeted towards research and development within each of these major categories and the overall percentage of FIP spending that has gone towards research and development in each year.

²⁶⁴ ROK MND, “2020 Nyeon Gukbangyesan, Jeongbuangwa Dongilhan 50 Jo 1,527 Eogwoneuro Hwakjeong” [2020 년 국방예산, 정부안과 동일한 50 조 1,527 억원으로 확정; 2020 Defense Budget, Confirmed at 50.1527 Trillion Won, Same as the Administration’s Plan] December 10, 2019, 6,

Table 6. Distribution of FIP Spending Towards R&D, 2013-2020 (₩)									
	2013	2014	2015	2016	2017	2018	2019	2020	
FIP Total	10,116,302,575,000	10,509,652,959,000	11,013,962,508,000	11,639,809,314,000	12,196,951,018,000	13,520,291,991,000	15,373,324,000,000	16,680,442,000,000	
C2 and Reconnaissance (R&D)	401,577,000,000	373,593,395,000	255,336,000,000	297,008,000,000	277,119,000,000	294,609,000,000	445,748,000,000	487,238,000,000	
C2 and Reconnaissance (Production and Procurement)	697,577,000,000	456,269,753,000	532,929,000,000	1,031,356,000,000	849,347,000,000	1,017,899,000,000	846,655,000,000	614,643,000,000	
Maneuver and Firepower (R&D)	53,137,000,000	17,867,735,000	39,449,000,000	41,846,000,000	39,694,000,000	60,469,000,000	58,511,000,000	63,857,000,000	
Maneuver and Firepower (Production and Procurement)	1,902,864,000,000	2,328,382,600,000	2,263,030,000,000	2,157,358,000,000	2,240,284,000,000	2,318,519,000,000	2,116,865,000,000	1,739,365,000,000	
Naval (R&D)	53,812,000,000	52,105,430,000	67,196,000,000	104,689,000,000	143,966,000,000	173,736,000,000	161,249,000,000	215,021,000,000	
Naval (Production and Procurement)	1,627,704,000,000	1,732,413,830,000	1,778,830,000,000	1,560,510,000,000	1,768,494,000,000	1,999,017,000,000	2,097,695,000,000	2,618,900,000,000	
Aircraft (R&D)	138,875,000,000	28,535,646,000	124,339,000,000	150,534,000,000	406,581,000,000	560,804,000,000	784,461,000,000	1,147,442,000,000	
Aircraft (Production and Procurement)	2,288,444,000,000	2,311,804,640,000	2,392,894,000,000	2,437,067,000,000	2,501,070,000,000	2,888,943,000,000	4,433,358,000,000	5,181,219,000,000	
Guided Weapons (R&D)	610,676,000,000	533,636,739,000	572,312,000,000	583,710,000,000	511,998,000,000	397,087,000,000	237,280,000,000	397,049,000,000	
Guided Weapons (Production and Procurement)	1,029,819,000,000	1,192,384,444,000	1,461,392,000,000	1,745,729,000,000	1,896,171,000,000	2,159,109,000,000	2,462,321,000,000	2,194,639,000,000	
Defense Technology Development (R&D)	689,295,000,000	830,960,000,000	834,529,000,000	815,159,000,000	829,590,000,000	910,783,000,000	945,415,000,000	1,009,229,000,000	
Agency for Defense Development (R&D)	384,078,000,000	384,868,000,000	424,523,000,000	446,579,000,000	452,506,000,000	458,070,000,000	459,581,000,000	538,580,000,000	
Defense Agency for Technology and Quality (R&D)	106,980,000,000	112,152,000,000	117,832,000,000	115,908,000,000	122,314,000,000	127,430,000,000	136,228,000,000	154,783,000,000	
Other Defense Program Policy Support	29,038,000,000	32,414,000,000	40,517,000,000	38,173,000,000	39,946,000,000	37,752,000,000	64,185,000,000	153,303,000,000	
Defense Program Administration Support	97,840,575,000	116,665,747,000	102,641,508,000	106,566,314,000	109,909,018,000	108,289,991,000	115,562,000,000	156,631,000,000	
Internal Government Transfers	4,586,000,000	5,599,000,000	6,213,000,000	7,617,000,000	7,962,000,000	7,775,000,000	8,210,000,000	8,543,000,000	
Total R&D Spending	2,438,430,000,000	2,333,718,945,000	2,435,516,000,000	2,555,433,000,000	2,783,768,000,000	2,982,988,000,000	3,228,473,000,000	4,013,199,000,000	
Total Non-R&D Spending	7,677,872,575,000	8,175,934,014,000	8,578,446,508,000	9,084,376,314,000	9,413,183,018,000	10,537,303,991,000	12,144,851,000,000	12,667,243,000,000	
Percentage of FIP Spent on R&D	24.10	22.21	22.11	21.95	22.82	22.06	21.00	24.06	

Sources: Data is adapted from the *Seipsechuryesansaeopbyeol Seolmyeongseo* [세입세출예산안사업별 설명서; Explanation of Tax Revenue and Tax Expenditure Budget Programs] submitted by the ROK government to the National Assembly and the National Assembly's *Yesanane Daehan Sujeongan* [예산안에 대한 수정안; Amendment Regarding the Planned Budget] that details modifications made by the National Assembly to the government's budget request (see Appendix A for each year's detailed source information). Foreign Military Sales programs are included in the totals listed for Production and Procurement programs.

The data in table 6 shows that total research and development spending composed around 22 percent of FIP spending from 2014 to 2017 and maintained that level in the first defense budget prepared by President Moon's administration, the 2018 defense budget. The share of FIP spending allocated to research and development projects dropped slightly in the 2019 budget to 21 percent but then jumped to over 24 percent in the 2020 budget, the highest percentage since 2013. The summation of all research and development programs as identified in the defense budget does indicate an increased emphasis on funding research and development programs relative to other programs focused on production and procurement or administration.

A more nuanced view of the MND's funding of research and development programs emerges from a review of the specific research and development programs that have received increased funding, however. The largest research and development program in recent years has been the KF-X *Boramae* aircraft, which the government first funded in the 2014 budget and has subsequently grown to over one trillion won in the 2020 budget (see Appendix A, line 586). The program aims to develop a fighter aircraft indigenously produced in South Korea, and its significant budget buoys the figures on

overall research and development spending.²⁶⁵ Table 7 shows what the composition of the FIP budget would be if the KF-X program were excluded from the tabulations of research and development spending. When the KF-X program is removed from the calculations, the portion of FIP spending going to research and development programs is actually lower for the defense budgets prepared under President Moon's administration than the previous period of defense budgets from 2013 to 2017. Whereas roughly 21 percent to 22 percent of FIP spending went to research and development programs in 2014 to 2017 when KF-X is excluded, that figure has dropped to 19.5 percent, 17.4 percent, and 19 percent for the defense budgets in 2018, 2019, and 2020, respectively. The rise in research and development spending to over 24 percent of FIP spending in the 2020 budget is largely attributable to a single program, the KF-X, and the exclusion of that program from the figures is significant enough to negate the rise in research and development spending completely.

²⁶⁵ "KF-X Fighter: Korea's Future Homegrown Jet," *Defense Industry Daily*, December 10, 2019, <https://www.defenseindustrydaily.com/kf-x-paper-pushing-or-peer-fighter-program-010647>.

Table 7. Distribution of FIP Spending Towards R&D (Excluding KF-X), 2013-2020 (₩)									
	2013	2014	2015	2016	2017	2018	2019	2020	
FIP Total (Without KF-X)	10,116,302,575,000	10,489,652,959,000	10,958,762,508,000	11,572,809,314,000	11,893,951,018,000	13,084,929,991,000	14,709,133,000,000	15,640,187,000,000	
C2 and Reconnaissance (R&D)	401,577,000,000	373,593,395,000	255,336,000,000	297,008,000,000	277,119,000,000	294,609,000,000	445,748,000,000	487,238,000,000	
C2 and Reconnaissance (Production and Procurement)	697,577,000,000	456,269,753,000	532,929,000,000	1,031,356,000,000	849,347,000,000	1,017,899,000,000	846,655,000,000	614,643,000,000	
Maneuver and Firepower (R&D)	53,137,000,000	17,867,735,000	39,449,000,000	41,846,000,000	39,694,000,000	60,469,000,000	58,511,000,000	63,857,000,000	
Maneuver and Firepower (Production and Procurement)	1,902,864,000,000	2,328,382,600,000	2,263,030,000,000	2,157,358,000,000	2,240,284,000,000	2,318,519,000,000	2,116,865,000,000	1,739,365,000,000	
Naval (R&D)	53,812,000,000	52,105,430,000	67,196,000,000	104,689,000,000	143,966,000,000	173,736,000,000	161,249,000,000	215,021,000,000	
Naval (Production and Procurement)	1,627,704,000,000	1,732,413,830,000	1,778,830,000,000	1,560,510,000,000	1,768,494,000,000	1,999,017,000,000	2,097,695,000,000	2,618,900,000,000	
Aircraft (R&D)	138,875,000,000	28,535,646,000	124,339,000,000	150,534,000,000	406,581,000,000	560,804,000,000	784,461,000,000	1,147,442,000,000	
Aircraft (Production and Procurement)	2,288,444,000,000	2,311,804,640,000	2,392,894,000,000	2,437,067,000,000	2,501,070,000,000	2,888,943,000,000	4,433,358,000,000	5,181,219,000,000	
Guided Weapons (R&D)	610,676,000,000	533,636,739,000	572,312,000,000	583,710,000,000	511,998,000,000	397,087,000,000	237,280,000,000	397,049,000,000	
Guided Weapons (Production and Procurement)	1,029,819,000,000	1,192,384,444,000	1,461,392,000,000	1,745,729,000,000	1,896,171,000,000	2,159,109,000,000	2,462,321,000,000	2,194,639,000,000	
Defense Technology Development (R&D)	689,295,000,000	830,960,000,000	834,529,000,000	815,159,000,000	829,590,000,000	910,783,000,000	945,415,000,000	1,009,229,000,000	
Agency for Defense Development (R&D)	384,078,000,000	384,868,000,000	424,523,000,000	446,579,000,000	452,506,000,000	458,070,000,000	459,581,000,000	538,580,000,000	
Defense Agency for Technology and Quality (R&D)	106,980,000,000	112,152,000,000	117,832,000,000	115,908,000,000	122,314,000,000	127,430,000,000	136,228,000,000	154,783,000,000	
Other Defense Program Policy Support	29,038,000,000	32,414,000,000	40,517,000,000	38,173,000,000	39,946,000,000	37,752,000,000	64,185,000,000	153,303,000,000	
Defense Program Administration Support	97,840,575,000	116,665,747,000	102,641,508,000	106,566,314,000	109,909,018,000	108,289,991,000	115,562,000,000	156,631,000,000	
Internal Government Transfers	4,586,000,000	5,599,000,000	6,213,000,000	7,617,000,000	7,962,000,000	7,775,000,000	8,210,000,000	8,543,000,000	
Total R&D Spending	2,438,430,000,000	2,313,718,945,000	2,380,316,000,000	2,488,433,000,000	2,480,768,000,000	2,547,626,000,000	2,564,282,000,000	2,972,944,000,000	
Total Non-R&D Spending	7,677,872,575,000	8,175,934,014,000	8,578,446,508,000	9,084,376,314,000	9,413,183,018,000	10,537,303,991,000	12,144,851,000,000	12,667,243,000,000	
Percentage of FIP Spent on R&D	24.10	22.06	21.72	21.50	20.86	19.47	17.43	19.01	

Sources: Data is adapted from the *Seipsechuryesansaeopbyeol Seolmyeongseo* [세입세출예산안사업별 설명서; Explanation of Tax Revenue and Tax Expenditure Budget Programs] submitted by the ROK government to the National Assembly and the National Assembly's *Yesanane Daehan Sujeongan* [예산안에 대한 수정안; Amendment Regarding the Planned Budget] that details modifications made by the National Assembly to the government's budget request (see Appendix A for each year's detailed source information). Foreign Military Sales programs are included in the totals listed for Production and Procurement programs.

Although the aggregate level of funding for research and development programs may not reveal an increased emphasis on “pioneering defense technologies,” individual research and development programs might eventually result in dramatic improvements to the ROK military's combat effectiveness. The Core Technology Development program (see Appendix A, line 729) that the MND highlighted in the 2020 defense budget press release is one possible example, as it focuses on developing unmanned systems, robots, artificial intelligence, and other so-called “4th Industrial Revolution” technologies for incorporation into future acquisition programs.²⁶⁶ There are also research and development programs with relatively small budgets, such as the Unmanned Ground Surveillance Sensor (line 342), that might have a significant role in mitigating the manpower reduction within the ROK military by alleviating some of the requirements for large numbers of troops, and in that respect those programs could be transformational. Individual research and development programs may have the effect of “pioneering defense technologies” without significantly altering the aggregate share of FIP spending going towards research and development programs.

²⁶⁶ ROK MND, *2018 Defense White Paper*, 273.

International Engagement

ROK strategic policy documents have emphasized the importance of engaging with international partners to address security concerns. Within the O&M portion of the defense budget, there are multiple programs associated with international engagement activities: international military education (see Appendix A, line 117), multinational deployments and defense cooperative exchanges (line 300), peacekeeping operations deployments (line 301), and military attaché activities (line 303). Additionally, the program for operational conditions exercises (line 142) contains sub-programs for military exercises conducted both within South Korea and overseas combined exercises, although budget documents usually do not specify the funding levels for those sub-programs. Changes to the funding levels of these programs relative to the overall defense budget may reveal whether or not the rhetoric of engaging with international partners is associated with increased funding for activities that involve such engagement.

President Moon's administration inherited a defense budget that for 2017 measured just over 40 trillion won. In the three budgets drafted by the current administration and approved by the National Assembly, the defense budget has grown by a cumulative 24.34 percent and reached over 50 trillion won. In the defense budgets for 2018, 2019, and 2020, the programs for peacekeeping operations and military attaché activities have grown by roughly the same magnitude (see table 8). Over the same period of time, however, funding for the international military education program (which sends ROK service members to military schools in other countries) and the multinational deployments and defense cooperative exchanges program have remained essentially static, only growing by a cumulative 1.66 percent and 0.35 percent respectively.

Data on funding for the sub-program of overseas combined exercises is only available for the 2019 and 2020 budgets, thanks to a summary of overseas military training activities in the ROK National Assembly's *2020 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2020 년도 국방위원회 소관 예산안 예비심사보고; 2020 National Defense Committee Planned Budget Preliminary Review Report].²⁶⁷ According to that report, funding for overseas combined exercises in 2019 had measured ₩6,662,000,000 but the government was proposing to raise funding in 2020 to ₩15,949,000,000 (a 239 percent increase). However, it is difficult to discern if that significant increase to overseas combined exercise funding represents a new emphasis on overseas exercises or if it simply restores funding to a level that had previously existed prior to 2019. Funding for the entire operational conditions exercises program had ranged between ₩23 million and ₩29 million during the period of 2016 to 2018 before sharply dropping in 2019, so the proposed 239 percent increase to the overseas combined exercises sub-program in 2020 may have simply restored funding to its previous level or it may have dramatically increased the sub-program's funding.

²⁶⁷ ROK National Assembly, *2020 Nyeondo Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [2020 년도 국방위원회 소관 예산안 예비심사보고; 2020 National Defense Committee Planned Budget Preliminary Review Report] November 7, 2019, 171-8.

Table 8. Funding for Programs related to International Engagement, 2013-2020 (₩)								
	2013	2014	2015	2016	2017	2018	2019	2020
Defense Budget	34,345,275,036,000	35,705,619,422,000	37,455,990,939,000	38,799,549,371,000	40,334,649,019,000	43,158,119,468,000	46,697,085,000,000	50,152,700,149,000
Cumulative Increase since 2017 (%)					0.00	7.00	15.77	24.34
International Military Education	13,384,000,000	15,828,000,000	14,596,000,000	14,931,000,000	14,709,000,000	14,470,000,000	14,430,000,000	14,953,000,000
Cumulative Increase since 2017 (%)					0.00	-1.62	-1.90	1.66
Multinational Deployments and Defense Cooperative Exchanges	31,094,000,000	54,398,000,000	25,784,000,000	22,531,000,000	23,121,000,000	20,896,000,000	22,611,000,000	23,202,000,000
Cumulative Increase since 2017 (%)					0.00	-9.62	-2.21	0.35
Peacekeeping Operations Deployments	32,593,000,000	32,537,000,000	25,028,000,000	23,860,000,000	21,437,000,000	23,426,000,000	24,043,000,000	26,597,000,000
Cumulative Increase since 2017 (%)					0.00	9.28	12.16	24.07
Military Attaché Activities	10,148,000,000	10,443,000,000	10,888,000,000	11,225,000,000	11,186,000,000	11,808,000,000	12,272,000,000	13,955,000,000
Cumulative Increase since 2017 (%)					0.00	5.56	9.71	24.75

Sources: Data is adapted from the *Seipsechuryesansaeopbyeol Seolmyeongseo* [세입세출예산안사업별 설명서; Explanation of Tax Revenue and Tax Expenditure Budget Programs] submitted by the ROK government to the National Assembly and the National Assembly's *Yesanane Daehan Sujeongan* [예산안에 대한 수정안; Amendment Regarding the Planned Budget] that details modifications made by the National Assembly to the government's budget request (see Appendix A for each year's detailed source information).

While funding increases to the programs for peacekeeping operations and military attaché activities have kept pace with increases to the total defense budget, funding increases for the international military education program and the multinational deployments and defense cooperative exchanges program have not kept pace with increases to the defense budget in spite of the emphasis that strategic policy documents have placed on engagement with international partners. The 239 percent increase to funding for overseas military exercises from 2019 to 2020 seems to reflect an increased emphasis on engaging with international partners, but the lack of funding data for that sub-program in the years prior to 2019 makes it difficult to draw a conclusion on the significance of that 239 percent increase. Of course, budget data provides only a partial picture of the ROK military's efforts to engage with international partners. The biennial Defense White Paper also provides a summary of each service's training and exercises during the applicable two-year period, including the quantity of combined overseas exercises that each service conducted (to include ROK-US exercises and multilateral exercises conducted outside of South Korea). Each service except the Army conducted more of these combined overseas exercises in 2018 than 2017 (see table 9), although the *2018 Defense White Paper* only covers one full year of President Moon's term, making it

difficult to discern broader trends of combined exercise participation under the current administration.

Table 9. Instances of ROK Participation in Overseas Combined Exercises						
	2013	2014	2015	2016	2017	2018
Army	-	-	1	1	2	2
Navy	3	4	4	6	4	5
Air Force	2	2	2	2	2	3
Marine Corps	1	4	4	4	1	3

Sources: Data for exercise participation in 2013 and 2014 is adapted from ROK MND, *2014 Defense White Paper*, 74-76; data for exercise participation in 2015 and 2016 is adapted from ROK MND, *2016 Defense White Paper*, 90-94; data for exercise participation in 2017 and 2018 is adapted from ROK MND, *2018 Defense White Paper*, 101-106. The *2014 Defense White Paper* does not include data for the number of combined exercises conducted by the ROK Army.

While ROK strategic policy documents have emphasized the importance of engaging with international partners, some of the programs within the defense budget that are associated with such engagement have not grown in proportion with total defense spending. Increased international engagement may be occurring by means of activities that are not immediately obvious when reviewing the defense budget, but constrained fiscal resources for programs directly related to international engagement may hamper broader and more comprehensive ROK efforts to engage with the international community as a “middle power” to address its security interests.

Summary

This chapter has surveyed ROK perceptions of the security environment and security strategy objectives as stated in ROK policy rhetoric. The study has also

identified certain trends and features of the defense budgets approved in 2017, 2018, and 2019 that align and, in some cases, do not align with the government's rhetorical security strategy objectives. During the period of 2017 to 2019, the defense budget continued to make up roughly 10 percent of the total government budget, regardless of dynamics in the security environment and the Moon administration's security strategy objectives. Within the composition of the defense budget, however, certain shifts in spending do correlate with the government's policy objectives. Increased funding for aircraft programs and the concurrent reduction of funding for maneuver and firepower programs aligns with the government's objective of building a more balanced military force. Policy objectives of increased international engagement and promoting research and development, however, have not been as clearly supported with increased funding, suggesting a misalignment between ROK policy rhetoric and defense spending. With these findings in mind, in the next chapter the study will draw its final conclusions and recommendations.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of the research presented in this thesis has been to understand the relationship between the significant increases in ROK defense spending from 2017 to 2019 and the ROK government's policy rhetoric during the same period of time, during which there was an apparent reduction of the security threat to the ROK from the DPRK. The previous chapter surveyed the ROK government's characterizations of the security environment and its security strategy objectives in official policy rhetoric, and it then analyzed the alignment between the ROK defense budget and ROK security strategy objectives. Having conducted that analysis, this chapter will provide an answer to the research question that motivated this study and make recommendations that are applicable to U.S. organizations and individuals involved in the maintenance of the ROK-US alliance.

Conclusions

The primary research question underlying this study is: Does the allocation of resources within the ROK defense budget align with the priorities of ROK security and defense policy documents? The analysis presented in this study demonstrates that the priorities of ROK security and defense documents do not influence the overall size of the defense budget, but some security strategy objectives in policy rhetoric do align with aspects of the composition of the ROK defense budgets approved in 2017, 2018, and 2019. Since at least 2005, the defense budget has hovered around 10 percent of the total

government budget regardless of changing dynamics in the security environment or shifting security strategy objectives. Policy rhetoric may argue that uncertainty in the security environment is increasing and that larger defense budgets are required in order to defend South Korea, but the increases to the defense budget from 2017 to 2019 have merely maintained a roughly 10 percent share of government spending.

While changes in the size of the ROK defense budget are not driven by the priorities and objectives of ROK security and defense policy documents, some of the changes within the composition of the ROK defense budget from 2017 to 2019 are aligned with the security strategy objectives of President Moon's administration. Five-year projections of future defense budgets in the MDPs going back to 2008 had forecast increases to the share of the budget allocated to FIP in order to develop and acquire new military capabilities, but those projected increases have only materialized under President Moon's administration as FIP spending has grown to over 33 percent of the defense budget. As the FIP budget has been growing both in absolute terms and in its relation to the total defense budget, a greater portion of the FIP budget has been allocated to aircraft programs while the portion of the FIP budget allocated to maneuver and firepower programs has declined. The increased funding for aircraft programs (principally but not exclusively used by the ROK Air Force) in conjunction with decreased funding for maneuver and firepower programs (principally but not exclusively used by the ROK Army) aligns with the Moon administration's policy objective of building a military that is more balanced across the services.

Trends in defense spending from 2017 to 2019 clearly reflect the current administration's objective of building a more balanced military force, but budget trends

associated with policy objectives of engaging with international partners and promoting research and development are more ambiguous. ROK policy rhetoric heavily emphasizes the importance of research and development, especially insofar as emerging technologies may be able to mitigate the reduced availability of manpower required to fill the ROK military. The percentage of the FIP budget for 2020 that is devoted to research and development programs is higher than any year since 2013, which seems aligned with the rhetorical emphasis that the MND has given to the importance of technology and research and development. However, much of the recent increase in research and development spending is attributable to a single program, the KF-X aircraft. When that one program is excluded from budget calculations, the percentage of the FIP budget going towards research and development programs has actually been smaller under President Moon's administration than the previous administrations going back to at least 2013.

ROK security and defense policy documents stress the importance of engaging with international partners in order to advance the ROK's security interests as a middle power. However, funding for defense budget programs that directly enable engagement with international partners does not uniformly reflect that rhetorical importance. Funding for programs that support peacekeeping operations and military attaché activities has increased at roughly the same rate as the total defense budget from 2017 through 2019, but funding for the international military education program and the multinational deployments and defense cooperative exchanges program has remained essentially static. Funding for overseas combined exercises more than doubled from 2019 to 2020, but the lack of funding information for overseas combined exercises in the years prior to 2019 render it difficult to assess the significance of that funding increase. Security and defense

policy documents highlight the importance of ROK military engagement with international partners in support of the ROK's role as a middle power on the world stage, but some of the budget programs that directly support that objective have not been allocated increased funding.

Recommendations

Three principal recommendations for U.S. organizations involved in the maintenance of the ROK-US alliance follow from the conclusions drawn above regarding the alignment between ROK security strategy objectives and defense spending. The first recommendation is that changes in the size of the ROK defense budget, in and of themselves, should not be interpreted as signals of ROK policy changes, ROK perceptions of the security environment, or ROK commitment towards the ROK-US alliance. If the ROK government continues the practice of spending 10 percent of the total government budget on defense, changes in defense spending will reflect changes in the government's general fiscal policy rather than changes in defense policy. Defense budgets would grow by smaller increments under an administration with a more conservative fiscal policy than the Moon administration. Those smaller increments of increases to the defense budget would be due to smaller growth of total government spending, rather than an indication of that future government assigning less importance to national defense or attempting to free-ride on U.S. security commitments. Similarly, defense budgets would grow by even larger increments under a government with a more expansionary fiscal policy, and those large increases in defense spending would not be indicative of increased ROK concerns about the security environment or ROK efforts to build military capabilities as a hedge against U.S. abandonment. As long as the defense

budget continues to hover around 10 percent of the government's total budget, the size of the defense budget should not be used as a metric for assessing ROK security or defense policies.

The second recommendation is that a re-examination of the U.S. military capabilities stationed on the Korean Peninsula is prudent given the ROK military's fielding of advanced weapons systems as part of its efforts to build a more balanced military force. As the ROK adds new military capabilities that contribute to the combined capabilities of the ROK-US alliance, such as F-35 stealth fighters, AEGIS-equipped destroyers, and indigenously developed air defense systems, the U.S. military should also consider adjusting the capabilities that it is currently stationing in South Korea.

Adjustment of those U.S. forces could potentially further both U.S. interests and ROK-US alliance interests on the Korean Peninsula and across Northeast Asia. ROK and U.S. officials would need to carefully discuss the timing and the substance of any changes to U.S. military capabilities on the Korean Peninsula in order to ensure that those changes are furthering the interests of the ROK-US alliance and to ensure that the change in U.S. capabilities is not perceived, either by the ROK or other regional actors, as a reduction in the U.S. commitment towards the ROK-US alliance.

Finally, the third recommendation of this study is that the United States should actively encourage greater ROK military engagement with like-minded partners throughout the Pacific and globally. President Moon's administration has stated the importance of greater international engagement in its policy rhetoric, and the ROK military has acquired several aviation and maritime platforms suitable for operations away from the Korean Peninsula. Defense budgets for the international military education

program and the multinational deployments and defense cooperative exchanges have not grown accordingly, however. U.S. encouragement of ROK international engagement is not only a matter of U.S. officials working with their ROK counterparts, but also a matter of U.S. engagement with other allies and partners to encourage those allies and partners to pursue greater defense and military cooperation with the ROK. ROK military engagement with like-minded partners, even when conducted in a setting where the U.S. military is not a participant, generally furthers U.S. interests by reinforcing international norms of military behavior, maintaining and strengthening access to the global commons, and promoting interoperability among military partners of both the ROK and the United States.

Other Implications

The analysis presented in this thesis identified that the ROK defense budget has composed roughly 10 percent of the total government budget since at least 2005 regardless of changes in the security environment, changing political administrations, and changing security strategy objectives. However, this analysis has not identified the reasons why that 10 percent figure has been consistent over time despite changing conditions. One possibility may be that liberal ROK politicians, who generally prefer engagement rather than confrontation with the DPRK, choose to maintain defense budgets with similar funding levels as their conservative counterparts in order to maintain the support of the ROK military and defense establishment, essentially co-opting the military by providing it with fiscal resources. Another possibility, perhaps more likely, is that the institutional processes within the ROK that carve out the defense budget from the total government budget are insulated from political pressures and not compelled to

consider security environment dynamics or security strategy objectives. Future research concerned with ROK public policy and budget development could explore why the defense budget has consistently composed 10 percent of the total government budget since at least 2005.

Finally, the conclusions of this study are specific to a particular period of time: from Moon Jae-in's election as the President of the ROK through the end of 2019. A periodic re-examination of ROK security strategy objectives and ROK defense spending could validate whether or not the conclusions drawn in this study remain valid. If the ROK defense budget's share of the total government budget were to deviate significantly from its historical norm of 10 percent, then that may indicate that security environment dynamics and security strategy objectives are influencing defense spending in new ways. Additionally, if the composition of the FIP budget changed so that spending on aircraft programs no longer dwarfed spending on maneuver and firepower programs, then that may indicate that the policy objective of building a military that is balanced across the services is no longer is important (either due to achieving that policy objective or abandoning it). For the foreseeable future, however, those trends appear likely to continue. The 2018 MDP projected that the portion of the defense budget devoted to FIP will continue to rise, reaching 36.5 percent of defense spending in 2023.²⁶⁸ Additionally, projections by both the Ministry of Economy and Finance and the MND indicate that the defense budget will continue to make up approximately 10 percent of the total government budget (see table 10) through at least 2023.

²⁶⁸ ROK MND, *2018 Defense White Paper*, 162.

Table 10. Projections of Future ROK Defense Budgets and Total Government Budgets					
	2019 – 2023 National Fiscal Management Plan Total Budget Projection (Trillion ₩)	2019 – 2023 National Fiscal Management Plan Defense Budget Projection (Trillion ₩ / %)		2018 MDP Defense Budget Projection (Trillion ₩ / %)	
2021	546.8	53.4	9.76	54.1	9.89
2022	575.3	56.4	9.81	57.8	10.05
2023	604.0	59.5	9.85	61.8	10.23

Sources: Data on total budget projections is adapted from ROK Ministry of Economy and Finance, “2019~2023 Nyeon Gukga Jaejeong Unyong Gyehoek” [2019~2023 년 국가재정운용계획; 2019~2023 National Fiscal Management Plan] September 3, 2019, 25, <http://www.korea.kr/common/download.do?tblKey=EDN&fileId=187937114>; data on projected defense budgets in the 2019 – 2023 National Fiscal Management Plan is adapted from ROK Ministry of Economy and Finance, “2019~2023 Nyeon Gukga Jaejeong Unyong Gyehoek” [2019~2023 년 국가재정운용계획; 2019~2023 National Fiscal Management Plan] September 3, 2019, 155; data on the 2018 MDP’s defense budget projection is adapted from ROK MND, *2018 Defense White Paper*, 162.

Every government faces fiscal limitations in terms of allocating finite resources towards a wide variety of national objectives. The manner in which each government expends its financial resources reveals insight into the priorities that are actually important within the state’s institutions. The consistent ratio of ROK defense spending to total government spending during the dynamic period of 2017 to 2019 indicates that changes in the security environment and new policy objectives are significant enough to drive shifts in funding within the composition of the ROK defense budget, but those changing conditions are not significant enough to compel a redistribution of fiscal resources throughout the government’s entire budget.

APPENDIX A

ROK DEFENSE BUDGETS, 2013-2020

This appendix provides data on the approved fiscal appropriation to every program in the ROK defense budget from 2013 to 2020 (see table 11). The author has indexed the program names with numbers in order to facilitate referencing specific programs throughout this study. The data is taken from the *Seipsechuryesanansaeopbyeol Seolmyeongseo* [세입세출예산사업별 설명서; Explanation of Tax Revenue and Tax Expenditure Planned Budget Programs] published annually by the National Assembly and any modifications made by the National Assembly in the annual *Yesanane Daehan Sujeongan* [예산안에 대한 수정안; Amendment Regarding the Planned Budget]. The exact figures for officer, non-commissioned officer, and conscript payroll expenses (lines 8, 9, 10) are taken from the National Assembly's *Gukbangwiwonhoe Sogwan Yesanan Yebisimsabogoseo* [국방위원회 소관 예산안 예비심사보고; National Defense Committee Planned Budget Preliminary Review Report] and any modifications made by the National Assembly in the annual *Yesanane Daehan Sujeongan* [예산안에 대한 수정안; Amendment Regarding the Planned Budget].

In the table below, programs are grouped according to the categories in which they are listed in the 2018, 2019, and 2020 budgets. Prior to 2018, the categories of the FIP budget were structured differently. For programs that had been listed under a previous category that no longer appears in the FIP portion of the budget, the author has listed them in the appropriate category based on the nature of each program and the

categorization of that program or its related programs (follow-on upgrades or subsequent versions) in the budgets published in 2018 and later. Additionally, some programs within the O&M portion of the budget have changed categories over time; those programs are listed in the category to which they are assigned in the 2020 budget.

Lines that depict total funding for a category of programs are sums of subordinate programs. The totals of those sums can be validated against the “Jeongbuisongjeongbo” [정부이송정보; Government Transfer Report] that the National assembly publishes upon the approval of the budget. For all of the years listed except for 2013 and 2014, the sums of the figures in table 10 exactly match the figures in the “Jeongbuisongjeongbo” [정부이송정보; Government Transfer Report] and the figures in the MND’s press releases regarding the approved budget. For 2013, in the total O&M category (line 36) there is a discrepancy of ₩500,000 between the figure given in the Government Transfer Report and the summation of all O&M programs. The figure in line 36 for 2013 is the figure from the Government Transfer Report. Similarly, for 2014 in the Food Service and Clothing category (line 19) there is a discrepancy of ₩457,000 between the figure given in the Government Transfer Report and the summation of programs in that category. The figure in line 19 for 2014 is the figure from the Government Transfer Report. Given the small size of these discrepancies (both less than \$500 in U.S. currency) they do not affect the analysis presented in this study.

Table 11. ROK Defense Budgets, 2013-2020 (₩)										
	2013	2014	2015	2016	2017	2018	2019	2020		
1	Total Defense Budget (Lines 2 + 3)									
	34,345,275,036,000	35,705,619,422,000	37,455,990,939,000	38,799,549,371,000	40,334,649,019,000	43,158,119,468,000	46,697,085,000,000	50,152,700,149,000		
2	Force Operating Costs Budget (O&M) (Lines 4 + 36)									
	24,228,972,461,000	25,195,966,463,000	26,442,028,431,000	27,159,740,057,000	28,137,698,001,000	29,637,827,477,000	31,323,761,000,000	33,472,258,149,000		
3	Force Enhancement Budget (FEP) (Line 335)									
	10,116,302,575,000	10,509,652,959,000	11,013,962,508,000	11,639,809,314,000	12,196,951,018,000	13,520,291,991,000	15,373,324,000,000	16,680,442,000,000		
4	Troops Operating Costs (Lines 5 + 19 + 30)									
	14,271,777,501,000	14,840,832,652,000	15,581,074,234,000	16,406,729,418,000	17,146,447,870,000	18,400,849,476,000	18,775,842,000,000	19,860,001,000,000		
5	Payroll Policy (Lines 6 through 18)									
	9,986,554,501,000	10,358,699,652,000	11,028,243,234,000	11,679,364,418,000	12,264,945,870,000	13,393,776,476,000	13,645,907,000,000	14,590,554,000,000		
6	Servicemember Payroll Costs									
7	Payroll Costs (Lines 8 through 10)									
	8,297,640,000,000	8,636,703,423,000	9,244,511,737,000	9,806,406,000,000	10,327,349,000,000	11,403,700,000,000	11,497,907,000,000	12,249,977,000,000		
8	Officer Payroll Costs									
	3,665,567,000,000	3,741,457,000,000	3,896,726,000,000	4,065,512,000,000	4,209,234,000,000	4,301,320,000,000	4,327,136,000,000	4,435,633,000,000		
9	NCO Payroll Costs									
	4,005,298,000,000	4,189,064,000,000	4,524,419,000,000	4,767,235,000,000	5,070,910,000,000	5,286,240,000,000	5,478,808,000,000	5,717,865,000,000		
10	Conscript Payroll Costs									
	626,775,000,000	706,182,000,000	823,367,000,000	973,659,000,000	1,047,205,000,000	1,816,140,000,000	1,691,963,000,000	2,096,479,000,000		
11	Military Civilian Payroll Costs									
12	Payroll Costs									
	1,104,762,000,000	1,111,933,144,000	1,472,731,275,000	1,549,146,000,000	1,604,604,000,000	1,641,300,000,000	1,780,591,000,000	1,943,237,000,000		
13	Civil Servant Payroll Costs									
14	Payroll Costs									
	49,231,501,000	49,963,611,000	51,449,222,000	54,746,418,000	54,509,870,000	58,318,476,000	61,403,000,000	65,276,000,000		
15	Reserve Forces Payroll Costs									
16	Payroll Costs									
	301,129,000,000	315,982,474,000	-	-	-	-	-	-		
17	Health Insurance Contribution Costs									
18	Health Insurance Contribution Costs									
	233,792,000,000	244,117,000,000	259,551,000,000	269,066,000,000	278,483,000,000	290,458,000,000	306,006,000,000	332,064,000,000		
19	Food Service and Clothing (Lines 20 through 29)									
	1,873,789,000,000	1,969,443,457,000	2,050,095,000,000	2,135,082,000,000	2,165,969,000,000	2,189,219,000,000	2,189,409,000,000	2,248,156,000,000		
20	Food Service Costs									
21	Basic Food Service									
	1,275,855,000,000	1,348,394,000,000	1,395,568,000,000	1,451,880,000,000	1,467,570,000,000	1,497,380,000,000	1,453,064,000,000	1,432,499,000,000		
22	Special Meals									
	98,930,000,000	103,500,000,000	103,150,000,000	103,868,000,000	107,428,000,000	109,417,000,000	117,634,000,000	127,708,000,000		
23	Special Rations									
	21,585,000,000	23,345,000,000	24,106,000,000	23,924,000,000	23,218,000,000	23,218,000,000	22,057,000,000	22,588,000,000		
24	Military Education Student Meal Service									
	3,393,000,000	-	-	-	-	-	-	-		
25	Private Culinary Management									
	23,399,000,000	23,494,000,000	26,355,000,000	29,740,000,000	33,750,000,000	42,227,000,000	50,958,000,000	57,638,000,000		
26	Clothing Expenses									
27	Basic Clothing									
	301,132,000,000	37,508,000,000	335,954,000,000	356,623,000,000	366,667,000,000	339,786,000,000	350,667,000,000	367,828,000,000		
28	Special Clothing									
	122,261,000,000	325,230,000,000	135,515,000,000	139,003,000,000	134,427,000,000	140,778,000,000	153,730,000,000	190,392,000,000		
29	Individual Equipment									
	27,234,000,000	107,972,000,000	29,447,000,000	30,044,000,000	32,909,000,000	36,413,000,000	41,299,000,000	49,503,000,000		
30	Transactions between Accounting Funds (Transfers) (Lines 31 through 35)									
	2,411,434,000,000	2,512,690,000,000	2,502,736,000,000	2,592,283,000,000	2,715,533,000,000	2,817,854,000,000	2,940,526,000,000	3,021,291,000,000		

		2013	2014	2015	2016	2017	2018	2019	2020
31	Transfers between Accounting Funds (Regular Accounts)								
32	Service member Pension Contribution Costs	2,278,052,000,000	2,329,600,000,000	2,332,718,000,000	2,399,310,000,000	2,504,619,000,000	2,607,643,000,000	2,727,770,000,000	2,782,574,000,000
33	Civil Service Pension Contribution Costs	99,593,000,000	102,000,000,000	106,918,000,000	127,914,000,000	136,112,000,000	210,211,000,000	212,756,000,000	238,717,000,000
34	Civil Service Pension Fund Transfers (Severance Pay)	33,773,000,000	81,073,000,000	63,075,000,000	65,037,000,000	74,778,000,000	-	-	-
35	Civil Service Pension Fund Transfers (Scholarship Loans)	16,000,000	17,000,000	25,000,000	22,000,000	24,000,000	-	-	-
36	Operations & Maintenance (Lines 37 + 47 + 62 + 109 + 153 + 195 + 205 + 288 + 310 + 332)	9,957,194,960,000	10,355,133,354,000	10,860,954,197,000	10,753,010,639,000	10,991,250,131,000	11,236,978,001,000	12,547,919,000,000	13,612,257,149,000
37	Defense Information/IT (Lines 38 through 46)	506,997,000,000	516,499,965,000	540,142,000,000	525,255,000,000	471,694,000,000	451,876,000,000	502,729,000,000	564,049,000,000
38	Information Communications Systems Operations								
39	Information Communications Foundational System Establishment Information/IT	211,385,000,000	238,764,000,000	223,121,000,000	209,161,000,000	171,956,000,000	167,355,000,000	183,670,000,000	213,513,000,000
40	Information Systems Development Maintenance (Information/IT)	50,612,000,000	52,809,000,000	74,965,000,000	72,440,000,000	67,713,000,000	67,170,000,000	84,659,000,000	109,043,000,000
41	Information Communications Operations Support (Information/IT)	40,445,000,000	41,299,000,000	16,383,000,000	16,967,000,000	18,193,000,000	17,958,000,000	14,505,000,000	14,832,000,000
42	Communications Charges (Information/IT)	120,401,000,000	107,311,875,000	101,086,000,000	96,194,000,000	92,616,000,000	89,634,000,000	89,004,000,000	94,171,000,000
43	Communications Facilities (Information/IT)	34,468,000,000	35,749,000,000	37,079,000,000	39,215,000,000	47,639,000,000	34,228,000,000	39,533,000,000	38,091,000,000
44	Defense Integrated Information Management Center Establishment Information/IT	12,361,000,000	4,078,000,000	12,700,000,000	11,956,000,000	-	-	-	-
45	Information Security (Information/IT)	-	-	38,308,000,000	43,223,000,000	37,878,000,000	39,738,000,000	55,565,000,000	71,865,000,000
46	Defense Broadband Combined Network (BTL) Government Payments Information/IT	37,325,000,000	36,489,090,000	36,500,000,000	36,099,000,000	35,699,000,000	35,793,000,000	35,793,000,000	22,534,000,000
47	Military Personnel Health and Welfare Improvement (Lines 48 through 61)	249,170,000,000	268,840,000,000	297,889,000,000	311,753,000,000	316,880,000,000	336,388,000,000	371,123,000,000	412,523,000,000
48	Military Medicine								
49	Treatment Support	43,069,000,000	47,963,000,000	50,621,000,000	52,399,000,000	59,659,000,000	71,459,000,000	97,322,000,000	101,471,000,000
50	Medical Equipment Acquisition	49,636,000,000	33,523,000,000	28,275,000,000	21,016,000,000	28,584,000,000	29,587,000,000	32,362,000,000	38,827,000,000
51	Medical Equipment Repair	5,003,000,000	5,581,000,000	5,279,000,000	5,279,000,000	5,290,000,000	4,936,000,000	5,162,000,000	4,897,000,000
52	Medical Supplies Procurement	81,051,000,000	83,274,000,000	102,984,000,000	107,070,000,000	102,582,000,000	100,989,000,000	96,465,000,000	111,874,000,000
53	Medical Facilities Improvement	7,108,000,000	12,076,000,000	8,231,000,000	10,727,000,000	6,697,000,000	9,473,000,000	16,432,000,000	24,622,000,000
54	Military Personnel Travel Expenses								
55	Military Personnel Travel Expenses	57,963,000,000	58,613,000,000	64,213,000,000	66,241,000,000	66,715,000,000	64,505,000,000	60,999,000,000	64,368,000,000
56	Occupation Transition Support								
57	Occupation Transition Support Education	5,340,000,000	5,890,000,000	3,205,000,000	3,730,000,000	-	-	-	-
58	Military Personnel Welfare Support								
59	Disability Compensation	-	6,995,000,000	12,573,000,000	12,017,000,000	12,219,000,000	13,023,000,000	13,725,000,000	14,177,000,000
60	Military Daycare Center Operations Support	-	14,925,000,000	22,508,000,000	33,274,000,000	35,134,000,000	37,807,000,000	41,440,000,000	45,276,000,000

				2013	2014	2015	2016	2017	2018	2019	2020
61		Health and Welfare Support			-	-	-	-	4,609,000,000	7,216,000,000	7,011,000,000
62		Military Supply Support and Cooperation (Lines 63 through 108)		4,233,043,000,000	4,522,691,881,000	4,737,666,000,000	4,603,183,000,000	4,672,261,000,000	4,935,625,000,000	5,331,124,000,000	5,735,332,000,000
63		Equipment Acquisition									
64		Maneuver Equipment (Acquisition)		182,114,000,000	186,465,000,000	186,032,000,000	174,894,000,000	145,987,000,000	175,433,000,000	210,997,000,000	237,845,000,000
65		Firepower Equipment (Acquisition)		8,510,000,000	9,985,549,000	11,628,000,000	11,505,000,000	15,134,000,000	12,064,000,000	21,647,000,000	41,591,000,000
66		Aircraft Equipment (Acquisition)		46,062,000,000	30,216,000,000	40,261,000,000	52,609,000,000	41,154,000,000	26,694,000,000	35,833,000,000	39,571,000,000
67		Maritime Equipment (Acquisition)		34,477,000,000	34,453,000,000	49,262,000,000	47,276,000,000	48,637,000,000	56,201,000,000	60,742,000,000	42,297,000,000
68		Communications Electronics Equipment (Acquisition)		46,887,000,000	40,876,113,000	42,793,000,000	47,363,000,000	38,992,000,000	42,216,000,000	52,859,000,000	67,080,000,000
69		General Equipment (Acquisition)		44,779,000,000	51,186,000,000	47,973,000,000	49,469,000,000	65,467,000,000	67,734,000,000	80,319,000,000	51,874,000,000
70		Specialized Equipment (Acquisition)		233,000,000	76,279,000	332,000,000	26,000,000	4,712,000,000	5,340,000,000	354,000,000	3,944,000,000
71		Precision Measurement Equipment (Acquisition)		5,279,000,000	5,362,684,000	5,200,000,000	4,798,000,000	6,316,000,000	6,588,000,000	8,154,000,000	7,619,000,000
72		Maintenance Equipment and Fielding Support Costs (Acquisition)		11,481,000,000	14,233,000,000	13,539,000,000	14,253,000,000	19,953,000,000	20,459,000,000	22,719,000,000	30,468,000,000
73		Supplies Acquisition									
74		Military Engineer Supplies		24,348,000,000	25,316,000,000	27,001,000,000	26,514,000,000	29,700,000,000	30,962,000,000	32,583,000,000	39,479,000,000
75		Logistics Supplies		115,063,000,000	126,421,000,000	132,806,000,000	131,971,000,000	173,538,000,000	142,984,000,000	199,640,000,000	183,916,000,000
76		Communications Supplies		26,138,000,000	25,635,000,000	25,641,000,000	26,004,000,000	30,278,000,000	26,777,000,000	26,156,000,000	26,218,000,000
77		Chemical Supplies		11,884,000,000	12,513,000,000	10,704,000,000	11,315,000,000	12,135,000,000	9,564,000,000	9,857,000,000	9,753,000,000
78		Supplies Maintenance		15,709,000,000	12,210,891,000	18,446,000,000	22,045,000,000	24,930,000,000	32,127,000,000	33,994,000,000	44,382,000,000
79		Equipment Maintenance									
80		Maneuver Equipment (Maintenance)		539,221,000,000	597,376,000,000	645,903,000,000	676,021,000,000	671,134,000,000	750,464,000,000	807,476,000,000	861,264,000,000
81		Firepower Equipment (Maintenance)		85,980,000,000	92,053,000,000	99,204,000,000	101,203,000,000	122,631,000,000	136,785,000,000	136,660,000,000	152,304,000,000
82		Aircraft Equipment (Maintenance)		863,746,000,000	921,989,000,000	935,135,000,000	1,034,146,000,000	1,094,492,000,000	1,199,664,000,000	1,237,147,000,000	1,410,641,000,000
83		Maritime Equipment (Maintenance)		234,689,000,000	281,500,000,000	322,569,000,000	358,965,000,000	380,643,000,000	366,213,000,000	378,054,000,000	433,084,000,000
84		Communications Electronics Equipment (Maintenance)		160,781,000,000	173,856,000,000	172,453,000,000	176,821,000,000	184,353,000,000	192,669,000,000	183,989,000,000	190,565,000,000
85		General Equipment (Maintenance)		50,412,000,000	51,748,000,000	52,476,000,000	52,541,000,000	57,267,000,000	58,458,000,000	64,400,000,000	57,684,000,000
86		Specialized Equipment (Maintenance)		189,437,000,000	201,981,000,000	231,599,000,000	253,019,000,000	248,388,000,000	260,233,000,000	271,938,000,000	299,712,000,000
87		Precision Measurement Equipment (Maintenance)		3,167,000,000	2,660,000,000	2,274,000,000	2,531,000,000	2,521,000,000	2,302,000,000	2,409,000,000	2,239,000,000
88		Information Systems (Maintenance)		40,655,000,000	18,605,000,000	22,478,000,000	32,342,000,000	54,932,000,000	60,126,000,000	60,647,000,000	61,964,000,000
89		Fuel Procurement									
90		Cooking Fuel		40,802,000,000	41,377,426,000	39,166,000,000	26,948,000,000	23,874,000,000	21,202,000,000	20,226,000,000	22,800,000,000
91		Heating Fuel		208,006,000,000	223,596,000,000	224,811,000,000	156,564,000,000	149,570,000,000	149,522,000,000	160,976,000,000	176,163,000,000

			2013	2014	2015	2016	2017	2018	2019	2020
92		Equipment Fuel	750,752,000,000	807,166,000,000	817,832,000,000	537,045,000,000	426,776,000,000	480,051,000,000	560,861,000,000	582,217,000,000
93		Packing Containers and Other	4,608,000,000	5,138,939,000	5,076,000,000	5,181,000,000	5,571,000,000	5,072,000,000	6,064,000,000	4,999,000,000
94		Transportation Activities								
95		Transportation Activities	85,493,000,000	95,653,000,000	102,418,000,000	103,650,000,000	105,114,000,000	119,364,000,000	126,924,000,000	127,273,000,000
96		Disaster and Safety Management								
97		Disaster and Safety Management	6,589,000,000	6,589,000,000	7,391,000,000	10,571,000,000	14,047,000,000	16,932,000,000	18,584,000,000	23,236,000,000
98		Training Munitions								
99		Ground Training Munitions	222,058,000,000	228,085,000,000	233,660,000,000	231,584,000,000	235,713,000,000	210,967,000,000	191,571,000,000	178,989,000,000
100		Naval Gun Training Munitions	26,474,000,000	29,796,000,000	42,444,000,000	45,376,000,000	53,228,000,000	58,162,000,000	62,469,000,000	73,049,000,000
101		Aircraft Training Munitions	68,417,000,000	81,363,000,000	81,019,000,000	90,087,000,000	91,786,000,000	88,939,000,000	113,039,000,000	106,275,000,000
102		Other Training Munitions	905,000,000	905,000,000	924,000,000	927,000,000	1,026,000,000	995,000,000	1,035,000,000	1,067,000,000
103		Munitions Management								
104		Munitions Maintenance	68,673,000,000	75,373,000,000	75,790,000,000	76,480,000,000	80,407,000,000	75,913,000,000	101,890,000,000	113,671,000,000
105		Demilitarization	9,214,000,000	10,932,000,000	11,426,000,000	11,139,000,000	11,855,000,000	14,477,000,000	14,154,000,000	13,995,000,000
106		Military Supply Policy Support								
107		Military Supply Policy Support	-	-	-	-	-	8,413,000,000	9,891,000,000	11,222,000,000
108		Civil-Military Technology Cooperation (R&D) (MND)	-	-	-	-	-	3,559,000,000	4,866,000,000	4,882,000,000
109		Military Personnel Education and Training (Lines 110 through 152)	526,181,000,000	504,564,106,000	516,296,000,000	546,529,100,000	578,086,000,000	534,798,000,000	612,209,000,000	701,525,000,000
110		Service member Development and Education								
111		Troop Development and Education	3,815,000,000	3,644,000,000	4,158,000,000	3,807,000,000	4,459,000,000	4,074,000,000	4,117,000,000	3,953,000,000
112		Leader Development and Education	21,487,000,000	21,619,000,000	22,076,000,000	29,816,000,000	29,345,000,000	30,692,000,000	30,692,000,000	34,597,000,000
113		Military Human Resources Development and Education								
114		Military College Education	4,516,000,000	5,372,000,000	5,368,000,000	8,061,000,000	8,309,000,000	10,374,000,000	10,396,000,000	11,092,000,000
115		MOS School Education	11,692,000,000	12,474,000,000	11,495,000,000	10,213,000,000	10,034,000,000	10,357,000,000	12,989,000,000	10,755,000,000
116		Independent Unit Education	2,338,000,000	1,812,000,000	1,599,000,000	1,519,000,000	1,633,000,000	1,778,000,000	1,524,000,000	1,626,000,000
117		International Military Education	13,384,000,000	15,828,000,000	14,596,000,000	14,931,000,000	14,709,000,000	14,470,000,000	14,430,000,000	14,953,000,000
118		Civilian-contracted Education	34,943,000,000	35,613,000,000	29,029,000,000	28,459,000,000	28,484,000,000	28,356,000,000	28,769,000,000	29,343,000,000
119		Self-development Education	-	-	10,686,000,000	14,099,000,000	10,540,000,000	10,744,000,000	14,865,000,000	23,334,000,000
120		Military Technical Manpower Development	3,363,000,000	3,663,000,000	-	-	-	-	-	-
121		Reservist Basic Military Training								
122		Food Service Support	5,611,000,000	-	-	-	-	-	-	-

			2013	2014	2015	2016	2017	2018	2019	2020
123		Clothing Support	7,265,000,000	-	-	-	-	-	-	-
124		Education Support	865,000,000	922,844,000	-	-	-	-	-	-
125		Scientific Training	-	-	-	-	-	-	-	-
126		Scientific Training	55,630,000,000	42,204,532,000	52,249,000,000	62,760,000,000	67,071,000,000	51,813,000,000	60,076,000,000	76,863,000,000
127		Troop Information & Education Cultural Activities	-	-	-	-	-	-	-	-
128		Troop Information & Education Cultural Activities	26,189,000,000	26,792,000,000	28,990,000,000	31,665,000,000	41,083,000,000	42,417,000,000	46,437,000,000	49,307,000,000
129		Defense Policy Guide	3,566,000,000	3,698,000,000	-	-	-	-	-	-
130		War Commemoration Service Society	11,396,000,000	11,317,000,000	10,934,000,000	10,080,000,000	10,683,000,000	9,303,000,000	12,429,000,000	13,451,000,000
131		Education Facilities	-	-	-	-	-	-	-	-
132		Training Grounds and General Education Facilities	-	-	155,068,000,000	143,119,000,000	157,844,000,000	142,347,000,000	167,224,000,000	193,725,000,000
133		Training Grounds Acquisition Management	127,263,000,000	110,619,000,000	-	-	-	-	-	-
134		General Education Facilities Construction and Operations	19,683,000,000	19,407,910,000	-	-	-	-	-	-
135		Navy Technology Administration School Combined Education Center New Construction	6,004,000,000	7,838,820,000	-	-	-	-	-	-
136		Korea Military Academy Comprehensive Education Center New Construction	13,970,000,000	24,144,000,000	-	-	-	-	-	-
137		Industry - University - Military Cooperation in Technology Manpower Development	-	-	-	-	-	-	-	-
138		Technology Manpower Development Support	3,146,000,000	2,868,000,000	-	-	-	-	-	-
139		Associate's Degree Acquisition Support	100,000,000	100,000,000	-	-	-	-	-	-
140		Training and Education Support	-	-	-	-	-	-	-	-
141		Unit Training and Support	37,542,000,000	39,240,000,000	39,308,000,000	39,347,200,000	41,318,000,000	44,716,000,000	45,269,000,000	48,058,000,000
142		Operational Conditions Exercises	17,147,000,000	22,537,000,000	20,981,000,000	28,919,000,000	23,663,000,000	26,555,000,000	18,841,000,000	30,094,000,000
143		Common Training Aid Support	18,999,000,000	14,768,000,000	15,121,000,000	15,695,900,000	23,056,000,000	22,179,000,000	21,795,000,000	25,686,000,000
144		Combat Development Research	15,974,000,000	12,594,000,000	3,738,000,000	3,960,000,000	3,687,000,000	3,907,000,000	10,162,000,000	11,752,000,000
145		Education Policy Support	-	-	-	-	-	1,120,000,000	1,114,000,000	1,645,000,000
146		Military Personnel Matters	-	-	-	-	-	-	-	-
147		Leadership Retention Promotion Project	53,034,000,000	52,306,000,000	51,782,000,000	46,282,000,000	46,282,000,000	42,971,000,000	61,006,000,000	62,309,000,000
148		Full-time Reservist Operations	-	-	26,718,000,000	27,184,000,000	27,275,000,000	8,796,000,000	8,177,000,000	8,177,000,000
149		Short-term Domestic and Overseas Inspections	7,259,000,000	7,259,000,000	7,171,000,000	6,966,000,000	6,966,000,000	4,327,000,000	4,327,000,000	4,014,000,000
150		Service member Duty Acclimation Support	-	-	-	15,826,000,000	18,017,000,000	18,231,000,000	22,342,000,000	31,764,000,000
151		Recovery of Remains	-	5,923,000,000	5,229,000,000	3,820,000,000	3,628,000,000	3,648,000,000	10,672,000,000	9,623,000,000
152		Personnel Policy Support	-	-	-	-	-	1,623,000,000	4,556,000,000	5,404,000,000
153		Military Facilities Construction and Operations (Lines 154 through 194)	2,445,878,000,000	2,477,603,890,000	2,612,920,000,000	2,655,663,000,000	2,772,726,000,000	2,794,772,000,000	3,439,749,000,000	3,887,857,000,000

		2013	2014	2015	2016	2017	2018	2019	2020
154	Barracks Basic Facilities								
155	Barracks Living Spaces		-	223,916,000,000	97,428,000,000	108,194,000,000	88,422,000,000	103,848,000,000	239,080,000,000
156	Army Barracks Living Spaces	321,202,000,000	179,013,024,000	-	-	-	-	-	-
157	Navy, Air Force, and Other Barracks Living Spaces	71,281,000,000	13,741,000,000	-	-	-	-	-	-
158	GoP Guard Post Barracks Living Spaces	6,181,000,000	22,612,318,000	-	-	-	-	-	-
159	Barracks Living Spaces Auxiliary Facilities	76,800,000,000	130,978,000,000	124,752,000,000	145,654,000,000	136,353,000,000	138,473,000,000	133,549,000,000	121,312,000,000
160	Leadership Housing Facilities								
161	Officials and Leadership Quarters	-	-	156,886,000,000	171,416,000,000	130,483,000,000	166,499,000,000	185,317,000,000	512,016,000,000
162	Officials	-	62,027,000,000	-	-	-	-	-	-
163	Leadership Quarters	-	53,091,789,000	-	-	-	-	-	-
164	Military Officials and Apartments	44,164,000,000	-	-	-	-	-	-	-
165	Bachelor Quarters	123,156,000,000	-	-	-	-	-	-	-
166	2nd Fleet Headquarters Bachelor Quarters New Construction	-	4,574,249,000	-	-	-	-	-	-
167	19th Fighter Wing Apartments Construction	-	17,210,918,000	1,000,000,000	15,750,000,000	-	-	-	-
168	BTL Government Payments	325,344,000,000	386,402,000,000	446,777,000,000	495,624,000,000	494,262,000,000	500,489,000,000	509,186,000,000	204,448,000,000
169	General Facilities Improvement								
170	Environmental Preservation Facilities	85,163,000,000	120,117,000,000	106,474,000,000	107,923,000,000	105,068,000,000	107,087,000,000	157,933,000,000	184,834,000,000
171	Maintenance and Supply Facilities	91,201,000,000	153,639,000,000	184,700,000,000	191,411,000,000	213,647,000,000	155,802,000,000	196,286,000,000	230,957,000,000
172	General Support Facilities	541,050,000,000	556,244,000,000	576,825,000,000	584,885,000,000	606,753,000,000	538,876,000,000	689,947,000,000	731,666,000,000
173	Cyber Command	-	-	-	-	11,198,000,000	9,090,000,000	-	-
174	155mm Replacement Facilities (Located in FIP Budget Until 2017)	-	-	-	-	11,683,000,000	16,000,000,000	4,488,000,000	-
175	Sadong-hang Forward Base (Located in FIP Budget Until 2017)	-	-	-	-	6,025,000,000	3,453,000,000	15,615,000,000	13,155,000,000
176	Air Force Runway Repaving	-	-	-	-	4,748,000,000	30,200,000,000	46,946,000,000	68,471,000,000
177	Air Force Air Intelligence Wing Establishment	-	-	-	-	13,464,000,000	-	-	-
178	Korea Air and Space Operations Center (KAOC) New Construction	-	-	-	-	3,337,000,000	-	-	-
179	Operations Command Facilities Replacement (Gangneung Base)	-	-	-	-	1,077,000,000	7,045,000,000	2,055,000,000	12,072,000,000
180	777 Command Operations and Administration Facilities New Construction	-	-	-	-	3,080,000,000	1,886,000,000	5,667,000,000	25,116,000,000
181	Facilities Policy Support	-	-	-	-	-	6,279,000,000	7,606,000,000	5,040,000,000
182	MND Annex Remodeling	5,567,000,000	15,329,584,000	5,000,000,000	19,283,000,000	-	-	-	-
183	Military Children 'Dormitory-style High School' Dormitories New Construction	20,300,000,000	8,700,000,000	-	-	-	-	-	-
184	2nd Operational Command Children's Dormitory-style High School' Establishment	-	-	1,974,000,000	3,974,000,000	-	-	-	-

		2013	2014	2015	2016	2017	2018	2019	2020
185	562 Ammunition Supply Point New Construction	-	-	-	-	-	-	-	-
186	Defense Combined Information Management Center New Construction	13,758,000,000	17,265,000,000	-	-	-	-	-	-
187	JWSC (Joint Chiefs of Staff Wargame Center) New Construction	650,000,000	4,913,447,000	-	-	-	-	-	-
188	Army Training Center Multipurpose Auditorium	13,226,000,000	8,711,561,000	-	-	-	-	-	-
189	15th Special Activity Wing Command Aircraft Staging Facilities Reinforcement	13,267,000,000	10,947,000,000	-	-	-	-	-	-
190	Land Purchases	27,581,000,000	23,159,000,000	13,459,000,000	12,107,000,000	10,048,000,000	7,864,000,000	7,078,000,000	8,635,000,000
191	Land Purchases								
192	Facilities Maintenance Operations								
193	Facilities Maintenance Management	359,400,000,000	374,929,000,000	425,471,000,000	455,845,000,000	489,615,000,000	572,174,000,000	905,207,000,000	1,036,067,000,000
194	Public Utility Charges	306,587,000,000	333,997,000,000	345,686,000,000	354,363,000,000	423,691,000,000	445,133,000,000	469,021,000,000	494,988,000,000
195	Reserve Force Management (Lines 196 through 204)	144,244,000,000	146,905,000,000	127,527,000,000	123,126,400,000	137,110,000,000	132,535,000,000	170,310,000,000	206,678,000,000
196	Reserve Military Training Grounds Acquisition								
197	Training Grounds Facilities Land Purchases	2,140,000,000	34,000,000	-	-	-	-	-	-
198	Reserve Military Training Facilities Acquisition	29,510,000,000	27,939,000,000	28,106,000,000	28,006,400,000	31,295,000,000	29,370,000,000	38,044,000,000	41,557,000,000
199	Reserve Force Maintenance								
200	Food Service Support	7,836,000,000	8,263,000,000	8,148,000,000	7,646,000,000	8,162,000,000	8,492,000,000	8,883,000,000	9,834,000,000
201	Combat Equipment Support	11,104,000,000	12,327,000,000	12,487,000,000	6,362,000,000	11,407,000,000	8,500,000,000	13,188,000,000	15,251,000,000
202	Mobilization Training	7,910,000,000	8,395,000,000	8,117,000,000	8,605,000,000	10,241,000,000	12,746,000,000	20,454,000,000	26,433,000,000
203	General Training	33,883,000,000	36,343,000,000	42,190,000,000	43,294,000,000	42,515,000,000	41,694,000,000	46,598,000,000	50,417,000,000
204	Reserve Force Operations Support	51,861,000,000	53,604,000,000	28,479,000,000	29,213,000,000	33,490,000,000	31,733,000,000	43,143,000,000	63,186,000,000
205	Executive Agencies Operations (Lines 206 through 287)	106,653,437,000	136,761,387,000	151,721,603,000	133,689,437,000	199,519,131,000	201,813,001,000	222,609,000,000	189,100,000,000
206	Korea Armed Forces Printing & Publishing Depot Operations								
207	Basic Services and Support Costs	110,000,000	8,100,000,000	100,000,000	99,000,000	99,000,000	99,000,000	99,000,000	99,000,000
208	Korea Armed Forces Printing & Publishing Depot Services and Support Costs	8,000,000,000	108,000,000	8,100,000,000	7,827,000,000	7,497,000,000	7,293,000,000	6,557,000,000	6,928,000,000
209	Payroll Costs	13,139,000,000	13,740,119,000	14,646,751,000	-	-	-	-	-
210	Health Insurance Contribution Costs	424,000,000	433,000,000	457,000,000	-	-	-	-	-
211	Naval Supply Center Operations								
212	Basic Expenses	148,000,000	146,000,000	147,000,000	147,000,000	147,000,000	148,000,000	148,000,000	153,000,000
213	Naval Supply Center Services and Support Costs	2,403,000,000	2,549,000,000	6,596,000,000	5,669,000,000	2,857,000,000	1,738,000,000	1,679,000,000	1,964,000,000
214	Air Force 40th Supply Center Operations								
215	Basic Expenses	92,000,000	-	-	-	-	-	-	-

			2013	2014	2015	2016	2017	2018	2019	2020
216		Air Force 40th Supply Center Services and Support Costs	635,000,000	-	-	-	-	-	-	-
217		Korean Armed Forces Capital Hospital Operations								
218		Basic Expenses	399,000,000	393,000,000	480,000,000	480,000,000	577,000,000	533,000,000	589,000,000	612,000,000
219		Korean Armed Forces Capital Hospital Services and Support Costs	24,597,000,000	25,073,000,000	28,940,000,000	28,379,000,000	25,172,000,000	26,216,000,000	44,362,000,000	34,568,000,000
220		Navy 1st Repair Depot Operations								
221		Basic Expenses	71,000,000	70,000,000	69,000,000	69,000,000	73,000,000	95,000,000	98,000,000	104,000,000
222		Navy 1st Repair Depot Services and Support Costs	1,065,000,000	1,038,000,000	1,044,000,000	586,000,000	556,000,000	656,000,000	876,000,000	934,000,000
223		Air Force 83rd Maintenance Depot Operations								
224		Basic Expenses	108,000,000	106,000,000	101,000,000	99,000,000	102,000,000	105,000,000	105,000,000	115,000,000
225		Air Force 83rd Maintenance Depot Services and Support Costs	3,621,000,000	2,893,000,000	2,785,000,000	2,695,000,000	2,802,000,000	2,774,000,000	2,689,000,000	2,456,000,000
226		Armed Forces Daegu Hospital Operations								
227		Basic Expenses	121,000,000	119,000,000	138,000,000	138,000,000	149,000,000	161,000,000	161,000,000	167,000,000
228		Armed Forces Daegu Hospital Services and Support Costs	10,943,000,000	11,047,000,000	11,814,000,000	11,220,000,000	9,464,000,000	11,182,000,000	7,439,000,000	10,716,000,000
229		Navy 2nd Repair Depot Operations								
230		Basic Expenses	72,000,000	71,000,000	70,000,000	70,000,000	76,000,000	99,000,000	99,000,000	104,000,000
231		Navy 2nd Repair Depot Services and Support Costs	1,592,000,000	4,162,000,000	1,527,000,000	738,000,000	738,000,000	863,000,000	2,046,000,000	2,060,000,000
232		Air Force 82nd Maintenance Depot Operations								
233		Basic Expenses	111,000,000	109,000,000	106,000,000	113,000,000	113,000,000	128,000,000	256,000,000	268,000,000
234		Air Force 82nd Maintenance Depot Services and Support Costs	1,988,000,000	2,100,000,000	2,180,000,000	3,420,000,000	1,900,000,000	1,970,000,000	2,259,000,000	2,434,000,000
235		Armed Forces Medical Research Institute Operations								
236		Basic Expenses	180,000,000	177,000,000	82,000,000	82,000,000	82,000,000	83,000,000	83,000,000	83,000,000
237		Armed Forces Medical Research Institute Services and Support Costs	1,985,000,000	2,299,000,000	1,487,000,000	972,000,000	1,003,000,000	1,153,000,000	1,086,000,000	1,767,000,000
238		Army Consolidated Maintenance Depot Operations								
239		Basic Expenses	-	609,000,000	601,000,000	601,000,000	601,000,000	655,000,000	655,000,000	655,000,000
240		Army Consolidated Maintenance Depot Services and Support Costs	-	27,875,000,000	28,619,000,000	23,391,000,000	22,516,000,000	21,226,000,000	21,892,000,000	18,461,000,000
241		Navy 3rd Repair Depot Operations								
242		Basic Expenses	-	41,000,000	40,000,000	40,000,000	42,000,000	68,000,000	68,000,000	70,000,000
243		Navy 3rd Repair Depot Services and Support Costs	-	497,000,000	547,000,000	253,000,000	253,000,000	296,000,000	338,000,000	293,000,000
244		Air Force Consolidated Supply Depot Operations								
245		Basic Expenses	-	178,000,000	177,000,000	177,000,000	177,000,000	180,000,000	180,000,000	194,000,000
246		Air Force Consolidated Supply Depot Services and Support Costs	-	937,000,000	1,007,000,000	940,000,000	1,045,000,000	1,370,000,000	1,297,000,000	1,359,000,000

		2013	2014	2015	2016	2017	2018	2019	2020
247	Korea Joint Interoperability Technology Center Operations								
248	Basic Expenses		-	129,000,000	129,000,000	130,000,000	146,000,000	140,000,000	140,000,000
249	Korea Joint Interoperability Technology Center Services and Support Costs		-	2,665,000,000	2,664,000,000	2,422,000,000	2,152,000,000	2,299,000,000	2,480,000,000
250	Navy Maintenance Depot Operations								
251	Basic Expenses		-	281,000,000	281,000,000	296,000,000	311,000,000	311,000,000	317,000,000
252	Navy Maintenance Depot Services and Support Costs		-	4,948,000,000	3,339,000,000	5,071,000,000	3,292,000,000	3,736,000,000	3,543,000,000
253	Defense Integrated Datacenter (DIDC) Operations								
254	Basic Expenses		-	-	165,000,000	227,000,000	228,000,000	221,000,000	221,000,000
255	Defense Integrated Datacenter (DIDC) Services and Support Costs		-	-	6,283,000,000	62,727,000,000	63,250,000,000	65,522,000,000	36,730,000,000
256	Army Special Weapons Maintenance Group Operations								
257	Basic Expenses	79,000,000	-	-	-	-	-	-	-
258	Army Special Weapons Maintenance Group Services and Support Costs	834,000,000	-	-	-	-	-	-	-
259	Army 1st Supply Group Operations								
260	Basic Expenses		-	57,000,000	58,000,000	59,000,000	-	-	-
261	Army 1st Supply Group Services and Support Costs		-	920,000,000	948,000,000	1,003,000,000	-	-	-
262	Army 2nd Supply Group Operations								
263	Basic Expenses	99,000,000	97,000,000	94,000,000	94,000,000	94,000,000	-	-	-
264	Army 2nd Supply Group Services and Support Costs	759,000,000	850,000,000	895,000,000	727,000,000	777,000,000	-	-	-
265	Army 3rd Supply Group Operations								
266	Basic Expenses	110,000,000	108,000,000	105,000,000	105,000,000	105,000,000	-	-	-
267	Army 3rd Supply Group Services and Support Costs	1,480,000,000	1,589,000,000	1,591,000,000	1,295,000,000	1,242,000,000	-	-	-
268	Army Aircraft Maintenance Group Operations								
269	Basic Expenses	99,000,000	-	-	-	-	-	-	-
270	Army Aircraft Maintenance Group Services and Support Costs	1,785,000,000	-	-	-	-	-	-	-
271	Army Consolidated Supply Depot Operations								
272	Basic Expenses		-	-	-	-	455,000,000	455,000,000	455,000,000
273	Army Consolidated Supply Depot Services and Support Costs		-	-	-	-	4,029,000,000	4,102,000,000	4,501,000,000
274	Defense Media Agency Operations								
275	Payroll Costs	9,357,437,000	9,303,956,000	9,934,852,000	10,608,437,000	10,441,629,000	11,016,490,000	11,299,000,000	11,354,000,000
276	Basic Expenses	896,000,000	922,000,000	987,000,000	958,000,000	1,000,000,000	999,000,000	729,000,000	707,000,000
277	Public Interest Service Personnel Operations	34,000,000	3,000,000	-	-	-	-	-	-

			2013	2014	2015	2016	2017	2018	2019	2020
278		Defense Media Agency Health Insurance Contribution Costs	302,000,000	297,060,000	318,000,000	330,000,000	342,000,000	357,000,000	376,000,000	404,000,000
279		Defense Media Agency Program Production and Support Costs	-	-	16,936,000,000	17,500,000,000	18,285,000,000	18,718,000,000	19,601,000,000	20,939,000,000
280		Newspaper Production	6,016,000,000	6,112,000,000	-	-	-	-	-	-
281		Broadcast Production	12,601,000,000	12,202,000,000	-	-	-	-	-	-
282		Facilities Maintenance	398,000,000	407,252,000	-	-	-	-	-	-
283		Defense Computing Information Agency Operations								
284		Payroll Costs	-	-	-	-	2,784,502,000	2,753,511,000	2,605,000,000	2,510,000,000
285		Basic Expenses	-	-	-	-	408,000,000	394,000,000	440,000,000	444,000,000
286		Defense Computing Information Agency Health Insurance Contribution Costs	-	-	-	-	82,000,000	85,000,000	90,000,000	97,000,000
287		Defense Computing Information Agency Services and Support Costs	-	-	-	-	13,982,000,000	14,536,000,000	15,622,000,000	17,694,000,000
288		Policy Planning and International Cooperation (Lines 289 through 309)	879,768,000,000	965,545,125,000	971,644,000,000	1,042,595,000,000	1,071,077,000,000	1,092,215,000,000	1,116,072,000,000	1,184,278,000,000
289		U.S. Forces Korea Special Measures Agreement (SMA) Contributions								
290		Payroll Costs	334,000,000,000	341,348,000,000	349,000,000,000	362,995,000,000	365,540,000,000	371,000,000,000	378,049,000,000	500,500,000,000
291		Military Facilities Improvements	235,462,000,000	297,302,000,000	337,334,000,000	391,798,000,000	409,739,000,000	444,231,000,000	452,671,000,000	371,000,000,000
292		Combined Force Strengthening	26,000,000,000	7,200,000,000	-	-	-	-	-	-
293		Military Supplies	140,538,000,000	153,850,233,000	158,466,000,000	158,466,000,000	160,194,000,000	144,960,000,000	147,714,000,000	167,400,000,000
294		U.S. Forces Korea Other Contributions								
295		US Communications Line Usage	1,087,000,000	1,006,000,000	-	-	-	-	-	-
296		Combined Command and Control Communications System Usage	21,979,000,000	20,574,000,000	15,960,000,000	16,892,000,000	31,410,000,000	20,850,000,000	20,458,000,000	20,643,000,000
297		U.S. Forces Korea Facilities Site Support								
298		Facilities Site Support	14,326,000,000	13,712,892,000	10,564,000,000	10,472,000,000	6,522,000,000	7,253,000,000	7,885,000,000	8,124,000,000
299		Overseas Deployments								
300		Multinational Deployments and Defense Exchange Cooperation	31,094,000,000	54,398,000,000	25,784,000,000	22,531,000,000	23,121,000,000	20,896,000,000	22,611,000,000	23,202,000,000
301		PKO Deployments	32,593,000,000	32,537,000,000	25,028,000,000	23,860,000,000	21,437,000,000	23,426,000,000	24,043,000,000	26,597,000,000
302		Military Attaché Activities								
303		Military Attaché Activities	10,148,000,000	10,443,000,000	10,888,000,000	11,225,000,000	11,186,000,000	11,808,000,000	12,272,000,000	13,955,000,000
304		Policy Planning Support								
305		Policy Research Activities (R&D)	853,000,000	883,000,000	839,000,000	814,000,000	790,000,000	790,000,000	790,000,000	790,000,000
306		Policy Planning Support	-	-	-	-	-	2,604,000,000	2,376,000,000	4,391,000,000
307		Korea Institute for Defense Analyses (KIDA) Operations								
308		Korea Institute for Defense Analyses (KIDA) (R&D)	28,509,000,000	29,062,000,000	34,495,000,000	40,153,000,000	37,506,000,000	41,260,000,000	43,830,000,000	47,676,000,000

			2013	2014	2015	2016	2017	2018	2019	2020
309		Cost Feasibility Studies								
		Defense Administration Support (Lines 311 through 331)								
310			3,179,000,000	3,229,000,000	3,286,000,000	3,389,000,000	3,632,000,000	3,137,000,000	3,373,000,000	-
		Basic Expenses	841,084,023,000	809,634,000,000	904,458,594,000	810,691,702,000	771,897,000,000	756,956,000,000	781,994,000,000	730,915,149,000
311										
312										
		Basic Expenses	361,303,000,000	366,304,000,000	384,748,000,000	382,768,000,000	389,677,000,000	385,116,000,000	402,721,000,000	410,838,000,000
313		Administration Effectiveness Improvement and Capability Development								
314			970,000,000	967,000,000	-	-	-	-	-	-
315		Defense Administration Support								
316			32,386,000,000	6,607,000,000	10,543,000,000	17,807,000,000	18,014,000,000	17,152,000,000	19,311,000,000	34,601,000,000
317		Civil Compensation	171,447,023,000	177,139,000,000	178,748,594,000	177,734,702,000	180,834,968,000	147,670,000,000	136,613,000,000	119,405,149,000
318		Military Information Activities								
		Policy Activity Support	-	65,500,000,000	132,884,000,000	73,479,000,000	74,468,032,000	-	-	-
319		Other Policy Projects	238,883,000,000	-	-	-	-	-	-	-
320		Maritime Characteristics Surveys	6,002,000,000	6,842,000,000	6,842,000,000	6,267,000,000	6,267,000,000	6,000,000,000	6,120,000,000	5,920,000,000
321		Policy Media Support	-	-	-	-	-	6,616,000,000	8,231,000,000	9,049,000,000
322		Defense Events Support	-	-	-	-	-	23,495,000,000	12,392,000,000	17,031,000,000
323		Force Development Support	-	-	-	-	-	11,084,000,000	13,141,000,000	13,890,000,000
324		Unit Operations Support	-	-	-	-	-	16,643,000,000	17,312,000,000	18,390,000,000
325		Force Support System Research & Development	-	3,000,000,000	-	-	-	-	-	-
326		10.27 History Education Hall Support	20,000,000,000	-	-	-	-	-	-	-
327		Service member Culture Improvements								
328			10,093,000,000	11,552,000,000	12,970,000,000	-	-	-	-	-
329		Defense Judicial Affairs Support								
330			-	171,723,000,000	177,723,000,000	152,636,000,000	102,636,000,000	142,212,000,000	164,832,000,000	100,440,000,000
		Military Indemnity Costs	-	-	-	-	-	968,000,000	1,321,000,000	1,351,000,000
331		Judicial Affairs Policy Support	-	-	-	-	-	-	-	-
332		Transactions between Accounting Funds (Transfers) (Line 334)	24,176,000,000	6,088,000,000	690,000,000	525,000,000	-	-	-	-
333		Transfers between Accounting Funds (Regular Accounts)								
334		Service member Welfare Fund Transfers	24,176,000,000	6,088,000,000	690,000,000	525,000,000	-	-	-	-

		2013	2014	2015	2016	2017	2018	2019	2020
335	Force Enhancement (FIP) (Lines 336 + 443 + 531 + 583 + 643 + 726 + 769 + 789)	10,116,302,575,000	10,509,652,959,000	11,013,962,508,000	11,639,809,314,000	12,196,951,018,000	13,520,291,991,000	15,373,324,000,000	16,680,442,000,000
336	C2 and Reconnaissance Programs (Lines 337 through 442)	1,099,154,000,000	829,863,148,000	788,265,000,000	1,328,364,000,000	1,126,466,000,000	1,312,508,000,000	1,292,403,000,000	1,101,881,000,000
337	C2 and Reconnaissance Research & Development								
338	Tactical Information Communication Network (TICN) (R&D)	36,093,000,000	34,230,000,000	24,129,000,000	10,601,000,000	-	-	-	-
339	Tactical Information Communication Network (TICN) Block 1-2 (TICN-IR&D)	-	-	-	-	-	-	-	4,005,000,000
340	Electro-Optical Satellite Surveillance System (R&D)	-	2,000,000,000	3,000,000,000	9,606,000,000	6,609,000,000	5,500,000,000	21,516,000,000	-
341	Unmanned Ground Surveillance Center (R&D)	-	-	-	-	-	3,400,000,000	129,000,000	-
342	Unmanned Ground Surveillance Sensor (R&D)	-	-	1,996,000,000	1,996,000,000	1,221,000,000	-	-	500,000,000
343	Maritime Surveillance Radar-II (R&D)	-	-	1,505,000,000	3,629,000,000	3,931,000,000	9,323,000,000	13,194,000,000	-
344	Microsatellite Electro-Optical/Infrared (MS-EO/IR) (R&D)	19,895,000,000	16,569,477,000	-	-	-	-	-	-
345	Microsatellite Synthetic Aperture Radar (MS-SAR) 2nd Generation (R&D)	-	29,500,000,000	28,416,000,000	29,830,000,000	4,739,000,000	13,181,000,000	5,502,000,000	15,902,000,000
346	Medium Altitude Reconnaissance Unmanned Aerial Vehicle (MUAV) (R&D)	26,153,000,000	56,088,000,000	57,030,000,000	72,753,000,000	76,819,000,000	331,000,000	5,519,000,000	5,519,000,000
347	Anti-air Command, Control, and Alert (C2A) System (R&D)	7,878,000,000	7,471,000,000	6,122,000,000	4,050,000,000	-	-	-	-
348	Military Satellite Communications System-II (R&D)	34,718,000,000	50,488,000,000	20,390,000,000	60,900,000,000	16,088,000,000	18,142,000,000	14,681,000,000	57,479,000,000
349	Corps Reconnaissance Unmanned Aerial Vehicle-II (R&D)	20,657,000,000	24,015,000,000	17,833,000,000	25,657,000,000	23,025,000,000	440,000,000	880,000,000	27,246,000,000
350	Harbor Underwater Surveillance System (HUSS) (R&D)	-	-	2,031,000,000	8,125,000,000	26,265,000,000	30,870,000,000	66,640,000,000	-
351	425 Program (R&D)	-	-	1,875,000,000	2,000,000,000	44,500,000,000	106,816,000,000	207,919,000,000	234,493,000,000
352	Korean Joint Tactical Data Link System (JTDLIS) Complete Version (R&D)	5,068,000,000	904,000,000	-	-	-	-	-	23,100,000,000
353	Multi-source Imagery Fusion System (R&D)	-	-	-	-	-	-	14,875,000,000	25,426,000,000
354	Ground Tactical C4I System Performance Improvement	-	-	-	-	32,509,000,000	13,996,000,000	-	-
355	Ground Tactical C4I System Expansion Program (R&D)	19,138,000,000	12,893,000,000	28,047,000,000	34,998,000,000	-	-	15,759,000,000	16,014,000,000
356	701 Program (R&D)	75,666,000,000	67,472,000,000	39,479,000,000	30,286,000,000	40,818,000,000	33,018,000,000	-	-
357	Navy Tactical C4I System Performance Improvement	-	-	-	-	-	46,010,000,000	50,947,000,000	15,537,000,000
358	Air Force Tactical C4I Performance Improvement (R&D)	15,238,000,000	5,220,512,000	-	-	-	-	-	-
359	Magnetism Measurement Processing Equipment (R&D)	15,675,000,000	-	-	-	-	-	-	-
360	Military Intelligence Management System - Combined (MIMS-C) (R&D)	9,087,000,000	2,810,000,000	-	-	-	-	-	-
361	Military Intelligence Management System (MIMS) Performance Improvement	-	-	-	-	500,000,000	13,582,000,000	25,951,000,000	36,591,000,000
362	Space Weather Prediction and Alert System	-	-	-	-	-	-	-	15,000,000
363	Korea Theater Missile Operation (KTMO) Cell (R&D)	124,000,000	-	-	-	-	-	-	-
364	Korea Theater Missile Operation (KTMO) Cell Performance Improvement (R&D)	-	-	-	-	-	-	2,236,000,000	14,973,000,000
365	Fixed-type Long-range Radar (R&D)	13,487,000,000	13,542,330,000	6,211,000,000	-	95,000,000	-	-	-

				2013	2014	2015	2016	2017	2018	2019	2020
366		Allied Korean Joint Command and Control System (AKJCCS) (R&D)		12,444,000,000	10,752,749,000	-	-	-	-	-	-
367		Joint Fire Operating System - Korea (JFOS-K) (R&D)		12,775,000,000	7,123,690,000	-	-	-	-	-	-
368		Joint Fire Operating System - Korea (JFOS-K) Performance Improvement		-	-	-	-	-	-	-	10,070,000,000
369		Korean Joint Command and Control System (KJCCS) Performance Improvement (R&D)		31,572,000,000	18,387,000,000	8,594,000,000	2,577,000,000	-	-	-	-
370		Long-range Radar		-	-	-	-	-	-	-	368,000,000
371		Next Generation Local Air Defense Radar (R&D)		8,979,000,000	9,009,718,000	2,643,000,000	-	-	-	-	-
372		Ground Tactical Korean Variable Message Format (KVMF) (R&D)		10,365,000,000	3,496,994,000	3,034,000,000	-	-	-	-	-
373		Division Reconnaissance UAV (R&D)		8,648,000,000	-	-	-	-	-	-	-
374		Aircraft Control Radar(R&D)		6,998,000,000	712,000,000	2,251,000,000	-	-	-	-	-
375		Next Generation Small Unit Radio (R&D)		2,999,000,000	907,925,000	750,000,000	-	-	-	-	-
376		Self-propelled Torpedo Deception Countermeasure (R&D)		7,920,000,000	-	-	-	-	-	-	-
377		C2 and Reconnaissance Production and Procurement									
378		Tactical Information Communication Network (TICN)		-	-	40,000,000,000	299,900,000,000	370,495,000,000	548,326,000,000	350,013,000,000	285,028,000,000
379		Korean Joint Tactical Data Link System (JTDLs)		-	-	1,500,000,000	112,000,000	8,250,000,000	22,526,000,000	-	-
380		Ground Tactical Korean Variable Message Format (KVMF)		-	-	-	-	-	-	1,822,000,000	11,690,000,000
381		Tactical Communication System (SPIDER) Performance Improvement		32,820,000,000	-	-	-	-	-	-	-
382		Combatant-use Radio		-	-	-	-	-	-	-	-
383		Close Air Support (CAS) Control Equipment Reinforcement		930,000,000	949,529,000	836,000,000	-	-	-	113,000,000	1,331,000,000
384		Satellite Air Defense Warning System		6,275,000,000	16,953,400,000	25,414,000,000	192,000,000	-	-	-	-
385		Rear Area Satellite Communication System		-	-	-	-	348,000,000	12,116,000,000	20,407,000,000	13,828,000,000
386		Ground Laser Target Designator		22,603,000,000	9,347,884,000	5,739,000,000	-	-	-	-	-
387		JTAC-use Target Video Receiver		-	-	300,000,000	3,534,000,000	27,000,000	76,000,000	17,000,000	9,000,000
388		Air Ground Communications Radio		1,100,000,000	-	-	-	-	-	-	-
389		Handheld Satellite Air Ground Communications Radio		-	12,934,124,000	272,000,000	-	-	-	-	-
390		Airborne Early Warning and Control (AEW&C)		147,107,000,000	5,088,905,000	-	-	-	-	-	-
391		Next Generation Thermal Observation Device (TOD) Equipment		42,452,000,000	50,801,000,000	36,454,000,000	41,234,000,000	56,014,000,000	-	1,000,000,000	15,488,000,000
392		Tactical Reconnaissance Information Collection System		65,828,000,000	17,953,000,000	14,731,000,000	16,597,000,000	951,000,000	1,443,000,000	10,075,000,000	7,792,000,000
393		Division Reconnaissance Unmanned Aerial Vehicle		-	742,000,000	46,729,000,000	13,207,000,000	86,813,000,000	108,364,000,000	81,259,000,000	19,174,000,000
394		Small Reconnaissance UAV		1,153,000,000	1,134,000,000	5,864,000,000	19,250,000,000	-	-	-	-
395		Battalion Reconnaissance Unmanned Aerial Vehicle		-	-	-	-	22,018,000,000	9,520,000,000	-	-
396		Medium Altitude Reconnaissance Unmanned Aerial Vehicle (MUAV)		-	-	-	-	679,000,000	2,165,000,000	286,000,000	-

				2013	2014	2015	2016	2017	2018	2019	2020
397		Self-propelled Torpedo Deception Countermeasure		-	1,289,000,000	6,482,000,000	16,717,000,000	12,286,000,000	9,598,000,000	10,026,000,000	12,620,000,000
398		Tactical Airship (Blimp)		-	-	1,583,000,000	-	-	-	-	-
399		Reconnaissance Satellite Imagery Intelligence System		-	-	-	-	100,000,000	-	-	-
400		Corps Reconnaissance UAV Capability Reinforcement		1,000,000,000	17,216,232,000	25,984,000,000	-	-	-	-	-
401		Corps Recon UAV Inertial Navigation System Software Performance Improvement		2,190,000,000	-	-	-	-	-	-	-
402		Shinseigi Ship UAV Capability Reinforcement		-	500,000,000	7,797,000,000	2,495,000,000	12,013,000,000	-	-	-
403		Information Security Equipment		6,172,000,000	7,125,000,000	5,454,000,000	2,356,000,000	4,984,000,000	4,687,000,000	4,218,000,000	4,125,000,000
404		Forward Base Surveillance System		-	-	-	-	907,000,000	5,058,000,000	-	-
405		Ground Tactical Electronic Warfare Equipment-II		37,606,000,000	44,695,000,000	33,469,000,000	45,427,000,000	16,553,000,000	-	34,000,000	-
406		Maritime Small Electronic Warfare Equipment-II		-	-	-	-	500,000,000	13,466,000,000	18,526,000,000	7,192,000,000
407		Mobile Maritime Surveillance Radar		-	7,022,000,000	2,054,000,000	-	-	-	-	-
408		Maritime Surveillance Radar-II		-	-	-	-	-	-	-	1,484,000,000
409		Low Altitude Radar		4,033,000,000	32,865,704,000	31,703,000,000	11,646,000,000	2,361,000,000	-	-	-
410		Tactical Air Navigation (TACAN) Equipment		-	342,000,000	4,788,000,000	6,271,000,000	223,000,000	1,957,000,000	3,059,000,000	931,000,000
411		2nd Generation Meteorological Radar		-	459,000,000	2,690,000,000	8,898,000,000	5,919,000,000	6,827,000,000	-	-
412		Local Air Defense Radar		-	-	-	1,702,000,000	-	500,000,000	16,890,000,000	19,836,000,000
413		Aircraft Control Radar - Precision Approach Radar (PAR)		-	-	-	-	500,000,000	3,014,000,000	22,004,000,000	28,539,000,000
414		Aircraft Control Radar - Airport Surveillance Radar (ASR)		-	3,108,000,000	7,209,000,000	1,508,000,000	5,000,000	5,000,000	1,121,000,000	60,475,000,000
415		Local Airspace Surveillance System		-	-	985,000,000	4,993,000,000	-	1,353,000,000	-	-
416		Air Combat Maneuvering Instrumentation (ACMI) System		-	-	-	486,000,000	4,770,000,000	28,915,000,000	40,024,000,000	33,592,000,000
417		Coastal Combined Surveillance System		12,035,000,000	16,747,000,000	-	-	-	-	-	-
418		Harbor Surveillance System		30,790,000,000	13,370,000,000	24,721,000,000	21,602,000,000	13,170,000,000	-	-	-
419		Long-distance Detection Towed Array Sonar Sensor		46,225,000,000	-	-	-	-	-	-	-
420		2nd Generation Ground Tactical C4I System Performance Improvement		-	-	-	-	-	47,127,000,000	56,336,000,000	76,475,000,000
421		Destroyer Torpedo Acoustic Countermeasures (TACM) Performance Improvement		-	-	-	-	50,000,000	7,117,000,000	9,410,000,000	9,004,000,000
422		Mobile Aircraft Meteorological Observation Equipment		240,000,000	479,225,000	1,641,000,000	2,486,000,000	-	-	-	-
423		Mobile Meteorological Radar		-	-	-	-	-	-	-	51,000,000
424		Mobile Long-range Radar		-	-	-	-	-	-	-	313,000,000
425		Instrument Landing System (ILS)		1,268,000,000	1,279,750,000	-	-	-	-	311,000,000	5,558,000,000
426		New Detection Radar		9,852,000,000	3,269,000,000	3,209,000,000	-	-	-	-	-
427		Electromagnetic Pulse (EMP) Protection Facilities		17,430,000,000	52,651,000,000	50,904,000,000	51,895,000,000	-	-	-	-

			2013	2014	2015	2016	2017	2018	2019	2020
428		Airbase Anti-air Fire Control System	1,497,000,000	2,916,000,000	1,137,000,000	-	-	-	-	-
429		Cyber Command	1,421,000,000	887,000,000	4,118,000,000	1,011,000,000	-	-	-	-
430		Ground Operations Command Establishment	20,642,000,000	28,745,000,000	10,164,000,000	42,760,000,000	-	-	-	-
431		Korea Combat Training Center (KCTC) Reorganization	170,101,000,000	44,525,000,000	24,319,000,000	35,616,000,000	-	-	-	-
432		Army Airfield Combat Facilities Reinforcement	5,625,000,000	16,232,000,000	11,900,000,000	1,400,000,000	-	-	-	-
433		Small Scale Unit Reorganization Program	7,935,000,000	8,948,000,000	15,668,000,000	15,698,000,000	-	-	-	-
434		Corps Command Facilities New Construction	1,000,000,000	15,000,000,000	36,817,000,000	43,664,000,000	-	-	-	-
435		Sokcho Airfield Instrumentation Equipment	-	1,800,000,000	-	-	-	-	-	-
436		Capital Mechanized Infantry Division Unit Reorganization	-	-	2,532,000,000	-	-	-	-	-
437		37th Division Unit Reorganization	-	-	1,267,000,000	-	-	-	-	-
438		55th Division Unit Reorganization	-	-	7,716,000,000	-	-	-	-	-
439		Unit Reorganization - 1st Round	-	-	-	20,436,000,000	-	-	-	-
440		Marine Corps Dispersed Wargame System Establishment	197,000,000	-	-	-	-	-	-	-
441		C2 and Reconnaissance Foreign Military Sales Acquisitions	-	-	-	-	-	-	-	-
442		High Altitude Reconnaissance Unmanned Aerial Vehicle (HUAV)	50,000,000	18,895,000,000	28,779,000,000	298,263,000,000	229,411,000,000	183,739,000,000	199,704,000,000	108,000,000
443		Maneuver and Firepower Programs (Lines 444 through 530)	1,956,001,000,000	2,346,250,335,000	2,302,479,000,000	2,199,204,000,000	2,279,978,000,000	2,378,988,000,000	2,175,376,000,000	1,803,222,000,000
444		Maneuver and Firepower Research and Development	-	-	-	-	-	-	-	-
445		Next Generation Tactical Bridging (R&D)	3,552,000,000	1,000,000	-	-	-	-	-	-
446		Wheeled Combat Vehicle (R&D)	7,683,000,000	746,774,000	576,000,000	-	-	-	-	-
447		120mm Self-propelled Mortar (R&D)	4,191,000,000	1,011,000,000	8,282,000,000	9,626,000,000	7,462,000,000	10,760,000,000	7,000,000	-
448		Next Generation Multiple Launch Rocket (R&D)	16,329,000,000	-	-	-	-	-	-	-
449		Obstacle Clearance Tank (R&D)	-	112,000,000	6,009,000,000	6,103,000,000	5,048,000,000	13,720,000,000	-	-
450		Command Post Vehicle (R&D)	-	-	652,000,000	130,000,000	100,000,000	481,000,000	638,000,000	521,000,000
451		81mm Mortar-II (R&D)	-	512,000,000	578,000,000	2,611,000,000	2,630,000,000	2,564,000,000	-	-
452		Small Tactical Vehicle (R&D)	7,008,000,000	3,354,536,000	7,876,000,000	-	-	-	-	-
453		Fire Direction Vehicle (120mm Self-propelled Mortar Use) (R&D)	-	-	20,000,000	57,000,000	79,000,000	124,000,000	-	-
454		Amphibious Assault Armored Vehicle-II (R&D)	-	-	-	-	-	1,687,000,000	12,000,000,000	31,631,000,000
455		Chemical, Biological, Radiological Reconnaissance Vehicle-II (R&D)	8,295,000,000	5,580,411,000	4,847,000,000	5,835,000,000	4,793,000,000	14,926,000,000	-	-
456		Counterbattery Detection Radar-II (R&D)	4,752,000,000	4,788,014,000	3,676,000,000	6,077,000,000	18,077,000,000	-	-	-
457		Explosive Detection and Removal Robot (R&D)	-	-	-	-	1,000,000,000	2,600,000,000	3,789,000,000	3,750,000,000
458		230mm Unguided Munition (R&D)	-	-	-	-	-	1,000,000,000	20,025,000,000	13,811,000,000

			2013	2014	2015	2016	2017	2018	2019	2020
459		Unmanned Light Combat Vehicle (R&D)	-	-	-	-	500,000,000	9,471,000,000	20,369,000,000	11,995,000,000
460		Short-range Reconnaissance Drone(R&D)	-	-	-	-	-	-	-	900,000,000
461		Maneuver and Firepower Small-scale Business Development (R&D)	-	-	-	-	-	3,136,000,000	1,683,000,000	1,149,000,000
462		Individual Combat System (R&D)	-	-	-	-	-	-	-	100,000,000
463		105mm Howitzer Performance Improvement (R&D)	-	-	139,000,000	73,000,000	5,000,000	-	-	-
464		K-9 Self-propelled Artillery Performance Improvement (R&D)	-	1,462,000,000	6,788,000,000	11,334,000,000	-	-	-	-
465		KA-1 Target Ranging Equipment (R&D)	1,327,000,000	300,000,000	6,000,000	-	-	-	-	-
466		Maneuver and Firepower Production and Procurement								
467		K-21 Infantry Combat Vehicle	291,900,000,000	277,000,000,000	160,005,000,000	132,554,000,000	10,444,000,000	22,320,000,000	12,723,000,000	32,191,000,000
468		K-1 Heavy Recovery Vehicle	67,407,000,000	113,142,007,000	65,244,000,000	35,737,000,000	30,118,000,000	25,042,000,000	-	-
469		K-2 Tank	200,000,000,000	318,920,000,000	316,700,000,000	225,296,000,000	344,546,000,000	233,300,000,000	2,092,000,000	140,525,000,000
470		Light Recovery Vehicle (K-21)	5,717,000,000	33,572,000,000	49,352,000,000	47,444,000,000	41,982,000,000	45,400,000,000	56,100,000,000	52,146,000,000
471		Wheeled Armored Vehicle	-	-	-	4,620,000,000	23,877,000,000	145,862,000,000	202,606,000,000	189,561,000,000
472		K-2 Rifle	17,744,000,000	36,070,307,000	55,649,000,000	65,278,000,000	-	-	-	-
473		10-Ton Recovery Vehicle	9,947,000,000	10,176,141,000	6,889,000,000	2,736,000,000	2,740,000,000	3,408,000,000	2,823,000,000	8,080,000,000
474		Monocular Night Vision Device	35,595,000,000	34,585,000,000	17,003,000,000	17,244,000,000	24,910,000,000	11,633,000,000	-	-
475		K-11 Combat Rifle	17,791,000,000	29,341,812,000	11,200,000,000	966,000,000	15,000,000	449,000,000	11,000,000	-
476		Individual Weapon Day and Night Sight-II	4,405,000,000	7,927,693,000	4,852,000,000	4,350,000,000	2,178,000,000	-	-	-
477		Obstacle Clearance Tank	-	-	-	-	-	-	20,226,000,000	49,114,000,000
478		Saiper Rifle	3,894,000,000	6,347,845,000	7,528,000,000	8,019,000,000	10,899,000,000	16,193,000,000	8,739,000,000	9,490,000,000
479		Small Tactical Vehicle	-	-	-	6,343,000,000	35,777,000,000	50,001,000,000	89,145,000,000	56,149,000,000
480		GOP Scientific Alert System	17,497,000,000	20,042,000,000	80,068,000,000	24,449,000,000	-	-	-	-
481		Critical Facilities Alert System	-	-	100,000,000	172,000,000	19,107,000,000	20,738,000,000	16,013,000,000	13,017,000,000
482		Forward Observer Day and Night Ranging Equipment	28,829,000,000	-	-	-	-	-	-	-
483		Fires Control Vehicle (Using 120mm Self-propelled Mortar)	-	-	-	-	-	-	-	2,431,000,000
484		Multi-function Observation Device	-	-	45,000,000	937,000,000	59,000,000	13,400,000,000	17,097,000,000	14,366,000,000
485		Remote Control Weapon System (RCWS)	21,000,000	870,712,000	5,924,000,000	8,554,000,000	-	-	-	-
486		High-altitude Infiltration Equipment	-	648,000,000	14,053,000,000	857,000,000	-	-	-	-
487		Machine Gun Day and Night Sight	11,000,000	93,507,000	-	-	-	-	-	-
488		7.62mm Machine Gun-II	-	-	10,000,000	3,174,000,000	80,000,000	113,000,000	81,000,000	24,000,000
489		Machine Gun Sight	-	-	-	-	-	352,000,000	7,109,000,000	6,567,000,000

				2013	2014	2015	2016	2017	2018	2019	2020
552		Geomdokuri A-class		199,696,000,000	73,150,000,000	5,009,000,000	10,692,000,000	-	-	-	-
553		Geomdokuri B-class Batch-I		6,767,000,000	6,240,000,000	21,957,000,000	74,927,000,000	116,287,000,000	191,630,000,000	264,216,000,000	270,438,000,000
554		Geomdokuri B-class Batch-II		-	-	-	-	-	-	-	64,296,000,000
555		Korean Next-generation Destroyer (KDDX)		-	-	-	-	-	-	-	-
556		Destroyer (KDDX)		-	-	-	-	-	-	-	5,696,000,000
557		Gwanggaeto-III		7,196,000,000	4,367,000,000	-	-	-	-	-	-
558		Gwanggaeto-III Batch-II		1,000,000,000	3,000,000,000	47,068,000,000	105,821,000,000	176,545,000,000	223,087,000,000	514,684,000,000	555,459,000,000
559		Combat Service Support Boat		58,300,000,000	38,065,000,000	55,604,000,000	59,725,000,000	93,501,000,000	93,501,000,000	84,307,000,000	55,600,000,000
560		Minesweeper Ship - 2nd Round		62,857,000,000	57,371,000,000	66,970,000,000	37,585,000,000	62,270,000,000	99,119,000,000	11,434,000,000	42,565,000,000
561		Amphibious Ship-II		105,934,000,000	136,745,000,000	162,015,000,000	209,976,000,000	162,216,000,000	51,994,000,000	488,000,000	-
562		Tug and Salvage Ship-II		89,003,000,000	62,118,742,000	51,299,000,000	39,387,000,000	7,764,000,000	7,808,000,000	14,227,000,000	4,381,000,000
563		Logistics Support Ship-II		10,250,000,000	32,655,772,000	64,735,000,000	125,234,000,000	104,829,000,000	35,586,000,000	-	-
564		Training Ship		2,369,000,000	7,803,000,000	7,465,000,000	38,836,000,000	89,869,000,000	97,280,000,000	49,842,000,000	42,328,000,000
565		Next Generation Mine Laying Ship		45,219,000,000	92,665,000,000	86,078,000,000	67,772,000,000	-	-	-	-
566		Large Platform Experimental (LPX) Ship - 2nd Round		-	950,000,000	9,860,000,000	55,837,000,000	145,987,000,000	129,396,000,000	80,424,000,000	93,052,000,000
567		High Speed Landing Boat - 2nd Round		-	-	-	-	13,669,000,000	47,159,000,000	47,163,000,000	44,875,000,000
568		High Speed Combat Boat		-	-	-	-	-	-	-	2,046,000,000
569		Special Warfare Support Ship		6,685,000,000	7,802,000,000	10,522,000,000	1,648,000,000	23,000,000	2,096,000,000	4,381,000,000	3,488,000,000
570		Submarine Rescue Ship-II		-	-	3,083,000,000	7,840,000,000	6,494,000,000	83,385,000,000	128,196,000,000	89,941,000,000
571		Composite Influence Mine Sweeping Gear		-	-	-	-	-	764,000,000	11,966,000,000	18,574,000,000
572		Unnamed Mine Disposal Vehicle-II		-	-	-	-	-	5,408,000,000	18,708,000,000	24,382,000,000
573		Special Infiltration Boat		-	-	-	-	1,283,000,000	1,930,000,000	1,983,000,000	72,000,000
574		Jangbogo-II		366,108,000,000	327,954,000,000	248,702,000,000	173,874,000,000	109,479,000,000	52,141,000,000	1,170,000,000	-
575		Jangbogo-III Batch-I		103,223,000,000	240,000,000,000	207,246,000,000	234,993,000,000	359,528,000,000	425,306,000,000	299,092,000,000	527,030,000,000
576		Jangbogo-III Batch-II		-	-	-	9,538,000,000	33,958,000,000	29,059,000,000	30,148,000,000	132,614,000,000
577		Jangbogo-I Performance Improvement		-	-	-	-	-	-	-	63,466,000,000
578		Joint Logistics Over the Shore (JLOTS) Support System		-	-	-	-	-	-	-	1,634,000,000
579		Jeju Civilian-Military Combined Port		200,966,000,000	256,470,108,000	298,056,000,000	-	-	-	-	-
580		Pohang Base Runway Repaving		9,652,000,000	15,867,200,000	16,118,000,000	-	-	-	-	-
581		Submarine Force Command Establishment		1,584,000,000	11,365,577,000	9,428,000,000	2,950,000,000	-	-	-	-
582		Sadong-hang Forward Base		6,731,000,000	18,518,431,000	24,415,000,000	42,215,000,000	-	-	-	-

		2013	2014	2015	2016	2017	2018	2019	2020
583	Aircraft Programs (Lines 584 through 642)	2,427,319,000,000	2,340,340,286,000	2,517,233,000,000	2,587,601,000,000	2,907,651,000,000	3,449,747,000,000	5,217,819,000,000	6,328,661,000,000
584	Aircraft Research and Development								
585	Small Armed Helicopter (R&D)	600,000,000	7,000,000,000	58,526,000,000	55,900,000,000	92,213,000,000	100,213,000,000	98,542,000,000	85,615,000,000
586	Boromae (KF-X) (R&D)		20,000,000,000	55,200,000,000	67,000,000,000	303,000,000,000	435,362,000,000	664,191,000,000	1,040,255,000,000
587	Small Armed Helicopter Air-to-Ground Missile (R&D)		-	759,000,000	7,394,000,000	8,042,000,000	25,229,000,000	21,728,000,000	21,572,000,000
588	Medical Evacuation Helicopter (R&D)		700,000,000	9,000,000,000	20,240,000,000	3,326,000,000	-	-	-
589	Amphibious Utility Helicopter Development (R&D)	4,476,000,000	835,646,000	854,000,000	-	-	-	-	-
590	FA-50 Development (R&D)	63,799,000,000	-	-	-	-	-	-	-
591	Korea Helicopter Program (KHP) Project	70,000,000,000	-	-	-	-	-	-	-
592	Aircraft Production and Procurement								
593	F-15K - 2nd Round	15,325,000,000	10,000,000	-	-	-	-	-	-
594	FA-50 Production	734,795,000,000	527,877,000,000	392,665,000,000	449,444,000,000	166,915,000,000	-	-	-
595	Command Helicopter (VH-X)	-	-	1,396,000,000	7,518,000,000	-	-	-	-
596	Command Helicopter Forward Looking Infrared (FLIR) Camera Installation	-	-	-	89,492,000,000	275,000,000	-	-	-
597	Aerial Refueling Aircraft	-	6,913,000,000	81,654,000,000	-	186,960,000,000	409,200,000,000	516,706,000,000	63,338,000,000
598	Large Transport Aircraft (C-130J)	143,138,000,000	145,444,000,000	22,135,000,000	-	-	-	-	-
599	Maritime Operations Helicopter	87,450,000,000	107,145,990,000	120,326,000,000	105,269,000,000	9,306,000,000	56,289,000,000	50,660,000,000	214,490,000,000
600	Amphibious Utility Helicopter	-	-	-	6,752,000,000	84,944,000,000	121,488,000,000	134,076,000,000	248,916,000,000
601	Korea Utility Helicopter Initial Production	294,738,000,000	50,000,000,000	-	-	-	-	-	-
602	Korea Utility Helicopter Follow-on Production	182,266,000,000	363,872,189,000	376,311,000,000	457,682,000,000	568,567,000,000	509,434,000,000	670,114,000,000	641,948,000,000
603	Next Generation Combat Aircraft (F-X)	337,800,000,000	366,400,000,000	354,044,000,000	598,889,000,000	-	-	-	-
604	Flight Practice Training Aircraft	-	1,803,000,000	8,228,000,000	18,198,000,000	14,000,000	502,000,000	-	-
605	T-50B - 2nd Round	-	17,381,000,000	42,351,000,000	-	-	-	-	-
606	Medical Evacuation Helicopter	-	-	-	-	-	14,750,000,000	173,599,000,000	78,432,000,000
607	Maritime Patrol Aircraft-II	-	-	-	-	100,000,000	1,000,000,000	195,831,000,000	-
608	Maritime Patrol Aircraft - 2nd Round (P-3C)	1,081,000,000	-	-	-	-	-	-	-
609	Basic Flight Training Helicopter	-	-	486,000,000	6,446,000,000	10,000,000,000	39,995,000,000	1,843,000,000	150,000,000
610	Aircraft Crewmember Night Vision Device	30,000,000	177,764,000	28,000,000	1,003,000,000	9,101,000,000	34,000,000	-	-
611	Introductory Tactical Training Aircraft - 2nd Round	-	-	-	-	-	-	4,703,000,000	258,400,000,000
612	Aircraft Tactical Training Simulator	12,217,000,000	9,956,102,000	-	-	-	-	-	-
613	T-50 Simulator	-	-	-	-	-	-	2,737,000,000	12,164,000,000

			2013	2014	2015	2016	2017	2018	2019	2020
645		30mm Wheeled Antiaircraft Gun (R&D)	-	500,000,000	630,000,000	7,215,000,000	6,337,000,000	14,493,000,000	24,794,000,000	-
646		30mm Composite Antiaircraft Weapon (R&D)	964,000,000	-	-	-	-	-	-	-
647		Short-range Rocket Launcher (R&D)	-	917,000,000	3,875,000,000	929,000,000	17,000,000	500,000,000	500,000,000	50,000,000
648		Medium-range Infantry Missile (MRIM) <i>Ihyeongang</i> (R&D)	35,406,000,000	15,768,114,000	-	-	-	-	-	-
649		Heavy Torpedo-II(R&D)	26,163,000,000	16,285,000,000	11,528,000,000	6,705,000,000	6,628,000,000	8,780,000,000	-	-
650		Antiship-missile Defensive Missile (R&D)	49,186,000,000	22,415,000,000	18,763,000,000	500,000,000	500,000,000	13,263,000,000	-	-
651		Army Live Virtual Constructive (LVC) Training System Build-1 (R&D)	-	-	-	-	-	-	2,000,000,000	2,778,000,000
652		Tactical Ship-to-Ground Missile (R&D)	12,485,000,000	9,862,000,000	10,095,000,000	4,736,000,000	9,243,000,000	-	-	-
653		Long-range Surface-to-Air Missile (L-SAM) (R&D)	-	-	7,997,000,000	37,600,000,000	114,055,000,000	93,789,000,000	54,974,000,000	155,552,000,000
654		2.75" Guided Rocket (LOGIR) (R&D)	25,996,000,000	14,196,000,000	7,162,000,000	-	-	-	-	-
655		2nd Generation Long-range Air-to-Ground Missile (R&D)	-	-	-	-	-	349,000,000	13,125,000,000	21,197,000,000
656		130mm Guided Rocket (R&D)	7,446,000,000	7,330,000,000	7,889,000,000	8,523,000,000	9,634,000,000	-	-	-
657		Next Generation Tactical Missile (SAM-X) (R&D)	7,200,000,000	7,200,000,000	19,914,000,000	24,145,000,000	-	-	-	-
658		Tactical Ground-to-Ground Guided Weapon (R&D)	-	-	-	-	-	9,653,000,000	4,900,000,000	-
659		<i>Hyeonmu</i> Performance Improvement (R&D)	149,500,000,000	150,431,000,000	63,811,000,000	69,900,000,000	66,500,000,000	2,859,000,000	-	-
660		<i>Haecheon</i> Performance Improvement (R&D)	60,297,000,000	69,006,300,000	141,319,000,000	115,000,000,000	106,822,000,000	78,416,000,000	-	-
661		<i>Cheolmae-II</i> Performance Improvement (R&D)	27,510,000,000	39,086,000,000	35,113,000,000	23,359,000,000	16,820,000,000	-	-	-
662		155mm Extended Range Projectile (R&D)	-	541,000,000	5,520,000,000	6,328,000,000	7,692,000,000	7,158,000,000	460,000,000	2,341,000,000
663		<i>Hyeonmu</i> 2nd Round Performance Improvement (R&D)	185,800,000,000	155,833,000,000	217,862,000,000	230,800,000,000	114,398,000,000	142,990,000,000	105,450,000,000	74,765,000,000
664		<i>Haecheon</i> 2nd Round Performance Improvement (R&D)	-	-	2,189,000,000	15,700,000,000	4,220,000,000	21,362,000,000	24,164,000,000	87,320,000,000
665		Light Torpedo Performance Improvement (R&D)	-	-	-	-	-	-	-	4,570,000,000
666		Laser Antiaircraft Weapon Block-I (R&D)	-	-	-	-	-	-	3,296,000,000	33,551,000,000
667		Graphite "Power Outage" Bomb (R&D)	-	-	-	-	-	500,000,000	-	8,000,000,000
668		Submarine Launched Mobile Mine (R&D)	10,532,000,000	12,551,325,000	56,000,000	1,295,000,000	14,535,000,000	-	-	-
669		Active Radio Frequency (RF) Deception Device (R&D)	-	2,404,000,000	500,000,000	-	-	-	-	-
670		Small-scale Business Development (R&D)	12,191,000,000	9,311,000,000	18,089,000,000	30,975,000,000	20,731,000,000	-	-	-
671		Guided Weapon Small-scale Business Development (R&D)	-	-	-	-	-	2,975,000,000	3,617,000,000	6,925,000,000
672		Guided Weapons Production and Procurement								
673		Combat Reserve Ammunition	393,181,000,000	405,410,000,000	390,507,000,000	393,271,000,000	358,813,000,000	337,286,000,000	342,090,000,000	551,951,000,000
674		Electronic Time Fuse	3,066,000,000	20,418,922,000	18,965,000,000	18,532,000,000	19,512,000,000	19,508,000,000	-	-
675		Remotely Operated Mine	-	5,400,000,000	18,365,000,000	24,462,000,000	15,954,000,000	6,791,000,000	-	-

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707		Medium-range Air-to-Ground Guided Bomb (2000lbs)	-	300,000,000	19,892,000,000	64,060,000,000	5,000,000,000	-	-	-
708		GPS Guided Bomb (2000lbs) - 3rd Round	-	10,000,000,000	20,040,000,000	27,562,000,000	15,364,000,000	-	-	-
709		Aviation Munitions Fuses	-	-	-	2,000,000,000	5,318,000,000	15,584,000,000	1,047,000,000	16,888,000,000
710		GPS Guided Bomb (2000lbs) - 4th Round	-	-	-	-	-	-	-	112,541,000,000
711		Medium-range Infantry Missile (MRIM) (Anti-tank)	-	-	-	8,376,000,000	21,968,000,000	193,624,000,000	207,018,000,000	248,346,000,000
712		Tactical Ground-to-Ground Missile	-	-	-	-	-	400,000,000	600,000,000	78,027,000,000
713		Cheolmae-II Performance Improvement	-	-	-	-	5,000,000,000	170,827,000,000	136,663,000,000	169,272,000,000
714		Hyommu - 2nd Round Performance Improvement	-	-	-	-	278,902,000,000	304,919,000,000	442,654,000,000	242,139,000,000
715		Haejeong Performance Improvement	-	-	-	-	-	-	33,627,000,000	-
716		GPS Guided Bomb (JDAM) - 2nd Round	10,284,000,000	7,748,208,000	9,091,000,000	663,000,000	-	-	500,000,000	-
717		Guided Weapons Foreign Military Sales Acquisition								
718		PATRIOT Guidance Enhanced Missile-TBM (GEMT)	-	11,248,000,000	69,575,000,000	110,173,000,000	49,284,000,000	-	-	-
719		Ship-to-Air Missile	38,820,000,000	15,711,818,000	886,000,000	886,000,000	1,527,000,000	222,000,000	50,711,000,000	70,606,000,000
720		Submarine-to-Ship Missile	21,931,000,000	36,706,065,000	28,089,000,000	12,484,000,000	11,830,000,000	26,525,000,000	41,850,000,000	-
721		Multipurpose Precision Guided Cluster Munitions	38,009,000,000	25,724,000,000	59,968,000,000	72,538,000,000	30,471,000,000	13,676,000,000	-	-
722		Next Generation Short-range Air-to-Air Missile - 2nd Round	-	2,522,000,000	22,137,000,000	28,154,000,000	39,957,000,000	8,777,000,000	-	-
723		Medium-range Air-to-Air Missile	9,138,000,000	38,948,000,000	62,042,000,000	72,938,000,000	40,703,000,000	49,358,000,000	46,830,000,000	20,282,000,000
724		PATRIOT PAC-3 Missile	-	-	-	-	-	16,700,000,000	119,025,000,000	71,684,000,000
725		PATRIOT Performance Improvement	-	1,200,000,000	35,447,000,000	174,389,000,000	283,710,000,000	375,500,000,000	278,642,000,000	82,485,000,000
726		Defense Program Policy Support (Lines 727 through 768)	1,209,391,000,000	1,360,394,000,000	1,417,401,000,000	1,415,819,000,000	1,444,356,000,000	1,534,035,000,000	1,605,409,000,000	1,855,895,000,000
727		Defense Technology Development								
728		Basic Research (R&D)	44,200,000,000	51,294,000,000	51,353,000,000	49,164,000,000	48,703,000,000	44,271,000,000	41,174,000,000	39,024,000,000
729		Core Technology Development (R&D)	272,029,000,000	282,432,000,000	268,181,000,000	267,671,000,000	262,545,000,000	270,510,000,000	302,662,000,000	401,500,000,000
730		Exclusive Use Technology (R&D)	314,693,000,000	420,954,000,000	420,954,000,000	405,502,000,000	428,887,000,000	505,418,000,000	508,307,000,000	463,737,000,000
731		Advanced Concept Technology Demonstration (ACTD) (R&D)	9,273,000,000	7,780,000,000	-	-	-	-	-	-
732		Core Component Domestic Production Development Support (R&D)	7,500,000,000	9,500,000,000	-	-	-	-	-	-
733		Core Component & Software Development/ACTD (R&D)	-	-	28,041,000,000	25,124,000,000	24,009,000,000	23,855,000,000	26,164,000,000	37,124,000,000
734		Civil-Military Technology Cooperation (R&D) (DAPA)	41,600,000,000	59,000,000,000	66,000,000,000	67,698,000,000	65,446,000,000	66,729,000,000	67,108,000,000	67,844,000,000
735		Agency for Defense Development (ADD)	384,078,000,000	384,868,000,000	424,523,000,000	446,579,000,000	452,506,000,000	458,070,000,000	459,381,000,000	538,580,000,000
736		ADD Payroll Costs (R&D)	207,193,000,000	213,100,000,000	224,245,000,000	234,203,000,000	248,713,000,000	256,615,000,000	261,362,000,000	298,287,000,000
737		ADD Operations Costs (R&D)	16,847,000,000	16,847,000,000	19,558,000,000	20,611,000,000	25,718,000,000	26,906,000,000	26,906,000,000	29,487,000,000

			2013	2014	2015	2016	2017	2018	2019	2020
738		ADD Facilities Construction & Maintenance (R&D)	9,015,000,000	9,885,000,000	13,471,000,000	13,092,000,000	14,198,000,000	14,843,000,000	17,719,000,000	28,449,000,000
739		ADD Research Infrastructure Improvements (R&D)	84,785,000,000	75,397,000,000	93,999,000,000	103,867,000,000	87,016,000,000	76,930,000,000	69,237,000,000	98,000,000,000
740		ADD Technology Support (R&D)	804,000,000	2,242,000,000	-	-	-	-	-	-
741		ADD Research Support (R&D)	65,434,000,000	67,397,000,000	-	-	-	-	-	-
742		ADD Technology/Research Support (R&D)	-	-	73,250,000,000	74,806,000,000	76,861,000,000	82,776,000,000	84,357,000,000	84,357,000,000
743		Defense Agency for Technology and Quality (DTaQ)								
744		DTaQ Payroll Costs (R&D)	35,852,000,000	36,590,000,000	38,121,000,000	39,451,000,000	43,488,000,000	45,286,000,000	47,742,000,000	62,494,000,000
745		DTaQ Operations Costs (R&D)	5,590,000,000	5,650,000,000	5,650,000,000	4,027,000,000	5,716,000,000	5,716,000,000	5,860,000,000	6,294,000,000
746		DTaQ Facilities Construction & Maintenance (R&D)	24,881,000,000	13,752,000,000	12,727,000,000	6,793,000,000	9,773,000,000	8,540,000,000	9,514,000,000	13,249,000,000
747		DTaQ Technology Planning (R&D)	17,223,000,000	21,759,000,000	23,743,000,000	24,452,000,000	25,087,000,000	25,701,000,000	24,570,000,000	26,166,000,000
748		DTaQ Quality Management (R&D)	23,434,000,000	34,401,000,000	37,591,000,000	41,185,000,000	38,250,000,000	42,187,000,000	48,542,000,000	46,580,000,000
749		Acquisition Support	29,038,000,000	32,414,000,000	40,517,000,000	38,173,000,000	39,946,000,000	37,752,000,000	64,185,000,000	153,303,000,000
750		Advanced Research/Analysis Assessment								
751		Test and Evaluation	339,000,000	339,000,000	-	-	-	-	-	-
752		Production Cost Management	763,000,000	1,284,000,000	2,207,000,000	2,268,000,000	2,768,000,000	1,713,000,000	2,279,000,000	6,142,000,000
753		Contract Management	1,815,000,000	1,956,000,000	1,982,000,000	2,011,000,000	2,155,000,000	1,808,000,000	1,896,000,000	2,106,000,000
754		Standards Management	863,000,000	1,250,000,000	1,686,000,000	1,681,000,000	1,705,000,000	1,705,000,000	1,999,000,000	1,999,000,000
755		Air Worthiness Certification	202,000,000	317,000,000	654,000,000	406,000,000	278,000,000	401,000,000	585,000,000	875,000,000
756		Rapid Demonstration Acquisition	-	-	-	-	-	-	-	30,000,000,000
757		Weapon System Operational Improvement Support	-	-	-	-	-	-	-	17,210,000,000
758		Defense Industry Development Support								
759		International Defense Industrial Cooperation Support	423,000,000	423,000,000	917,000,000	942,000,000	934,000,000	1,423,000,000	1,850,000,000	2,063,000,000
760		Defense Industry Development Support	6,145,000,000	11,747,000,000	13,536,000,000	11,969,000,000	12,470,000,000	-	-	-
761		Defense Sector Infrastructure and Mutual Cooperation Environment Development	-	-	-	-	-	856,000,000	1,771,000,000	1,897,000,000
762		Global Defense Firms (Large and Small) Support	-	-	-	-	-	2,250,000,000	2,606,000,000	9,261,000,000
763		Defense Venture Firms Development	-	-	-	-	-	4,350,000,000	6,532,000,000	13,252,000,000
764		Defense Industry Export Support	-	-	-	-	-	5,575,000,000	24,736,000,000	45,014,000,000
765		Defense Industry Interest Rate Differential Compensation	9,100,000,000	7,736,000,000	9,787,000,000	8,080,000,000	8,080,000,000	7,622,000,000	8,995,000,000	7,198,000,000
766		Defense Industry Technology Support								
767		Defense Industry Technology Basic Development	-	-	-	947,000,000	1,591,000,000	643,000,000	254,000,000	229,000,000
768		Defense Industry Technology Protection	-	-	-	-	-	1,180,000,000	866,000,000	932,000,000

		2013	2014	2015	2016	2017	2018	2019	2020
769	Defense Program Administration Support (Lines 770 through 788)	97,840,575,000	116,665,747,000	102,641,508,000	106,566,314,000	109,909,018,000	108,289,991,000	115,562,000,000	156,631,000,000
770	Payroll Costs								
771	Payroll Costs	52,804,575,000	51,354,747,000	52,854,508,000	63,939,314,000	69,618,018,000	74,295,991,000	78,572,000,000	84,073,000,000
772	Basic Expenses								
773	Basic Expenses	9,507,000,000	3,543,000,000	9,293,000,000	9,657,000,000	9,961,000,000	9,824,000,000	9,852,000,000	9,969,000,000
774	Basic Expenses (Total Amount Subject to Payroll)	-	3,899,000,000	-	-	-	-	-	-
775	Affiliated Organizations Basic Expenses (Total Amount Subject to Payroll)	-	734,000,000	-	-	-	-	-	-
776	Public Interest Service Personnel Operations	-	33,000,000	-	-	-	-	-	-
777	Affiliated Organizations Basic Expenses	-	905,000,000	-	-	-	-	-	-
778	Health Insurance Contribution Costs								
779	Defense Acquisition Program Administration Health Insurance Contribution Costs	1,675,000,000	1,602,000,000	1,681,000,000	1,747,000,000	1,808,000,000	1,886,000,000	2,577,000,000	2,769,000,000
780	Defense Programs Information/IT								
781	Defense Programs Information/IT	3,290,000,000	3,815,000,000	13,041,000,000	16,467,000,000	16,627,000,000	14,674,000,000	16,568,000,000	19,672,000,000
782	Information/IT Operations and Maintenance	12,531,000,000	12,908,000,000	3,997,000,000	-	-	-	-	-
783	Administration Support								
784	Education and Training	1,865,000,000	1,677,000,000	3,854,000,000	1,646,000,000	1,672,000,000	1,834,000,000	2,040,000,000	2,294,000,000
785	Government Building Maintenance Management	3,286,000,000	3,286,000,000	8,658,000,000	5,104,000,000	4,970,000,000	436,000,000	430,000,000	412,000,000
786	Relocated Facilities Military Security and Specialized Facilities Establishment	4,586,000,000	24,504,000,000	-	-	-	-	-	-
787	Military Leadership Interest Rate Differential Compensation	3,955,000,000	3,628,000,000	-	-	-	-	-	-
788	Other Administration Support	4,341,000,000	4,777,000,000	9,263,000,000	8,006,000,000	5,253,000,000	5,340,000,000	5,523,000,000	37,442,000,000
789	Internal Transfers (Line 791)	4,586,000,000	5,599,000,000	6,213,000,000	7,617,000,000	7,962,000,000	7,775,000,000	8,210,000,000	8,543,000,000
790	Transfers between Accounting Funds (Regular Accounts)								
791	Civil Service Pension Fund Transfers	4,586,000,000	5,599,000,000	6,213,000,000	7,617,000,000	7,962,000,000	7,775,000,000	8,210,000,000	8,543,000,000

Sources: Data for the 2013 column is adapted from the combined totals of program funding in ROK National Assembly, *2013 Nyeondo Seipsechuryesanansaeopbyeol Seolmyeongseo* Vol. 2 [2013 년도 세입세출예산사업별 설명서 II; 2013 Explanation of Tax Revenue and Tax Expenditure Planned Budget Programs Vol. 2] September 28, 2012, https://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_H1R2B0S9Q2G8L0R9C4R2R0P8N9Y5R5; and ROK National Assembly, *2013 Nyeondo Yesanan Simsabogoseo* [2013 년도 예산안 심사보고서; 2013 Planned Budget Examination Report] December 31, 2012, https://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_H1R2B0S9Q2G8L0R9C4R2R0P8N9Y5R5; the figure for line 36 in 2013 does not match the sum of subordinate lines, as a different figure is given in ROK National Assembly, “Jeongbuisongjeongbo” [정부이송정보; Government Transfer Report] December 1, 2013, 176, https://likms.assembly.go.kr/bill/billDetail.do?billId=PRC_H1R2B0S9Q2G8L0R9C4R2R0P8N9Y5R5.

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APPENDIX B

DEFENSE REFORM 2.0 INITIATIVES

Table 12. Defense Reform 2.0 Initiatives		
Area	Category (Large Projects)	Initiative (Main Projects)
Military Structure	Reorganize the ROK-led Command Structure, based on the ROK-U.S. Alliance	CFC: Transition to a ROK-led Command Under the Continued Robust ROK-U.S. Alliance
		JCS: Enhance Operational Capabilities to Respond to Omnidirectional Security Threats
	Reorganize to an Efficient Unit Structure for the Exercise of Combat Power	Army: Reorganize to a Force that is Capable of Carrying Out Rapid Decisive Operations
		Navy: Reorganize to a Force Suitable for Multi-Dimensional Surface, Subsurface, and Aviation Operations
		Marine Corps: Reorganize to a Force that is Capable of Defending Strategic Islands and Executing Multi-Dimensional High-Speed Amphibious Operations
		Air Force: Reorganize to a Force that is Capable of Strategic Deterrence and Aerospace Operations
	Restructuring the Defense Manpower Structure Centered on Combat Efficiency	Reduction of Standing Troops: Phased Reduction to 500,000 Troops by 2022
		Redesign the Defense Manpower Structure Centered on Operations and Combat: Manpower Structure that Exercises the Best Combat Power
		Reinforce Reserve Forces: Strengthen Key Forces Through Selection and Concentration
	Reorganizing to a Force Structure Centered on Advanced Technology Capabilities	Realization of Strategic Deterrence
		Preparedness for Transnational and Non-Military Threats
		Lead Technological Advancement
		Contribute to Promotion of the Domestic Defense Industry and Economic Stimulation
		Acquire Capabilities to Protect National Interests
	Strengthen Response Capabilities to Transnational and Non-military Threats	Invest in Spending for Force Improvement
		Strengthen Cybersecurity Capabilities
		Strengthen Expertise in Preparedness for Natural and Manmade Disasters and Terrorism

Area	Category (Large Projects)	Initiative (Main Projects)
National Defense Operations	Establish Civilian Control and the Observance of Political Neutrality in the Military	Pursue Meaningful Civilian Control of National Defense
		Systematic and Conscious Improvements for Guaranteeing the Political Neutrality of the Military
	Improve the Workforce Management System for Defense Operations Efficiency	Reduction of the Service Period for New Soldiers for the Purpose of Efficiently Applying the Nation's Human Resources
		Adjust the Quota of General Officers
		Organize the Balance of the Military Services and Joint Units in Order to Strengthen Jointness
		Expand the Ratio of Females in the Military and Improve Service Conditions
	Develop Military Capabilities and a Management System of the 4th Industrial Revolution	Military Operational Capabilities on the Basis of Advanced Information and Communications Technologies
		Expand Technology-Powered Training Systems
	Transition to an Open Operations System Through Public Participation and Communication	Open National Defense Operations Through Improved Transparency and Integrity
		Develop Military Facilities that Mutually Support Regional Communities
	Strengthen Defense Acquisitions and Operations Management by Applying the Total Lifecycle Concept	Strengthen Military Supply Support on the Basis of Big Data Within the Total Lifecycle Concept
Barracks Culture	Strengthen Protection of Service members' Rights Commensurate with the Status of an Advanced Democratic Nation	Guarantee Human and Civil Rights that Meet Public Expectations
		Institutional Reforms for Probes into and Fundamental Resolution of Suspicious Deaths
	Improve Welfare and Service Conditions to Boost the Morale of Service members	Reasonable Remuneration for Military Service
		Improve Officer and NCO Welfare to Enable Them to Focus on Military Service
		Improve the Conditions of Barracks Life
		Strengthen Employment Support and Minimize the Interruption to Individual Careers
		Improve the Military Medical System

Area	Category (Large Projects)	Initiative (Main Projects)
Defense Industry	Improve the Defense Acquisition System with Increases in Efficiency and Expertise	Requirement Planning of Weapons Systems Based on Research Results of Professional Research Institutions
		Strengthen Connections at All Levels from Weapons Systems Acquisition through Operations and Maintenance
		Strengthen Timely and Effective Adjustment and Consultation Functions
		Reinforce the Support System for Decision-Making Processes and Task Performance
		Improve Defense Acquisitions Education and Personnel System
		Expand Participation of Civilian Experts in Primary Decision-Making Processes
		Increase Flexibility in Defense Acquisitions
		Apply Optimal Business Methods
	Strengthen Defense R&D Capabilities and Secure Defense Industry Competitiveness	React to Rapid Technological Change through Creative and Challenging Research
		Transition to an Open R&D System
		Redefine the Roles of Defense R&D Executing Organizations
		Develop a Healthy Defense Industry Ecosystem and Establish Mutually Supporting Partnerships
		Foster Small, Medium, and Venture Firms at Each Level of Growth, and Create High Quality Jobs
		Alleviate Burdens on Defense Firms and Remove Obstacles to Growth
		Strategic Export Support: Establish Tailored Strategic Approaches to Regions and States
	Increase Defense Industry Transparency and Eradicate Defense Industry Corruption	Heighten Preventative Measures Against Corruption
		Effective and Tailored Sanctions Against Each Type of Corruption
		Pursue and Develop Conditions for Aggressive Task Performance

Source: Data is adapted from ROK MND, *Gukbangaehyeok 2.0* [Defense Reform 2.0] 16-54.

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