NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

THE MEDIUM EXTENDED AIR DEFENSE SYSTEM: A RENAISSANCE IN TRANS-ATLANTIC ARMAMENTS COOPERATION?

by

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March 1999

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE March 1999	3. REPORT TYPE AND DATES COVERED Master's Thesis

4. TITLE AND SUBTITLE : THE MEDIUM EXTENDED AIR DEFENSE SYSTEM: A RENAISSANCE IN TRANS-ATLANTIC ARMAMENTS COOPERATION?

5. FUNDING NUMBERS

6. AUTHOR(S)
Engelhardt, Robert J.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Naval Postgraduate School
Monterey, CA 93943-5000

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Defense Threat Reduction Agency (DTRA)

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES
The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT *(maximum 200 words)*

The Medium Extended Air Defense System (MEADS) is the only theater missile defense system being developed within NATO to defend forward-deployed maneuver forces and NATO territory from theater ballistic missile attack. To gain the extra funding needed to keep this expensive TMD system alive, and to improve its reputation for reliability in Alliance weapon programs, the United States convinced NATO Europe that MEADS would be the model for triggering a "renaissance in armaments cooperation." To NATO Europe, however, MEADS became a litmus test of America's credibility as a future armaments partner. MEADS' European partners threatened to end armaments cooperation and pursue a policy of European self-sufficiency, which might undermine NATO's cohesion, if MEADS should fail because of U.S. political and bureaucratic interests.

This thesis examines U.S. and European decision-making concerning whether MEADS becomes the model for future trans-Atlantic armaments cooperation or the impetus for fragmenting NATO cohesion. It concludes that the West's common strategic interest in maintaining stability on the European continent and in countering the increasing menace from the proliferation of WMD and ballistic missiles will prevent a failed MEADS from threatening the near-term viability of the fifty year old trans-Atlantic alliance.

14. SUBJECT TERMS
Medium Extended Air Defense System (MEADS), Theater Missile Defense (TMD), Ballistic Missile Defense (BMD), North Atlantic Treaty Organization (NATO), Cooperation, Weapons of Mass Destruction (WMD)

15. NUMBER OF PAGES
132

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. 239-18

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THE MEDIUM EXTENDED AIR DEFENSE SYSTEM: A RENAISSANCE IN TRANS-ATLANTIC ARMAMENTS COOPERATION?

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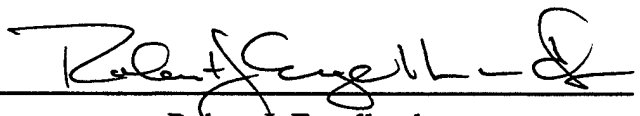
Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

NAVAL POSTGRADUATE SCHOOL
March 1999

Author: 
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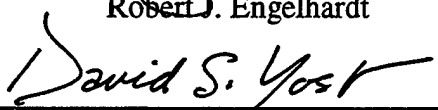
Approved by: 
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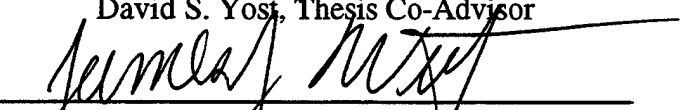
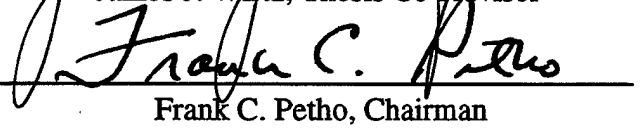

James J. Wirtz, Thesis Co-Advisor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ABSTRACT

The Medium Extended Air Defense System (MEADS) is the only theater missile defense system being developed within NATO to defend forward-deployed maneuver forces and NATO territory from theater ballistic missile attack. To gain the extra funding needed to keep this expensive TMD system alive, and to improve its reputation for reliability in Alliance weapon programs, the United States convinced NATO Europe that MEADS would be the model for triggering a "renaissance in armaments cooperation." To NATO Europe, however, MEADS became a litmus test of America's credibility as a future armaments partner. MEADS' European partners threatened to end armaments cooperation and pursue a policy of European self-sufficiency, which might undermine NATO's cohesion, if MEADS should fail because of U.S. political and bureaucratic interests.

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EXECUTIVE SUMMARY

The Medium Extended Air Defense System (MEADS) is a trans-Atlantic armaments program initiated in 1995 by the United States, Germany, and Italy to design and develop a mobile point defense system capable of protecting forward-deployed forces and NATO territory from a multitude of existing and emerging airborne threats. The centerpiece of MEADS' mission was to defend against theater ballistic missile attack. The MEADS theater missile defense (TMD) concept is unique. It combines the ability to move with ground maneuver forces, the ability to deploy rapidly to crisis areas via non-strategic transport, and an ability to engage a diverse array of threats. Furthermore, it is the only TMD weapon being developed as a NATO system; and it is, to date, the biggest joint development project the United States has undertaken with its European allies. America's estimated 60 percent share of the originally planned cost to design, develop, and procure MEADS was more than $11 billion through 2016.

The Clinton administration sold the MEADS concept as the model for trans-Atlantic weapon development in a new era constrained by reduced defense spending. The United States hoped MEADS would improve America's reputation in international weapons programs by triggering a "renaissance in armaments cooperation" between the United States and NATO Europe. However, to NATO Europe, MEADS became a litmus test of America's future credibility as a reliable partner. A failure on America's part to remain committed to MEADS, some feared, would push NATO European governments

to exclude U.S. defense industry from their lucrative arms markets and turn inward to a policy of European self-sufficiency. If this occurred, NATO might not survive.

Germany and Italy understood the importance of TMD in carrying out NATO's traditional territorial defense mission as well as in responding to the new post-Cold War need to respond to regional crises outside the Alliance's borders. The United States was a necessary partner not only for fiscal reasons, but also because of America's dominance in missile defense technologies, research and development, and operational experience. Germany and Italy nonetheless remained wary and concerned that internal U.S. bureaucratic and political interests might derail MEADS and leave them without a TMD capability to protect their populations and deployed forces. The United States promised to alleviate their apprehension through a new "renaissance in armaments cooperation."

By late 1998, however, domestic U.S. political and bureaucratic factors reminiscent of those prominent during the Cold War resurfaced and have nearly killed MEADS' chances of being realized. The United States was unwilling to jeopardize its higher priority TMD systems to fully fund MEADS. Instead, the United States presented an alternative concept to Germany and Italy that would be cheaper, but less capable. The Germans and the Italians argued that prospects for future trans-Atlantic armaments cooperation would be jeopardized unless the United States demonstrated a solid commitment to MEADS. Both sides of the Atlantic have since been locked in a process of bargaining to find a mutually beneficial resolution to the MEADS issue, thereby resolving the doubt this endeavor has cast over NATO's cohesion.

Applying theory on intra-alliance management to the MEADS case suggests that the common interest in preserving NATO will force a compromise. NATO's current common interest rests on the strategic necessity to remain unified to better maintain the peace on the Alliance's southern and southeastern borders, uncertainty over Russia's long-term prospects for transformation to a trusted partner in European affairs, and emerging ballistic missile threats that will eventually place all of NATO within striking distance of weapons of mass destruction. Depending on its practical implementation, a compromise on MEADS may not erase the obvious failure of the United States to live up to its promises, but may rather serve to entrench the European perception that America is not a reliable armaments partner. Finally, MEADS' failure has only perpetuated the status quo in trans-Atlantic armaments cooperation. No "renaissance in armaments cooperation" has emerged, despite early claims that MEADS would be a model for future collaboration.

ACKNOWLEDGMENTS

I wish to thank my thesis co-advisors, David Yost and James Wirtz, for their guidance and instruction.

Most importantly, to my wife, Elizabeth, and my son, Kyle, I want to thank you for the time you gave up during the last eighteen months. Without your patience, love and understanding this thesis could not have been written.

I. INTRODUCTION

A. BACKGROUND

The parameters of the ballistic missile defense (BMD) debate have been altered since the end of the Cold War. BMD programs have come under political and fiscal scrutiny comparable to that affecting a great number of other weapons programs. Before 1989-91, the main threat to the United States and its NATO European allies was the Soviet Union (and the Warsaw Pact). Accordingly, the U.S. BMD effort was directed primarily against the Soviet "strategic" ballistic missile force. As the West struggled to comprehend the implications of the events in the Soviet Union during the summer of 1991, however, the nature of the new global threat had already revealed itself during the Gulf War. Regional instability and the proliferation of weapons of mass destruction (WMD) and their primary means of delivery—ballistic missiles—began to fill the void being created by the looming collapse of Soviet power.

The traditional military threat posed by the Soviets was replaced by regional instability. National and ethnic tensions have ignited a series of regional conflicts since 1991. In some cases, these conflicts have been intensified by the proliferation of WMD and ballistic missile systems and technology. Ballistic missile proliferation has affected already turbulent regions, including North Africa, the Middle East, South Asia, and North-East Asia. [1] The primary lesson learned by nations studying U.S. capabilities during the Gulf War was that conventional weapons are not sufficient to deter or counter

[1]Robert Rudney, "The Contribution of the Medium Extended Air Defense System (MEADS) to the U.S. Post-Cold War Strategy," *Comparative Strategy* (1997): 293.

superior U.S. conventional military strength.[2] Therefore, several states have initiated, accelerated or acquired ballistic missile programs and capabilities and have sought WMD payloads to deter U.S. intervention in future regional crises. The synergistic result of regional instability and ballistic missile and WMD proliferation has forced profound changes in how the West organizes and structures its defense efforts to meet this new threat.

In response to the threat of regional instability and the proliferation of ballistic missiles, the United States has taken the lead in developing and deploying theater missile defense (TMD) systems designed to protect American and Allied forces from ballistic missiles. Because of the increasing trend since 1991 to commit forces to coalition operations and because of reduced defense budgets on both sides of the Atlantic, however, there has been a push for greater trans-Atlantic cooperation on armaments programs to maximize interoperability, reduce costs, and preserve defense-industrial capabilities. Of the five TMD programs in the U.S. defense budget, however, only one represents a true effort at international cooperation—the Medium Extended Air Defense System, or MEADS.[3] MEADS is a trilateral TMD program involving the United States, Germany and Italy. The three NATO allies have agreed to share the cost and development associated with the first two phases of the program on the basis of a 60-25-

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[2] See Douglas R. Graham, "Missile Defense Capability," *Comparative Strategy* (1993), 37-40.

[3] The five TMD programs include: three lower-tier (Patriot Advanced Capability-3 (PAC-3), Navy Area Wide, and MEADS) and two upper-tier systems (Theater High Altitude Air Defense (THAAD) and Navy Theater Wide).

15 allotment. Initial unit deployment was projected to begin by FY2007, production and acquisition through FY2016, resulting in a likely operational life out to 2025.[4]

The burden sharing arrangement of the MEADS project is being touted as a model for future trans-Atlantic armaments cooperation. However, to NATO Europe, MEADS is also a test of America's future reliability as a partner in trans-Atlantic weapons programs following disappointments in collaborative efforts during the Cold War. America's demonstrated commitment to the MEADS program may serve to persuade its Allies to continue with the traditional practice of anchoring many of their major defense acquisitions to the United States. Conversely, a U.S. failure to pursue MEADS could cause them to turn towards a policy of European self-reliance as advocated by France.

B. THESIS QUESTION

This thesis examines the factors likely to determine whether MEADS becomes the model for future trans-Atlantic armaments cooperation or another negative experience in NATO cooperation. To accomplish this task, three fundamental questions are addressed. First, of the five TMD programs the United States is currently developing, why is MEADS the only system being jointly pursued with NATO partners. Second, to what extent are U.S. political, bureaucratic, and industrial factors weakening the viability of MEADS and the credibility of the United States as a partner in future NATO armaments projects? Lastly, and most important, what impact would a failure on the part of the

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[4]General Accounting Office, *Defense Acquisition: Decision Nears on Medium Extended Air Defense System*, 9 June 1998, GAO/NSIAD-98-145, Report to the Chairman, Subcommittee on Military Research and Development on National Security, House of Representatives.

United States to remain committed to MEADS have on trans-Atlantic cohesion within NATO?

The thesis assesses the potential impact MEADS' fate could have for future trans-Atlantic armaments cooperation and NATO cohesion. If the trilateral MEADS program is canceled because of a lack of U.S. political commitment, America's NATO Allies may move toward a policy of greater European self-reliance, an approach that could harm Alliance cohesion. In the foreseeable future, however, because of the challenges in the new security environment and the prevailing economic constraints, the United States and Europe will probably not jeopardize their mutually beneficial relationship within the NATO alliance as a result of disappointments associated with the MEADS project.

C. THEORY

To analyze and draw plausible conclusions from the material presented in Chapters II through V, applicable portions of the theoretical work done by Glenn H. Snyder on intra-alliance dynamics will be used to guide the assessment of MEADS' future offered in Chapter VI.[5] Snyder examines the interactions of states within alliances when the international structure is characterized by multipolarity. He justifies his focus on multipolar systems on the grounds that multipolarity has been the structural norm during most of international history, and that the two possible deviations from this norm, bi-polarity and unipolarity, originate from a multipolar foundation.[6] Furthermore, Snyder believes that the international system in the foreseeable future will be multipolar. While

[5] Glenn H. Snyder, Alliance Politics (Ithaca, N.Y.: Cornell University Press, 1997), 1-39.

[6] Ibid., 3.

the international structure that emerged after the end of the Cold War is generally accepted as having been unipolar in that the United States was the sole remaining superpower, few would argue that the same environment remains today. Recent vetoes by France, Russia, and China of U.S.-sponsored United Nations Security Council resolutions on Iraq or Yugoslavia exemplify the growing tendency by some of the remaining great powers to challenge U.S. hegemony in an attempt to equilibrate the international balance of power.

1. Alliance Management Through Bargaining

Snyder's theory addresses two phases in the life of an alliance: formation and management. He defines "management" as the joint and unilateral processes by which alliance members try to keep the alliance alive and to advance their own interests within it.[7] The dominant theoretical model in both alliance formation and management is that of bargaining. During the formation of an alliance, states bargain over its terms, such as the scope of their commitments or the amount of forces to be contributed and under what contingencies. During the subsequent managing of the alliance, allies may bargain over levels of preparedness during peacetime (burden sharing), war plans, or the amount of support to be provided in crisis confrontations with the adversary. Given NATO's continued preeminence in European security affairs, this thesis considers only the theoretical construct found in the management phase. MEADS falls within the broad parameters of "levels of preparedness during peacetime," in Snyders's theory. MEADS

[7] Ibid.

represents a peacetime endeavor among three NATO allies to counter the increasing "peripheral" threat from WMD and ballistic missile proliferation.

Alliance management involves the pursuit of both "common" interests and "competitive" interests and is thus essentially a process of bargaining.[8] The most fundamental common interest is to preserve the alliance, whereas the primary competitive interest is to control or influence one's fellow ally or allies in order to minimize one's own costs and risks. The need to manage the alliance arises when competitive interests among allies threaten to pull them apart from their most fundamental common interest. For NATO this is the preservation of the collective defense commitment and the military posture to honor it effectively.

According to Snyder, the outcomes of intra-alliance bargaining will depend on each of the parties' relative bargaining power. Bargaining power is a function of three determinants: the allies' dependence on the alliance, their commitment to the alliance, and their comparative interest in the object of bargaining. In most cases, a state's bargaining power will be greater, the lower its dependence, the looser its commitment, and the greater its interests at stake.[9] The relationship between the lower relative levels of dependence and commitment and a higher relative level of interests-at-stake may appear contradictory at first glance. A concrete example may clarify the theory, however. If Germany and Italy place a higher interest on MEADS than does the United States, their threat to upset trans-Atlantic armaments cooperation is more credible and this strengthens

[8] Ibid., 165.

[9] Ibid., 166.

their bargaining position. The interactions of dependence, commitment, and interests-at-stake will provide the basis for assessing intra-alliance bargaining power and will serve as the framework for analyzing and assessing what impact the MEADS outcome could have on future trans-Atlantic armaments cooperation and possibly even NATO cohesion. First, however, the three bargaining power determinants need to be defined.

a. *Dependence*

Snyder defines a state's dependence on an alliance as the net benefit it receives from the alliance, compared to the benefits available from alternative sources. Benefits are net because the values provided by an ally are partially offset by the costs of one's own commitment to the ally. More succinctly, Snyder offers that military dependence is a aggregate of three factors: (1) a state's need for military assistance, (2) the degree to which the ally fills that need, and (3) alternative ways of meeting the need, such as increasing one's own military preparedness or relying on an alternative ally. The more dependent one's partner, the greater one's power over it. The opposite is also true. The greater one's own dependence, the less power one has. Thus, the bargaining edge will generally go to the least dependent party.

b. *Commitment*

The second component in the relative bargaining power of allies is their degree of commitment to the alliance. Commitment, like dependence, weakens bargaining power. The more firmly one is committed to the alliance, the less credible, and therefore the less effective, are threats to withdraw support from an ally or abandon the alliance. Such threats, whether real or perceived, are, according to Snyder, probably

the most important tactical source of alliance bargaining power. Within the degree of commitment, expressed as a contract, there is a sense of obligation that engages legal and moral values that did not exist before the alliance was formed. A commitment among allies engages political values as well, such as prestige and reputation for honoring agreements. All of theses values would be sacrificed if the commitment was not honored.

There is an additional aspect of commitment that is important to intra-alliance decision-making dynamics: commitment-by-interest. If a less dependent state (typically the stronger state) has a strategic interest in defending or aiding a more dependent ally (the weaker state), it will be more difficult to make a credible threat to withhold support.[10] Likewise, if the more dependent ally understands the strategic interest relationship, it will have greater bargaining power by being able to resist the ally's pressure. Strategic interest tends to have an inverse effect on the relative bargaining power among allies. A stronger state has a clear interest in maintaining a weaker state's existence and independence, and will act to protect it since it cannot defend itself. Thus, a strong state, if it can defend itself, cannot credibly threaten to withhold support, whereas the weak state can afford to do so.

[10] On page 169, Snyder amplifies the definition of "strategic:" an interest is strategic if the stronger state would have come to the aid of the weaker state even in the absence of an alliance treaty. Numerous historical examples of this relationship exist: U.S. support to Britain during the early years of World War II through Lend-Lease, or the U.S. military commitment to Kuwait since 1990 in the absence of a formal treaty.

c. *Interests*

The third bargaining power determinant is the parties' interest in the specific issue about which they are bargaining. The higher a state values what it is being asked to give up, and the lower it values what the partner would offer in return, the more it will resist a particular proposal. In intra-alliance bargaining, the parties threaten to frustrate the realization of their common interest—ultimately, preserving the alliance—in order to prevail on the issue in which they are in conflict. Their mutual dependence is a measure of how much harm they could inflict on each other by breaking off the relationship. The credibility of their threat to do that not only depends on the degree of dependence or the firmness of their commitments, but also on the comparative intensity of their interest in the issue being bargained over.[11] As this case study will demonstrate, an ally (Germany, Italy) that is more dependent and more committed than its partner (the United States) might nevertheless have superior bargaining power if it can convince its ally that it places a greater value on the subject of negotiation.

2. Bargaining Range

In bargaining between allies, an agreement or compromise may fall within a range of possible outcomes that would make both parties better off than if they continued to disagree—the idea of the "net" benefit. At the extreme edges of this range of possibilities, however, is the risk that continued disagreement between allies could lead to the collapse of the alliance. A likely outcome is that a failure to reach an agreement would not lead to the alliance's collapse, but rather to a deterioration of its value or a

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[11] Ibid., 171.

failure to increase its value. Snyder postulates that even though nonagreement in bargaining is not likely to lead to collapse, the weakening of the alliance in the present will increase the probability of its breakup in the future.

Finally, Snyder postulates that when the threat from the outside adversary (the common interest) is high relative to the subject of bargaining (the competitive interest), the common interest will prevail and states will seek a compromise to maximize their net benefits. But when mutual dependence declines, perhaps as the external threat decreases, bargaining will be tougher.[12] According to Snyder, when mutual dependence decreases as a result of a decreased threat, allies will begin to attach more importance to their gains relative to each other instead of seeking to maximize their joint gains relative to the adversary. When this occurs, alliance cohesion will be harder to maintain.

D. OUTLINE

Chapter II examines the evolution of U.S. and European policy on TMD. The chapter begins by exploring European reactions to U.S. BMD initiatives during the Cold War. This period shaped a strategic culture of European views on missile defense. Chapter II then examines how U.S. and NATO European BMD policies have been shaped by the end of the Cold War and the experiences of the Gulf War. Finally, the chapter concludes by reviewing the steps NATO has taken since 1991 to forge unanimity on dealing with the threat from ballistic missiles.

Chapter III demonstrates that the requirement for MEADS was not conceptualized in a vacuum, but was generated in response to the increasing threat to Europe and

[12] Ibid., 172.

coalition operations from the proliferation of ballistic missiles on NATO Europe's southern and southeastern periphery. The chapter first examines the lessons of the Gulf War (above all, the potential for ballistic missiles to complicate Western-led coalitions responding to regional crises) and then considers the current and emerging ballistic missile threat to NATO-deployed forces and NATO territory.

Chapter IV examines how and why MEADS became a NATO TMD system. The first section reviews the evolution of MEADS into an international program and how the United States sold MEADS to NATO Europe under the guise of a renewed relationship in trans-Atlantic armaments cooperation. Chapter IV then outlines the national rationales behind German, Italian, French, and British decisions to join or not join MEADS.

Chapter V explores how domestic U.S. political and bureaucratic interests have influenced MEADS' viability as a NATO weapons program and its impact on future trans-Atlantic armaments cooperation. Specifically, the chapter explores how U.S. political support and funding for MEADS disappeared as a result of competing higher priority U.S. TMD programs and associated struggles between the executive and legislative branches of government. Additionally, German and Italian reactions to U.S. policy decisions are presented to support judgments about how U.S. credibility in armaments cooperation has likely been further damaged for the near future.

Finally, Chapter VI applies Snyder's theoretical alliance management template to the data presented in Chapters II through V as a framework to assess the plausible impact the MEADS case will have on future trans-Atlantic armaments cooperation and NATO cohesion.

II. EVOLUTION OF U.S. AND EUROPEAN TMD POLICY

A. INTRODUCTION

From the late 1950s to the late 1980s, U.S. BMD policy, strategy, and programs were dominated by the U.S.-Soviet confrontation, with intermittent attention to Chinese and other third party threats. America's European partners were essentially "secondary parties" to this superpower competition. Friction among NATO allies over BMD policy still existed. European reactions to U.S. BMD initiatives—both strategic and theater—have been more critical than supportive since the debate first started in 1967.[13] Over the course of the last thirty years there have been three periods in which U.S. BMD initiatives have stirred considerable debate within the Alliance: 1967 to 1972 (the Sentinel and Safeguard ABM systems), 1983 to 1987 (the Strategic Defense Initiative or SDI), and the current period from the Gulf War to the present (establishing a unified BMD strategy to counter the proliferation of WMD and ballistic missiles).[14]

B. BMD POLICY AND THE SOVIET UNION

The first two periods of BMD initiatives sought to defend the West against a massive Soviet first strike. For Europeans, however, BMD issues appear much more complex than in the analyses sometimes advanced by the United States. America's most important European allies—Great Britain, France, and West Germany—were concerned

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[13] David S. Yost, "Western Europe and the U.S. Strategic Defense Initiative," *Journal of International Affairs* (Summer 1988), 272.

[14] The first debate was terminated by the ABM Treaty. The second petered out after the conclusion of the INF Treaty, particularly when it became apparent that no U.S. National Missile Defense (NMD) deployment was at hand.

that U.S. BMD policies could lead to a "de-coupling" of the U.S. nuclear guarantee to Europe by creating a "Fortress America," leaving Europe vulnerable to Soviet nuclear coercion or attack.[15] Second, it was believed between 1967-1972 and 1983-1987 that U.S. BMD initiatives could undermine the credibility of NATO's "flexible response" nuclear strategy and destabilize East-West relations by pushing the two superpowers into a BMD arms race.

This second view has been the most critical issue for Britain and France. British and French criticism of U.S. BMD policies between 1967-1972 and 1983-1987 stemmed from the fear that a BMD arms race would give the Soviets a capability to negate London's and Paris's nuclear deterrent.[16] Additionally, while not a nuclear power itself, West Germany viewed BMD as destabilizing to overall East-West relations and, therefore, like Britain and France, favored relying on existing nuclear deterrence arrangements. As a consequence, Britain, France, and West Germany were opposed to any BMD program that would undermine the 1972 Anti-Ballistic Missile (ABM) Treaty by igniting the arms race the treaty was ostensibly designed to prevent, at least in the eyes of its American proponents. While these were the main European views regarding the likely effects of a U.S.-based national missile defense system, the debate over theater defenses included an additional argument—assessed costs and effectiveness.

The debate over a "Europe-based" missile defense system during the Cold War also included apprehension over possible erosion of the ABM Treaty, but such a system

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[15] David S. Yost, "BMD and the Atlantic Alliance," *International Security* (Fall 1982), 144.

[16] Ibid., 147.

was rejected mainly because of the assessed costs and technical effectiveness required to defeat the redundancy and variety of Soviet missiles—from cruise missiles to ICBMs.[17] European governments held that the share of TMD costs they would be expected to bear would consume a disproportionate amount of their defense budgets, resulting in an inability to fund necessary conventional armaments (e.g., aircraft, armor and battlefield missile systems) that were at least equally important to NATO's deterrence credibility. Therefore, America's European NATO allies saw no affordable and technically feasible option other than the threat of nuclear retaliation as a deterrent.[18]

In early 1985, however, there was some acceptance of the SDI as a research program within NATO. This change of position was reflected in an official NATO Nuclear Planning Group (NPG) communiqué:

> We support the United States' research program into these [BMD] technologies, the aim of which is to enhance stability and deterrence at reduced levels of offensive nuclear forces. This research, conducted within the terms of the ABM Treaty, is in NATO's security interest and should continue.[19]

Additionally, several NATO allies—Britain, West Germany, and Italy—joined the SDI research program for a variety of reasons: (1) the assurance that the United States would not use the SDI to achieve nuclear superiority over the Soviet Union; (2) the U.S. assurance that the SDI would adhere to the ABM Treaty; (3) the conviction that it was

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[17] David S. Yost, "European Anxieties about Ballistic Missile Defense," *Washington Quarterly* (Fall 1984), 123.

[18] Ibid., 124.

[19] Final communiqué, NATO Nuclear Planning Group, 27 March 1985, paragraph 4, cited in David S. Yost, "Western Europe and the U.S. Strategic Defense Initiative," *Journal of International Affairs* (Summer 1988), 274.

prudent to uphold Alliance solidarity and cohesion in the face of ongoing U.S.-Soviet arms control talks; (4) the judgment that the SDI was a research program and that any effective deployment would not require national approval for many years; (5) the view that the opportunity to participate with the United States in high-technology research was worth seizing; (6) the assessment that clear Soviet aggressiveness in developing strategic and tactical anti-missile systems and anti-satellite weapons (ASATs) required a response in kind from the West; and (7) the assumption that research in the SDI would likely lead to the future development of improved air defenses—including TMD capabilities—for Europe.[20]

France, it should be noted, refused to participate in the SDI program, mainly on the grounds that doing so would entail a subordination to the United States in program development that would run counter to France's national identity and security interests.[21] Moreover, France believed that as part of its desire to achieve "European" autonomy, any TMD initiative should be an intra-European effort and not a trans-Atlantic one. This consistent French defense policy would reemerge in the MEADS program ten years later.

In summary, the staunch European opposition to the U.S. BMD initiatives in the 1967-1972 period was based on the desire to prevent a destabilizing effect on East-West relations and retain the credibility of the British and French nuclear deterrent. While these were still central issues in the 1983-1987 trans-Atlantic debate regarding the U.S. SDI, European positions became more flexible with the realization that Soviet BMD

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[20] David S. Yost, "Western Europe and the U.S. Strategic Defense Initiative," 272-276.

[21] Ibid., 306.

activities at the time mandated some U.S. research in BMD and the judgment that NATO should play a role in it.

C. BMD POLICY SINCE THE GULF WAR

While one could argue over the exact year the Cold War and the threat of a massive Soviet nuclear strike ended, the threat posed by proliferating theater ballistic missiles (TBM)[22] became clear to the West on 18 January 1991—one day after the commencement of Operation Desert Storm. On this day Iraq launched its first short-range ballistic missile (SRBM) attack against cities in Israel and cities and coalition forces in Saudi Arabia. Although Iraq chose not to employ WMD during the Gulf War, it did possess SRBM warheads armed with chemical weapons.[23] Since the Gulf War, Alliance agreement on policy and strategy in response to the proliferation of WMD and ballistic missiles has been easier to come by than in the past. These policies and strategies, however, have been influenced by internal political and bureaucratic factors as well as assessments of external threats.

Current U.S. policy on BMD—encompassing both National Missile Defense (NMD) and TMD—was shaped by events during 1990-1991. In the 1991 State of the Union address—while the Desert Storm air campaign was still being waged—President Bush announced that he had "directed that the SDI program be refocused on providing

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[22] TBMs range from short-range (approximately 150 km) to intermediate-range (less than 5,000 km).

[23] Commission to Assess the Ballistic Missile Threat to the United States, *Executive summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States*, 104th Congress, 15 July 1998, 14. Available [Online]:<http://www.house.gov/hasc/testimony/105thcongress/BMThreat.htm>.

protection from limited ballistic missile strikes, whatever the source."[24] The reorientation of the SDI—changed to Global Protection Against Limited Strikes (GPALS)—would now serve, as President Bush further outlined, "to defend the United States, its forward-deployed military forces, and its allies from deliberate, accidental, or unauthorized attacks involving up to roughly 100 reentry vehicles (or missiles)."[25] GPALS envisaged a BMD architecture that consisted of space-based sensors cueing both theater and strategic ground-based defense systems; the concept envisioned that future technological breakthroughs would eventually add a space-based intercept capability to GPALS. President Bush's election defeat, however, ended the GPALS concept.

With President Clinton's election in 1992, U.S. BMD policy and programs, along with the rest of the defense budget, were subjected to a comprehensive review. The resulting 1993 *Bottom Up Review* (BUR) reflected the assessment that theater ballistic missiles posed a more immediate threat to U.S. forces overseas than did the possibility of a limited Russian or Chinese missile attack against the United States. The BUR focused Department of Defense (DoD) efforts on individual TMD programs instead of the more ambitious and costly GPALS or SDI concepts. Although TMD became the Administration's chief BMD priority, the effort was downgraded from acquiring and deploying a system to demonstrating that the necessary technology was available in the event a credible threat emerged that warranted development and deployment of missile

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[24] "Text of President Bush's State of the Union Message to the Nation," *New York Times*, 30 January 1991, p. A12, quoted in John J. Kohout III, "The What, Who, How, and Why of GPALS Command-and-Control," *Comparative Strategy* (1992), 149.

[25] Ibid.

defenses.[26] The reprioritization of BMD policy also resulted in (1) a $2.5 billion reduction in the FY1994 missile defense budget that either cut back or killed strategic missile defense programs, and (2) the renaming of the Strategic Defense Initiative Organization (SDIO) to the Ballistic Missile Defense Organization (BMDO).[27]

Political pressure from the Republican-controlled Congress—as well as from 1996 Dole campaign—eventually pushed the Clinton Administration to adopt the more aggressive Republican agenda on TMD. The "Ballistic Missile Defense Act of 1995"—as part of the *National Defense Authorization Act for Fiscal Year 1996*—requires the Secretary of Defense to:

> Deploy affordable and operationally effective theater missile defenses to protect forward-deployed and expeditionary elements of the Armed Forces of the United States and to complement the missile defense capabilities of forces of coalition partners and of allies of the United States...[28]

Moreover, this legislation recognized the importance to U.S. national interests of seeking cooperation with allies and possible coalition partners in the development, deployment, and operation of TMD systems, and urged "the President to take the initiative within NATO to develop consensus in the Alliance for a timely deployment of effective ballistic missile defenses by the Alliance."[29] The BMDO's TMD strategy since 1995-96 has been to prioritize the development and deployment of both lower tier and upper tier systems as

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[26] Ibid.

[27] Charles F. Hermann, ed., *American Defense Annual* (New York: Lexington Books, 1994), 68.

[28] Congress, Senate, "Ballistic Missile Defense Act of 1995," section 231 of *National Defense Authorization Act for Fiscal Year 1996* (February 10, 1996).

[29] Ibid.

fast as technology permits.[30] The BMDO labeled TMD systems that were the most promising for immediate deployment as "core" systems which would receive priority funding.

D. NATO TMD POLICY DEVELOPMENT

Unanimity among NATO's 16 members over the need for a TMD capability in response to WMD and ballistic missiles first appeared in the November 1991 Strategic Concept—some eight months after the end of the Gulf War. While the new Strategic Concept addressed the multidirectional challenges facing the Alliance, it placed a strong emphasis on Europe's southern periphery:

> The stability and peace of the countries on the southern periphery to Europe are important for the security of the Alliance, as the 1991 Gulf War has shown. This is all the more so because of the build-up of military power and the proliferation of weapons technologies in the area, including weapons of mass destruction and ballistic missiles capable of reaching the territory of some member states of the Alliance. [31]

In 1993, the North Atlantic Council (NAC), NATO's top decision-making body, approved the NATO Air Defense Committee's (NADC) recommendations on the necessity to develop an extended air defense capability against TBMs as a logical extension of NATO's integrated air defense system.[32] That same year, the Extended Air Defense/Tactical Missile Defense (EAD/TMD) ad hoc working group was established

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[30] Lower-tier systems engage ballistic missiles within the atmosphere while upper-tier systems engage above the atmosphere.

[31] North Atlantic Treaty Organization, *NATO Handbook: The Alliance's Strategic Concept, Appendix IX*, 1995, 237 (para 12).

[32] David Martin, "Towards an Alliance Framework for Extended Air Defense/Theater Missile Defense," *NATO Review* (May 1996), 32-35.

with the mission to define future opportunities for Alliance-wide cooperation on TMD.[33] In 1994, the Alliance officially acknowledged that members on NATO's southern flank (i.e., namely Italy, Greece, and Turkey) were in fact threatened by WMD and ballistic missiles. In response, it established the Senior Politico-Military Group on Proliferation (SGP) to address the political aspects of NATO's policy on proliferation and the Senior Defense Group on Proliferation (DGP) to address military options to protect NATO populations, territory, and forces. In 1995, an additional working group, the Missile Defense Ad Hoc Working Group (MDAHG), was established to coordinate with the other NATO bodies and develop a comprehensive model for a future NATO TMD architecture.[34] In June 1996 the NAC approved the DGP's findings on the need for six core integrated military capabilities for dealing with proliferation. Among the six was an extended air defense capable of protecting deployed forces from TBMs; the DGP noted that NATO should pursue this as part of a layered (i.e., lower and upper tier) missile defense structure.[35] This is exactly what the MDAHG proposed in April 1997, a layered TMD structure that included ground and naval upper and lower-tier systems, space-based early warning for timely cueing of TMD radars as well as an integrated ballistic missile command, control, communications, and intelligence (BMC^3I) to coordinate assets. Based on the MDAHG model, NATO subsequently initiated a six-year feasibility study to

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[33] See Alcibiades Thalassocrates, "NATO Launches TMD Effort," *Military Technology 22* (Germany), August 1998, 87-91.

[34] Ibid.

[35] Ibid.

determine a system architecture. MEADS was envisaged as a key component of the MDAHG's model for NATO's layered defense against ballistic missiles.

E. CONCLUSION

The Cold War European resistance to U.S. BMD initiatives was based on the fear that strategic missile defense would have a destabilizing effect on East-West relations rather than providing added security. Opposing U.S. and NATO European views on BMD constituted one of the factors that prevented any deployment of a missile defense capability on European soil to counter the Soviet threat.

The experiences during the Gulf War, however, unified NATO policy on the need for a theater missile defense capability to a degree unheard of during the Cold War. Since 1991, NATO has made significant strides in developing a unified political strategy for dealing with the proliferation of ballistic missiles, but concrete steps to develop active defenses have been less intensive. Only two NATO European nations have joined the United States in funding the development of a TMD system, while the rest (except France) are apparently content to wait for an American BMD umbrella to cover Europe.

III. MEADS AND THE THREAT TO ALLIED TERRITORY

A. INTRODUCTION

The 1991 Strategic Concept's identification of the threat posed by WMD and TBMs from the southern and eastern regions of the Mediterranean and the Middle East represented the beginnings of a unified Alliance political position. To date, however, few allies have been willing to pay for a NATO missile defense capability. The nations long considered most dangerous to Western security on Europe's southern and southeastern periphery are: Iran, Iraq, Libya, Syria, and North Korea (as a supplier of missile technology). Other nations which could threaten NATO territory or expeditionary forces are Serbia, North African states other than Libya (such as Algeria), and Russia and China (both mostly as suppliers of TBMs or technical assistance, at least in currently foreseeable circumstances).[36]

This chapter examines the existing and emerging ballistic missile threat to Europe from nations on its periphery that have applied (or are now applying) lessons from the Gulf War. These countries pose not only a threat to the West's ability to intervene in regional conflicts, but also an emerging threat to NATO territory. This section illustrates how the threat from regional TBMs demands a "NATO" approach to TMD. This section concentrates on three types of TBMs—SRBMs, medium-range ballistic missiles (MRBM), and emerging multi-stage technology. The place to begin this review is with a brief overview of the role of ballistic missiles in the Gulf War.

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[36] Commission to Assess the Ballistic Missile Threat to the United States, *Executive Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States, 7.*

B. IRAQ'S DENIAL OF FULL SPECTRUM DOMINANCE

On 18 January 1991, when Iraq launched the first SCUD SRBMs into Israel and Saudi Arabia, the reality of the threat to coalition forces from SRBMs was broadcast in real-time to television sets across the globe. The psychological effect was magnified as audiences watched news reporters wearing gas masks broadcasting from Saudi military bases during inbound SCUD strikes. The effectiveness of Iraqi SRBM attacks to complicate coalition operations was demonstrated on the day before the war came to an end: on 25 February 1991, one SCUD missile slipped through Patriot missile defenses and struck a U.S. Army Reserve barracks in Saudi Arabia, killing 28 military personnel—the largest number of U.S. (and coalition) forces killed at one time during the war.[37] While Iraqi tanks, aircraft, artillery, and personnel were no match for their coalition counterparts, what did prove to be a challenge was Iraq's modified SCUD SRBMS that were based on 1960s technology.[38] The strategic implications of the coalition's inability to find Iraq's launchers and prevent further launches, or to provide an absolute defensive shield against missile attacks, confirmed the value of TBMs as an asymmetric counterbalance to general U.S. military superiority.

C. SIGNIFICANCE OF TBMs IN REGIONAL CRISES

According to the findings of the 1998 "Rumsfeld Report,"[39] a congressionally-mandated, bi-partisan panel of experts commissioned to assess the current ballistic

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[37] Michael R. Gordon and General Bernard E. Trainor, *The General's War* (Boston: Little, Brown and Company, 1995), 239.

[38] Douglas R. Graham, "Missile Defense Capability," *Comparative Strategy* 12 (1993): 37.

[39] Named for the commission's chairman, former Secretary of Defense Donald H. Rumsfeld.

missile threat to the United States, there are a handful of states seeking regional hegemony through aggression who reject the U.S. and European role as a stabilizing force, especially around the Mediterranean rim and in the Middle East. [40] These states have recognized that ballistic missiles and WMD offer a relatively cheap yet effective way of complicating U.S. efforts to project power.

According to an analyst with a leading Israeli strategic studies think tank, ballistic missiles provide several strategic benefits for aggressive states.[41] First, TBMs allow easy penetration of an adversary's airspace. In the case of the Gulf War, coalition supremacy essentially prevented Iraq from conducting any effective air operations, yet it could not prevent Iraq's SRBMs from entering Saudi or Israeli airspace. Second, the threat of retaliation with SRBMs may deter coalition use of airpower for deep strikes. The Gulf War coalition was not deterred by Iraq's SRBMs, but this factor may be significant if population centers are threatened more effectively. Ballistic missiles also allow an adversary to strike a coalition whether it is winning or losing on the battlefield—as in the case of the Gulf War. While absorbing extensive damage from coalition air and land forces, Iraq was still able to launch its SCUDs. Finally, ballistic missiles armed with WMD could prove catastrophic for coalition operations and could deter some NATO states from acting; it cannot be assumed that all "rogue" nations will be deterred by U.S. or Allied threats to use nuclear weapons.

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[40] Commission to Assess the Ballistic Missile Threat to the United States, *Executive Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States,* 8.

[41] Shai Feldman, "View from Israel: Ballistic Missile Proliferation in the Middle East," *Comparative Strategy* 14 (1995): 318.

D. HISTORY OF PROLIFERATION ON EUROPE'S PERIPHERY

During the 1970s and 1980s, the Soviet Union transferred SS-1C SCUD B (300 km) SRBMs and other shorter range missiles to several of its client states, including Egypt, Iraq, Syria, and Libya.[42] However, by the end of the 1980s, their experiences in Afghanistan and the loss of SCUDs to Afghan rebels moved the Soviets to limit missile transfers out of fear that these missiles could at some point threaten Soviet territory or interests. China and North Korea replaced the Soviet Union as the primary suppliers of SCUD B variants, including the longer range North Korean SCUD C (500 km), and provided assistance in establishing manufacturing lines in these countries for indigenous missile production.[43] Following the Gulf War all of the so-called "rogue" nations resumed or accelerated their TBM programs, possibly in light of the U.S. inability to counter the SRBM threat.[44]

E. THREAT FROM SRBMS

The current threat from SRBMs constitutes the most extensive TBM challenge to U.S.-European coalition operations because of the wide extent to which these missiles have proliferated since the 1970s. The SCUD and SCUD derivatives distributed by the Soviets and by the North Koreans in the 1990s represent 1960s technology, are not very accurate (when compared to modern TBMs), are single-stage missiles, and generally have

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[42] Sumner Benson, "Will NATO Deploy European Missile Defenses?," *Comparative Strategy* 16 (1997): 386.

[43] Ibid.

[44] Iraq, however, has been limited under the conditions of UN resolutions to testing TBMs with a range of 150 km or less.

a range from 300 to 1000 km. The Chinese also have been a primary supplier of missiles in the 1990s. China has marketed two mobile SRBMs that are not SCUD derivatives, the M-9 (600 km) and M-11 (300 km). It has been reported that following the Gulf War, China was negotiating the sale of the dual-capable M-9 to Syria, but U.S. pressure dissuaded China from going through with the sale.[45] The M-9 is perhaps the most advanced SRBM on the market. It incorporates computer technology, GPS-aided navigation, and TMD penetration capabilities; and its solid-fuel rocket provides for a faster launch cycle than the liquid-fueled SCUD.[46] These advances, especially GPS navigation, could allow the M-9 to target coalition maneuver forces. China, however, has exported the nuclear-capable M-11 SRBM to Pakistan.[47] There are no public reports of further Chinese attempts to market the M-9 and M-11 to other Middle Eastern countries, but this does not exclude the possibility that sales have already occurred.

Iran, Syria, and Libya are each believed to possess hundreds of SCUD-variant missiles. Iraq has a capability to extend the range of its SCUDs, but has been prohibited under United Nations Security Council Resolution 687 since the end of the Gulf War from developing or acquiring missiles with ranges greater than 150 km. Yet, Iraq has maintained the skills and industrial capability to reconstitute its ballistic missile program by working on a 150 km range missile under UN observation. And, if recent news reports

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[45] Feldman, "View from Israel: Ballistic Missile Proliferation in the Middle East," 319.

[46] Centre for Defense and International Security Studies, Lancaster University, U.K., 1997. Available [Online]: <http://www.cdiss.org/chinab.htm>.

[47] Commission to Assess the Ballistic Missile Threat to the United States, *Executive Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States,* 8.

are accurate, Iraq continues to import illegally missile-related technology for a missile program.[48]

The threat to NATO territory from SRBMs is limited. Turkey is within range of Iranian and Syrian missiles, and could even be attacked with Iraq's current 150 km missile. Without North Korean SCUD Cs (500 km), Libya would be unable to attack the Italian mainland. There is concern in Europe, however, that the rise of an Islamic fundamentalist government in either Algeria or Tunisia could place southern Spain, Mediterranean France, and southern Italy within range of SRBMs, if one of these North African states acquired TBMs from Libya or other suppliers.

This concern is justified. There have been at least three instances to date in which states have used or threatened to use SRBMs against NATO territory. In 1986, Libya fired two SCUD B missiles against the Italian island of Lampedusa (near Sicily) following the U.S. airstrike on Tripoli. During the Gulf War, in response to Iraq's threat to strike Turkey with SCUDs, the Netherlands deployed Patriot batteries to Turkey as a demonstration of its Article 5 commitment. The most recent threat occurred during the October 1998 standoff between NATO and Serbia over the Kosovo issue. According to Italian news articles, NATO had intelligence that in the event of an airstrike against Serbia, Belgrade would retaliate by either conducting a "Beirut-style" terrorist attack on NATO peace-keeping forces in Bosnia or an SRBM strike against NATO bases in Italy.[49] According to these reports, Serbia has SCUD B SRBMs and a modified version of the

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[48] The Associated Press, "Report: Iraq Tried For Missiles," *Pacific Stars And Stripes*, 1 December 1998, 1.

SCUD B with a range of 1,000 km that were supplied to Belgrade on the basis of an accord signed with the Russians in 1996.[50]

F. THREAT FROM SECOND GENERATION TBMs

The new missile threat emerging from within the Middle East and Mediterranean rim consists of MRBMs, second generation TBMs. The MRBMs appearing in these regions are of the North Korean No-Dong class, two-stage missiles with a range of approximately 1500 km. North Korea poses the greatest immediate threat to NATO interests because it is the largest proliferator of missiles to Europe's southern periphery, and its economic problems make it likely that the No-Dong will be sold.

In mid-1998, Iran flight-tested its Shabab-3 MRBM, which has a range capability similar to the No-Dong.[51] Iran is believed to have achieved this missile development through assistance from Russia and North Korea.[52] Iran is currently developing WMD as well. The Rumsfeld Report states that Iran could accumulate enough fissile material from its own nuclear reactors to build a weapon within ten years; but if it acquired this material from foreign sources, it could likely produce a weapon within one to three years. Libya

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[49] *Turin La Stampa* (Italy), 3 October 1998, Available [FBIS]:< http://fbis.fedworld.gov/cgi-bin/retrieve>, Doc ID: FTS 19981003000321 [25 October 1998].

[50] Ibid.

[51] Carnegie Endowment for International Peace, Non-Proliferation, Vol. 1, No.13, *New Declassified 1998 Report on the Ballistic Missile Threat* (28 September 1998). Available [Online]: <http://www.ceip.org/programs/nppbrief13.htm> [14 November 1998].

[52] Commission to Assess the Ballistic Missile Threat to the United States, *Executive Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States,* 9-14.

also seeks to acquire longer range missiles, especially the No-Dong and with its active WMD programs, Tripoli presents a considerable threat to the region.[53]

The threat of MRBMs to U.S.-European operations is no less serious than the use of SRBMs. In the near term, the smaller the Iranian or Libyan MRBM arsenal, relative to the number of SRBMs, the more likely it is that they will be considered strategic weapons—particularly because they are more likely to be armed with WMD warheads. NATO territory is becoming increasingly vulnerable. The Iranian Shabab-3 threatens the eastern half of Turkey. A Libyan No-Dong or Shabab-3 would threaten the southern half of Italy, 90 percent of Greece, and part of western Turkey. If the reports regarding Serbia's acquisition of a 1,000 km range missile are true, all of Italy, a small section of southeast France, and the southern half of Germany would be within striking distance.

G. THE EMERGING MULTI-STAGE THREAT

Where SRBMs and MRBMs presently threaten limited areas of NATO's southern flank, the emerging threat from Iranian and North Korean multi-stage ballistic missiles would place all of NATO and some U.S. territory within striking range. The most immediate multi-stage threat derives from North Korea. The United States has been monitoring North Korean efforts since the early 1990s to develop longer range, two stage ballistic missiles—the 1,500 plus km Taepo Dong-1 (TD-1) MRBM and the 4,000-6,000 km Taepo Dong-2 (TD-2) ICBM. The 31 August 1998 test flight of the TD-1was both

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[53] Department of Defense, Office of the Secretary of Defense, *Proliferation: Threat and Response* (November 1997), 37.

expected and a surprise; the surprising features included the missile's third stage and its utility as a space launch vehicle.[54] The test revealed that North Korea's missile program is more advanced than the U.S. intelligence community estimated. Although the third stage failed, the success of the first two stages equated to an operational test of the TD-1. However, Western experts believe that North Korea would have to overcome significant technical problems before it can use this third stage to deliver small payloads to ICBM ranges.[55]

Iran is believed to be capable of testing an ICBM capability within five years of deciding to do so; and it is unknown whether this decision has already been made.[56] A 10,000 km Iranian missile could threaten the U.S. Atlantic seaboard and parts of the mid-west. A lower tier system like MEADS could not defend against this threat, but the threat could motivate the Alliance as a whole to become more serious about layered missile defense.

H. RUSSIA CONTINUES TO SELL MISSILE TECHNOLOGY

According to the 1997 DoD report on proliferation, in addition to over 1,000 START-counted operational ICBMs and SLBMs, Russia retains hundreds of launchers and thousands of SS-21 and SCUD SRBMs. Russia also is developing a new short range missile to replace the SCUD, which was originally introduced over 30 years ago.

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[54] Carnegie Endowment for International Peace, "New Declassified 1998 Report on the Ballistic Missile Threat," *Non-Proliferation* 1 (September 1998). Available [Online]: http://www.ceip.org/programs/nppbrief13.htm>.

[55] Ibid.

[56] Commission to Assess the Ballistic Missile Threat to the United States, *Executive Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States,*13-14.

Additionally, although officially opposed to proliferation, Russia apparently continues to proliferate missiles and WMD, although it is not clear whether this is officially sanctioned or conducted by enterprises circumventing government controls.[57] The DoD summarizes Russian activity by stating that "some [Russian] officials may turn a blind eye to such activity because of the critical need for revenues."[58]

The Rumsfeld Report also warns of Russia's persistent role in proliferation by stating, "Russia poses a threat to the U.S. as a major exporter of enabling technologies, including ballistic missile technologies, to countries hostile to the United States. In particular, Russian assistance has greatly accelerated Iran's ballistic missile program."[59]

I. CONCLUSION

The Gulf War demonstrated the ability of TBMs to complicate Western power projection. Three examples were cited of how NATO territory has been threatened as a result of either unilateral or coalition operations in the Mediterranean and Middle Eastern regions. Iran, Iraq, Syria, Libya, and Serbia are seeking to acquire or develop TBMs that are more accurate and possess greater range than the thirty-year old SCUD. As these missiles become more accurate, coalition maneuver forces will become as vulnerable as cities and rear areas were during the Gulf War. Furthermore, longer range missiles will increasingly allow hostile countries to retaliate against Western coalition operations not

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[57] Department of Defense, Office of the Secretary of Defense, *Proliferation: Threat and Response* (November 1997), 46-48.

[58] Ibid., 47.

[59] Commission to Assess the Ballistic Missile Threat, *Executive Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States,* 10.

only from distances that may be out of range of coalition air forces, but also to strike deep into NATO territory.

Without an effective TMD, NATO will have to weigh the possible consequences of conducting out-of-area coalition operations. NATO, especially NATO Europe, may discover that non-Article 5 missions represent Article 5 risks. The desire to project a stabilizing force to crisis areas on its periphery may be deterred by an adversary's ability and willingness to strike Bonn/Berlin, London, Paris, or Rome with a ballistic missile.

IV. MEADS AND THE ALLIANCE

A. INTRODUCTION

U.S. and NATO European positions on defending against SRBMs and MRBMs rather than strategic ballistic missiles stems from the demise of the Soviet empire and experiences during the Gulf War. Both events reshaped the military environment in which U.S. and European forces are likely to be committed. The likely scenario for which the Alliance is reorganizing is now based on lessons learned during the Gulf War and involvement in the former Yugoslavia rather than the Cold War focus on preparing to resist a massive Soviet-led attack across Central Europe. For NATO, coalition operations outside NATO territory have become more prominent than its traditional collective defense function.[60] Collective security operations (also referred to as non-Article 5 operations) are intended to respond to regional crises on NATO's borders before escalating and "spilling over" into allied territory.

Yet, collective defense, the *raison d'être* of the Alliance, is not obsolete. On the contrary, the 1991 Strategic Concept reaffirms the Article 5 commitment as will the 1999 Strategic Concept scheduled to be unveiled during NATO's 50th anniversary summit in Washington DC in April 1999. Furthermore, the legitimacy of NATO's collective defense commitment has been reinforced by the desire of most of the former Warsaw Pact nations to join NATO. Additionally, the West's intervention in both Iraq and the former

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[60] David S. Yost, "The New NATO and Collective Security," *Survival* (Summer 1998): 135.

Yugoslavia has demonstrated that NATO must prepare to execute collective defense commitments when engaged in collective security operations.

Ensuring regional security within the European theater and on its periphery cannot be undertaken unilaterally. The United States is increasingly likely to be operating as part of a multinational coalition deployed outside of NATO Europe, whether as part of a NATO-led or NATO-endorsed effort (such as a coalition of willing nations as envisaged by the Combined Joint Task Force (CJTF) concept) or part of some other internationally sanctioned multinational operation. The worsening ballistic missile threat emanating from the Middle East and along the Mediterranean rim means that Allied forces intervening in regional crises will become increasingly exposed to attack by ballistic missiles. This concern has led both U.S. and European policy-makers and officers to require that TMD systems be able to protect deployed joint and combined forces engaged in everything from major regional conflicts (MRCs) to humanitarian or non-combatant evacuation operations (NEO).[61] Equally important, the nature of future coalition operations will demand that TMD systems possess a high level of interoperability and be easily and rapidly transportable to any theater of operations—as well as affordable.

Although all 16 members of NATO are in agreement on the need for a TMD capability, only the United States, Germany, and Italy have agreed collectively to develop a TMD system within NATO that is capable of meeting both collective defense and collective security challenges. MEADS is this system. This chapter describes the

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[61] Rudney, 296.

evolution of MEADS into an international program and the distinct European perspectives on joining or not joining the MEADS program. But more importantly, the chapter will demonstrate that by seeking international cooperation on the development of a common TMD system, the United States has turned MEADS into a test case for future trans-Atlantic armaments cooperation.

B. ORIGINS AND EVOLUTION OF MEADS

1. Filling a Critical Niche

The MEADS program originated in 1989 as "Corps Surface-to-Air Missile (Corps-SAM)," a U.S. Army concept for replacing the then 30-year old HAWK (Homing All-the-Way Killer) Surface-to-Air Missile (SAM). To improve its chances for funding, Corps-SAM evolved into a joint U.S. Army-U.S. Marine Corps program to fill the void that would be created once the Army retired its inventory of HAWK missiles from active service in 1994. The Marine Corps also needed a replacement for its HAWK batteries which were scheduled to be phased out around 2005—around the same time Corps-SAM was to achieve initial operational capable (IOC) status.

From the start, the Corps-SAM concept was envisaged as part of a layered air and missile defense architecture (see Figure 1, page 38, for a conceptual drawing of a layered TMD defense architecture). Corps-SAM would fill a critical niche between the man-portable Stinger SAM and fixed, rear-area defense provided by the Patriot and the upper tier THAAD (Theater High Altitude Air Defense).[62] Corps-SAM, unlike any other TMD

[62] Ibid., 293.

program, integrated three unique mission capabilities into one system: mobility, transportability, and target engagement diversity.

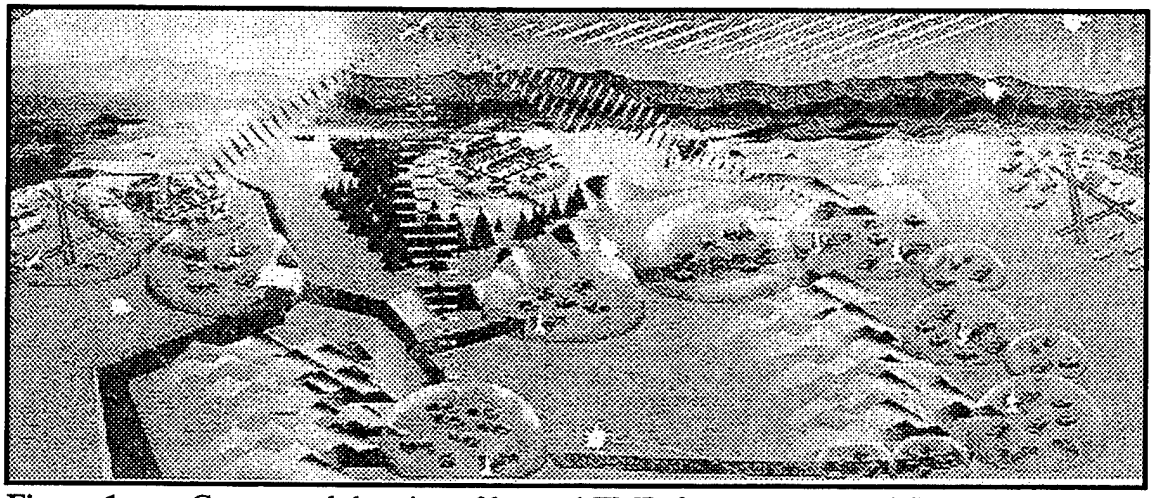

Figure 1. Conceptual drawing of layered TMD for maneuver and fixed assets. Source: *Aviation Week & Space Technology*, 14 December 1998, p. 60.

Corps-SAM's uniqueness rested with its planned capability to provide 360 degree protection to a "corps-size" unit maneuvering over the battlefield.[63] The system was intended to provide point defense protection to a zone with a radius of 15 to 25 km against TBMs with a range of 1,000 km or less.[64] In order to achieve this level of mobility, Corps-SAM had to be able to make the transition from fixed operations to a traveling configuration and back quickly. Additionally, the system was to be mounted on a wheeled vehicle to travel on unimproved roads and cross country with maneuver forces.

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[63] General Accounting Office, *Defense Acquisition: Decision Nears on Medium Extended Air Defense System*, 9 June 1998, GAO/NSIAD-98-145, Report to the Chairman, Subcommittee on Military Research and Development on National Security, House of Representatives.

[64] Jean Dupont, "Europe Wary of US Aims in Joint Defence Program," *Interavia Business & Technology*, 11 January 1996, 42.

Corps-SAM also was intended to be easily moved to any given theater of operations. For the Army, this meant the ability to move Corps-SAM within theater using tactical airlift such as the C-130 as opposed to large strategic airlift assets such as the C-141, C-17 or C-5. Since regional combatant commands control the use of C-130s within their area-of-responsibility (AOR)—as opposed to having to compete for space on strategic lift assets—commanders would possess the freedom and flexibility to move Corps-SAM at their discretion. For the Marine Corps, Corps-SAM had to be easily deployable via ship and function as part of an amphibious landing, as depicted in Figure 2 below.

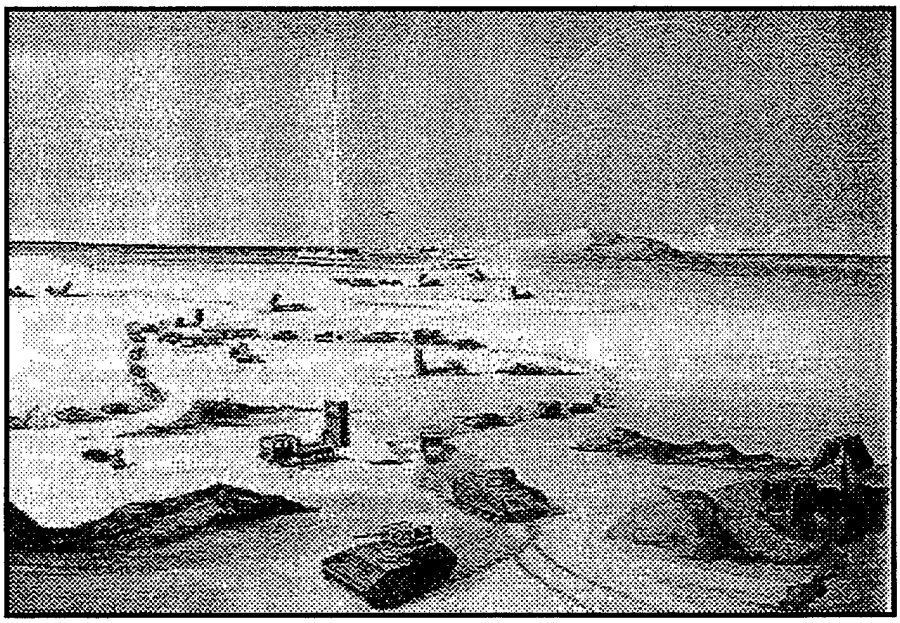

Figure 2. Artist's conception of Corps-SAM (MEADS) providing 360 degree TMD protection to maneuver forces. Source: *Aviation Week & Space Technology*, 27 February 1995, p. 23.

Additionally, Corps-SAM was intended to defend against a wide array of threats: SRBMs and some MRBMs carrying either conventional or WMD warheads; stealthy

high/low and slow/fast cruise missiles launched from air, land or sea platforms; unmanned aerial vehicles (UAVs); and rotary and fixed-wing aircraft. In 1989, neither U.S. nor NATO European air defense systems—Patriot PAC-1 (Patriot Advanced Capability-1) and HAWK—had a TMD capability.[65]

Corps-SAM differed from the other U.S. TMD programs in several ways. The closest comparable system is the latest Patriot upgrade, the Patriot Advanced Capability-3 or PAC-3. PAC-3 incorporates a number of significant improvements over the PAC-2 version used during the Gulf War that will allow it to engage threats similar to those within the scope of Corps-SAM; however, Corps-SAM was envisaged to have a more modern and powerful radar that would be able to engage slower, stealthier platforms in addition to SRBMs/MRBMs. More importantly, PAC-3 is not mobile, cannot engage targets within a 360 degree field-of-view (FOV), and is too large to be moved by C-130. THAAD is also a ground-based TMD system, but is designed to engage longer range TBMs at greater distances and higher altitudes so that post-intercept debris will not fall on allied forces. THAAD was not designed to counter shorter range TBMs, but instead provides the upper layer of defense by working in tandem with Corps-SAM and PAC-3. Corps-SAM and PAC-3 would provide terminal defense should a missile slip through THAAD's umbrella. Finally, there are the Navy programs: Navy Area Wide (NAW) and Navy Theater Wide (NTW). Both systems are based on the AEGIS platform and thus have a 360 degree FOV; however, NAW can provide terminal defense only along littoral

[65] The Patriot TMD capability (PAC-2) employed during Operation Desert Storm was a crash project upgrade for those units deployed to Saudi Arabia and Israel; the PAC-2 upgrade eventually covered all Patriot batteries. The HAWK TMD upgrade was initiated after the Gulf War.

regions, while the NTW concept is constrained by the very same factors affecting THAAD.

Corps-SAM was to be the only air defense system able to roll off transports with the troops and immediately begin operations. Because of the diversity of mission capabilities desired, and the anticipated advancements in technologies needed for a relatively small and mobile yet powerful radar, Corps-SAM evolved into a follow-on to the Patriot rather than a mere HAWK replacement.[66] However, designing a single system capable of providing each of the three mission features discussed above meant that high-technology solutions—possibly breakthrough technologies—were required, which implied an expensive system. The initial cost estimate was $3.6 billion for the first two stages of the program, and this did not include procurement. Justifying this level of expenditure at a time when the Bush Administration was beginning significant defense budget reductions as a result of the disappearance of the Soviet threat was difficult. Accordingly, while the Office of the Secretary of Defense (OSD) approved the system concept, it directed the Army to secure allied participation before system development would be approved.[67] Corps-SAM's survival thus rested on finding international partners to keep the concept alive.

2. Trans-Atlantic Participation in Corps-SAM

Viewing the reality of Iraqi SCUD attacks on television during the Gulf War unified European opinion on the need for a TMD capability to protect forces and

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[66] Corps-SAM also became seen as a Patriot follow-on because by 2007 Patriot will have been in operational service for over twenty years.

[67] Ibid.

territory.[68] While the Alliance's November 1991 Strategic Concept highlighted the dangers of ballistic missile proliferation and the need for missile defenses, there was no unified NATO or NATO European effort to develop a common TMD system. Britain, France, Germany and Italy each had a requirement to replace their respective HAWK missiles with a rapidly deployable system that would protect their forces from ballistic missile attack, yet each had different systems in mind. Germany's TMD concept system, the TLVS or "*Taktisches Luftverteidigungssystem,*" was similar to Corps-SAM. Britain held off on committing itself to any ongoing TMD effort until it completed a feasibility study that examined threats, requirements, and funding constraints. France and Italy had been jointly developing a family of ground and naval SAMs since 1990, and France held that these SAMs could be adapted to a TMD role. The United States was pursuing three lower-tier systems (Patriot PAC-3, Navy Area Wide, and Corps-SAM as well as a limited TMD capability upgrade for the Marine Corps' HAWK missiles), two upper tier systems (THAAD and Navy Theater Wide), two advanced concept designs (Boost Phase Intercept and Airborne Laser), and a strategic ABM system (national missile defense, or NMD).

In February 1994, the United States convinced Germany to merge its system with Corps-SAM, which was not difficult since Germany had never actually intended to build TLVS on its own because of costs and because of its traditional preference to cooperate with the United States rather than its European neighbors on air defense matters.[69] But partly because Germany wished the trans-Atlantic venture to have greater European

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[68] Hans Rühle, "Ballistic Missile Defense," *Comparative Strategy* 12 (1993): 81-83.

[69] Holger H. Mey, "Extended Air Defense—Germany Between European and Transatlantic Orientations," *Comparative Strategy* 14 (1995), 81-86.

participation, France and Italy also joined, but without abandoning their own HAWK replacement program, the SAMP-T (*sol-air moyenne portée-terre*, a land-based medium-range SAM). A year later, the four nations signed an initial statement of intent to collaborate on a common TMD system based on Corps-SAM, dividing costs and development on a 50-50 basis between the United States (50 percent) and Germany (20 percent), France (20 percent), and Italy (10 percent). Corps-SAM's name subsequently changed to MEADS, the Medium Extended Air Defense System.

In May 1996, after delaying the signing of the official agreement by five months, France withdrew from the multinational effort, citing budgetary reasons and asserting that MEADS did not correspond to its strategic needs.[70] The United States viewed France's last minute withdrawal as an attempt to undermine the trans-Atlantic effort and draw Germany into the "European" SAMP-T program. Yet that same month the United States, Germany, and Italy agreed to go ahead without France on the $160 million project definition and validation phase of MEADS and agreed that the United States would now bear 60 percent, Germany 25 percent, and Italy 15 percent of the cost of the system. The extra ten percent the BMDO had to agree to assume in order to keep MEADS alive internationally gave its domestic opponents additional ammunition. As a result, MEADS has been in danger of termination ever since.

3. A "Renaissance in Armaments Cooperation"

MEADS represented an innovative approach to trans-Atlantic armaments cooperation that was to set the tone for future collaboration on major military programs.

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[70] Olivier Provost, "Millon Confirms Pullout from MEADS Project," *Paris La Tribune Desfosses,* 20 May 1996, p. 11. Available [FBIS]: FBIS-WEU-96-099 [4 September 1998].

In fact, MEADS is the biggest joint development program the United States has ever undertaken.[71] Since the 1960s, trans-Atlantic arms cooperation projects have suffered a 50 percent cancellation rate, while intra-European programs have only failed less than eight percent of the time.[72] Neither side of the Atlantic deserves all the blame for these statistics, but recurring challenges have complicated U.S.-European cooperation. First, major powers—owing in part to industrial competition among NATO allies—have been reluctant to compromise on national military requirements. Second, major powers have been afraid to depend on other nations to meet fundamental, even strategic, security needs. Both of these positions have strongly influenced NATO Europe's push for a European security and defense identity (ESDI) and a counter effort by the United States to anchor ESDI within NATO. Historically, the United States has approached international cooperation by offering to sell an existing weapon system to allies or offering to co-produce a U.S.-developed system. There are numerous examples of this relationship, but a good illustration of the latter is the U.S. F-16 and its shared co-production with Belgium, the Netherlands, Denmark, and Norway.[73] America's European allies have tried to avoid trans-Atlantic programs in which European countries are the junior partners, for fear that the United States will ignore their interests. European allies have, however, favored cooperation with the United States when the two sides share the project

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[71] Robert P. Grant, "Transatlantic Armament Relations Under Strain," *Survival* 39 (Spring 1997), 124.

[72] Ibid., 114.

[73] Ibid., 115.

evenly or when it fits their interests, such as in programs enabling European nations to benefit from access to U.S. high technology.[74]

Such is the case with MEADS. In 1993, the new leadership in the U.S. Department of Defense gave unprecedented political support to improving NATO armament cooperation. While the new leadership stuck with traditional objectives (e.g., promoting common, interoperable equipment and leveraging U.S. resources through allied cost-sharing), it streamlined procedures for entering into agreements and generally tried to make European access to U.S. industry easier and the likelihood for successful cooperation greater. This strategy would, it was hoped, trigger a renaissance in armaments cooperation. The initial result was an increase in international programs from 40 in FY1994 to 120 by FY1996. [75] Of this number, only three were major initiatives: the Multifunction Information Distribution System (MIDS), the Joint Strike Fighter (JSF), and MEADS. Although the characteristics of MIDS and JSF differ from those of MEADS, MIDS and JSF have been positive experiences thus far for both sides. MEADS, as a trans-Atlantic endeavor, is different from MIDS and JSF in three ways: (1) it is the biggest joint development program the United States has ever undertaken; (2) it was started as an equal partnership (i.e., 50-50 percent U.S.-European burden-sharing, though it has since changed to 60-40); and (3) cooperation was initiated at the concept level.[76]

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[74] Ibid.

[75] Ibid., 118.

[76] Ibid., 119.

The shift in U.S. armaments policy played a big part in selling MEADS to the Allies, but the United States also offered three reasons why MEADS would strengthen the Atlantic Alliance at a time when contention over operating outside NATO's borders had cast doubts about its long-term viability. The first reason was political: MEADS would strengthen the military and industrial relationship that binds the United States and its European allies in a strong, long-term security relationship.[77] The second was military: MEADS represents preparation for coalition operations by harmonizing the requirements for interoperable equipment and common logistics capabilities (i.e., MEADS is deployable on European transport aircraft, such as the C-160 and C-130, and is not limited by design to U.S. strategic lift assets). The third reason was economic: MEADS allows nations to acquire a critical weapon system when constrained defense budgets prohibit pursuing such a venture on a unilateral basis, while joint development and procurement benefit participating nations through technology-sharing and increased employment requirements.

For the United States, Germany, and Italy, MEADS will provide unique air and missile defense capabilities that are ideal for protecting deployed forces during crisis management or peace-keeping operations. Additionally, MEADS will serve to replace and complement existing TMD systems, providing NATO members with a territorial defense capability against short and some medium-range ballistic missiles.

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[77] Congress, House, Committee on National Security, *Prepared Statement of Brigadier General Emery, USAF, Deputy Director Theater Air and Missile Defense, BMDO*, 104th Cong., 19 March 1997.

C. NATO EUROPEAN RATIONALES IN DECIDING ABOUT PARTICIPATION IN MEADS

Views among Germany, Italy, France, and Britain on the merits of joining or not joining MEADS reflect each country's political-military history. German and Italian defense policies have traditionally followed NATO policy, whereas France and Britain have maintained a more independent profile. Several factors affect European participation in TMD: the impact of the Gulf War; post-Cold War budget constraints; wariness regarding U.S. bureaucratic and political practices; and the understanding that trans-Atlantic cooperation remains central to each nation's security.

1. Germany

Writing in 1993 on the importance for Germany to commit itself to a BMD program, Dr. Hans Rühle explained how much German opinion on BMD policy had changed since 1983.[78] Specifically, standard German parliamentary opposition to U.S. BMD initiatives of the past no longer existed in 1993 because of the impact of the Gulf War:

> Faced with the images of SCUDs headed for Israel, even the German left now hopes for an ATBM [anti-tactical ballistic missile] capability of Patriot. Yet, not only did the SCUDs of the Gulf War lead to a growing acceptance of ATBM capabilities, they also forced SDI opponents to think beyond the current day and also beyond the Middle East. In short, SCUDs forced them to face the future problem of all problems: the proliferation of weapons of mass destruction and their means of delivery among Second and Third World countries.[79]

There is no longer any German objection to TMD in principle; however, whatever priority Germany places on TMD procurement will still be strongly constrained by

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[78] Dr. Hans Rühle, "Ballistic Missile Defense: A German View," *Comparative Strategy* 12 (1993): 81-81.

[79] Ibid., 82.

internal political processes. Other national priorities will weigh heavily against expensive defense programs: above all, the continuing costs associated with reunification, and the high level of unemployment. In 1993, Dr. Rühle anticipated that until 2008-2010 Germany would concentrate its energy on what he refers to as "inner unity" and will, therefore, "silently and passively consume the efforts of the United States."[80] In other words, Rühle predicted that Germany would work with and rely on the United States instead of pursuing a more independent program.

By early 1995, the internal German debate over a TMD capability rested not so much on what the system should defend against, but with whom Germany should build it. The German TLVS was originally conceived to contend with Soviet air attacks; however, in the new security environment a TMD capability to defend projected forces became a crucial requirement along with high mobility and transportability by C-130/C-160 aircraft. These new requirements were obviously influenced by the new Strategic Concept, the January 1994 North Atlantic Council (NAC) approval of the Combined Joint Task Force (CJTF) concept, and the debate over the inevitability of German participation in CJTF operations outside NATO territory. But constraints on defense spending meant that the TLVS could only be built through an international partnership. The question was whether this partnership was to be with the United States (Corps SAM), France and Italy (SAMP-T), or both.[81] There were political, military, and industrial advantages and disadvantages for each option.

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[80] Ibid., 83.

[81] Mey, "Extended Air Defense—Germany Between European and Transatlantic Orientations," 82.

There were several political reasons to join with the United States. U.S. counter-proliferation strategy was multi-faceted and was likely to be the driving force behind any NATO policy. Germany also acknowledged that the burden-sharing debate would likely flare up over TMD since Europe is more vulnerable to TBMs; partnership with the United States would remove Germany from Congressional criticism. However, according to Holger Mey of the Bonn-based Institute for Strategic Analysis and a leading contributor of literature regarding German perspectives on MEADS, the most important reason was that "close trans-Atlantic cooperation remains in the utmost security interests of Germany. ...existing missile defense programs, as well as the technological capabilities of the United States, make it a most important cooperative partner for Germany."[82]

The military reasons for partnership with the United States were emphasized by the German air force. Germany has had many positive experiences of close cooperation with the United States on air defense systems, such as the Nike, HAWK, and Patriot, all as part of NATO's integrated air defense structure. The German air force believed that MEADS would not only fulfill German requirements, but would best satisfy NATO's requirement for interoperability. Finally, the German air force favored U.S. technology, was confident in the trans-Atlantic relationship, and believed that, in the event of a European crisis, it would be a mistake for Germany to have equipment different from that of U.S. forces.[83]

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[82] Ibid., 83.

[83] Ibid.

The German view on the industrial aspect of cooperation with the United States was less auspicious. The Germans had low expectations for successful cooperation because U.S. financial, industrial, and technological dominance would overshadow German companies. Also, Germany was wary of armaments cooperation with the United States because of the internal competing interests of the U.S. military and industrial sector, and unpredictable executive-legislative interactions. Germany feared that it would be treated as a junior partner because of the complexity of MEADS, perhaps setting a precedent for future projects.[84]

Because of the importance placed on trans-Atlantic TMD cooperation, Germany would not opt for a solely "European" program like the French-Italian SAMP-T, although there were some compelling political reasons favoring cooperation with the French. Germany favored a U.S.-European effort, but did not believe France would give up the French-Italian SAMP-T for an entirely new system. The United States offered cooperation with France (and Italy) in hopes of securing Germany's participation. While France signed the statement of intent in 1995 to participate, the United States believed the subsequent French delay in finalizing the deal was an attempt to stall a German decision and draw the Germans into the SAMP-T by undermining MEADS by later withdrawing and thereby causing the funding arrangement to collapse.[85]

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[84] Ibid.

[85] Ibid., 86.

2. Italy

Italy's requirement for MEADS appears to be a reflection of its national political and military-industrial strategy. Italy's political strategy reflects its geostrategic position as one of the NATO members on Europe's southern flank most vulnerable to TBM threats. Italy's geographic location ensures that it will play a significant role in non-Article 5 missions as well as in Alliance territorial defense.[86] The increased TBM threat—and the Alliance's new roles—have forced Italy's armed forces to modernize their out-of-area military capability. Replacing the HAWK arsenal is one element of the modernization effort. Yet the Italian military has long been criticized for lacking a long-term military-industrial strategy.

The Italian armed forces have historically suffered from weak central control, resulting in extreme parochialism among its air force, navy, and army to the point where each competes for limited funds by vying to fill NATO requirements at the expense of the others.[87] The navy's acquisition of the Garibaldi-class Harrier VTOL aircraft carrier as a way of having its own independent air arm is an example of this inter-service competition. The other method for the services to acquire a larger portion of limited funds has been through international cooperative programs. Once the government has approved a multinational project, the international commitment ensures steady funding from start to finish. Although Italy views international cooperative efforts as more

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[86] Maurizio Cremasco, "Italy's Defense Policy," *Moscow Eksport Obychnykh Vooruzeniy* 7-8 (October 1997), pp. 30-31. Available [FBIS]: <http://fbis.fedworld.gov/cgi-bin/retrieve> Doc ID: FTS 19971001000517 [11 September 1998].

[87] Luigi Caligaris, "Italy," in *Politics and Security in the Southern Region of the Atlantic Alliance*, ed. Doouglas T. Stuart (London: Macmillan Press Ltd, 1988), 80.

expensive than purchasing equipment off the shelf, the benefits of access to technology, employment in Italian enterprises, and strengthened political ties can be more important than immediate cost-savings.

With a small defense budget, it is not clear why Italy would pursue two extended air defense systems—MEADS and SAMP-T—that appear to possess similar capabilities. It appears that, in view of its 1985-1986 internal debate over joining the SDI, Italy favors trans-Atlantic efforts. A joint U.S.-European TMD program would result in an increased sense of Alliance cohesion and would allow greater access to U.S. technology, while European multinational participation would prevent excessive dependence on the United States.[88] As with Germany, the main reason for Italy may be pragmatism. Aware of its own immediate vulnerability to TBMs and the sheer dominance of the United States in BMD programs, it would be imprudent for Italy not to work with the United States on a TMD system.

3. France

Discussion of France's role in MEADS is relevant not just because of its brief partnership with the United States, Germany, and Italy from 1995-96, but also because of its role in advertising the pitfalls of trans-Atlantic TMD cooperation. Perceived efforts on the part of the French to undermine MEADS relate to France's own perception of its national interests and those of its European neighbors. Referring to French intentions, Mey states:

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[88] Michael Harrison, "Italian Arms Control Policy," in *West European Arms Control Policy*, ed. Robbin Laird (Durham and London: Duke University Press, 1990), 189-191.

> Paris does not want to leave to leave the U.S.-dominated world market for medium-range and longer range ground-based air defense systems to the United States alone and it does not want Europe to remain dependent on U.S. systems like Patriot, Corps-SAM [MEADS], or THAAD.[89]

Mey further suggests that to France, all arms and weapon systems should be developed and produced in and by Europe, and to France "Europe" means French leadership. At least from the perspective of some German observers, France's national strategy has long sought to remove American dominance in European security affairs by replacing it with its own. MEADS/TMD thus became another political and economic arena in which to challenge U.S. hegemony. Yet, as with Germany and Italy, there also are areas of TMD in which it is in France's national interests to cooperate with the United States.

Based on a review of available literature, at no time does there appear any direct French conflict with the trans-Atlantic position on the growing ballistic missile threat to Europe or the need for missile defenses—in fact, NATO's Defense Group on Proliferation (DGP), established in 1994, was initially co-chaired by the United States and France. However, France's strategy, as outlined in the 1994 White Paper on Defense during the 1993-95 cohabitation government, sought a European rather than a NATO approach to the problem. France determined that it should not rely on its nuclear deterrent as a panacea in the new security environment.[90] Instead France would first develop—preferably along with its European allies—a space-based intelligence

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[89] Holger Mey, "Extended Air Defense—Germany Between European and Transatlantic Orientations," 83.

[90] John D. Morrocco, "Costs, Politics Impede European Efforts," *Aviation Week & Space Technology*, 3 March 1997, 55-57.

surveillance and early warning capability independent of the Americans to monitor potential threats. This approach would allow France to adapt its BMD efforts to the changing threat. The second part of France's strategy outline was to develop a TMD capability out of the already ongoing joint project with Italy since the late 1980s, the SAMP-T. The SAMP-T is to possess many of the same capabilities as envisaged for MEADS but at less cost; money became a crucial aspect of France's budgetary programming with the election of President Jacques Chirac in 1995.

The demise of French participation in MEADS resulted from Chirac's renewed emphasis on military reform that was spawned by the French experiences in the Gulf War and the disappearance of the Soviet Union. In February 1996, Chirac announced a wholesale reform that would reduce the size, capabilities, and budget of the French military, including the nuclear component.[91] In May 1996, France announced its withdrawal from MEADS. Like his Socialist predecessor, Jacques Chirac has abandoned the Gaullist goal of national self-sufficiency in areas in which French resources are insufficient to meet objectives—satellite intelligence, ballistic missile command, control, and communications equipment, and strategic lift. France also has sought collaboration with European partners to avoid American dominance. The French have nonetheless recognized their need to maintain close ties with the United States, notably in early warning capabilities.

According to France's former national armaments director, Henri Conze, any TMD system—European or American—must be interoperable. Accordingly, U.S.

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[91] Ronald Tiersky, "French Military Reforms and Strategy," *Strategic Forum* 94 (November 1996). Available [Online]:<http://www.ndu.edu/ndu/inss/strforum/forum94.html> [11 September 1998].

spaced-based early warning data should be shared with European TMD systems to maximize missile defense efforts.[92] While SAMP-T will compete with MEADS or any other U.S. TMD system designed for SRBMs, France will likely seek continued trans-Atlantic cooperation in areas in which it cannot be autonomous, such as space-based intelligence and communications.

4. Prospective Partners

Once the United States, Germany, and Italy agreed to proceed with the first phase of the MEADS project, there was hope that other HAWK-equipped NATO members would join the program and thereby increase MEADS' viability. The Netherlands, Turkey, and Great Britain were judged to be among the most likely to join MEADS. To date, none of the three has joined, yet Britain's lack of a TMD program, either national or in conjunction with other countries, warrants a closer look.

Since Britain became the first European nation to join the SDI program in 1985, it has maintained a higher level of cooperation with the BMDO than any other nation.[93] In 1994, rather than committing to MEADS, Britain initiated a two-year BMD pre-feasibility study to ascertain its future requirements. Its unclassified findings, unveiled in early 1997, listed several TMD-related recommendations. The study acknowledged that the threat from Europe's southern periphery was increasing, but did not see an immediate threat to Great Britain for approximately ten years. At the same time, however, it

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[92] Henri Conze, "Transatlantic Cooperation on Missile Defense: A French Perspective," Comparative Strategy 14 (1995): 431-441.

[93] Congress, House, Committee on National Security, *Prepared Statement of Brigadier General Emery, USAF, Deputy Director Theater Air and Missile Defense, BMDO*, 104th Cong., 19 March 1997.

recognized the necessity of a ground-based TMD system to protect deployed forces overseas. The study further made clear that for political and economic reasons, Britain would only cooperate—once it had decided to do so—in a trans-Atlantic TMD program. It did not commit Britain to a specific program, however, although naval TMD and the Airborne Laser program seemed to spark more interest than ground-based programs.

In September 1998, Britain further delayed any commitment to TMD by launching another three-year study. Ministry of Defense officials acknowledged that by pursuing this study, Britain had decided not to join MEADS.[94] Critics of the British decision charge that Prime Minister Blair's government has adopted a wait-and-see policy: that is, to monitor how the threat changes and how U.S. and European TMD programs evolve, and to decide at some future point whether Britain's defense budget can accommodate participation in a TMD program. Considering Britain's geographic position relative to the southern flank, its decision to wait is not unlike the U.S. policy on NMD. Jonathan Day, the Defence Ministry's Director of Defense Policy, in commenting on the findings of a recent review of strategic defense, stated that crisis management missions are expected to remain multinational in organization and that British expeditionary forces therefore do not require a full spectrum of TMD capabilities.[95] British policy, it seems, currently rests on the expectation that the United States will provide TMD for the expeditionary forces of any coalition including British forces.

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[94] Douglas Barrie, "Britain Holds Fire on Move to Theater Missile Defense," *Defense News*, 28 September-4 October 1998, 10.

[95] Stanley Orman, "U.K. Slow to Grasp Missile Threat," *Defense News*, 12-18 October 1998, 55-56.

D. CONCLUSION

For almost ten years following the end of the Cold War, the United States and NATO Europe have been engaged in restructuring the Alliance's military capabilities to fulfill NATO's dual missions of collective defense and out-of-area crisis management. In addition to redefining organizational and command functions, NATO has taken on a renewed effort at trans-Atlantic armaments cooperation to develop systems that meet NATO's new mission statement. MEADS was envisaged early on as a TMD system uniquely tailored to counter the external threats and internal coalition challenges recognized during the Gulf War.

The widespread desire to reduce defense spending in tandem with the reduction in the immediacy of a threat meant that expensive programs, like MEADS, were harder to justify as unilateral endeavors. The U.S. Corps-SAM concept was typical of post-Cold War budget-constrained defense projects. By gaining European partners, the shared benefits were seen to strengthen trans-Atlantic political, military, and economic ties while preparing a TMD capability suitable to both NATO functions. But, by promising its NATO European allies a new era in U.S. performance in armaments cooperation, the United States placed more than just the fate of MEADS at stake. The United States placed its future credibility as an armaments partner within NATO on the line as well.

European participation in MEADS was driven by the dominating U.S. lead and experience in TMD technologies and infrastructure. While both sides of the Atlantic have been limited on defense spending, Bonn/Berlin, London, Paris, and Rome understand that they cannot provide for an effective TMD capability without varying

levels of cooperation with the United States for some time to come. While NATO Europe acknowledges that the United States is an indispensable partner not only for TMD but for European security in general, it nonetheless remains wary of the potential cooperative pitfalls associated with internal U.S. bureaucratic interactions.

V. DOMESTIC U.S. FACTORS AFFECTING MEADS' VIABILILTY

A. INTRODUCTION

Germany and Italy, after having weighed the advantages and disadvantages of partnership with the United States, joined MEADS and committed themselves by programming the funding necessary to see the project through to completion. The Germans foresaw, however, that one significant disadvantage of cooperating with the United States was the unpredictable nature of U.S. domestic politics surrounding international defense programs. Specifically, the executive-legislative relationship as well as the competing interests of the military and the industrial sector would complicate the MEADS endeavor. France continues to defend its decision on MEADS by emphasizing that the program's current weakness results not from European actions, but from internal U.S. politics. In a July 1998 interview, the then outgoing French armaments cooperation attaché to the United States, Robert Ranquet, stated, "what makes MEADS interesting to Europeans is that the United States launched the program and invited international participation even though there wasn't enough money to pay for the effort." [96]

The reservations expressed by the Germans and the French were well founded. By December 1998, Congress had not appropriated any funding for MEADS beyond FY1998, and the Pentagon had made no firm commitment on whether to continue with the original MEADS concept or to seek an alternative way of satisfying the requirement

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[96] Vago Muradian, "Cooperation Not Only Cuts Costs, Boosts Interoperability," *Defense Daily*, 27 July 1998, vol. 199, no. 81, available through Nexis-Lexis [11 September 98].

for a mobile TMD-capable air defense system. The tri-lateral NATO program touted as a model for future trans-Atlantic armaments cooperation had fallen prey to internal U.S. politics and bureaucratic practices.

This chapter examines the extent to which U.S. political, bureaucratic, and industrial influences are weakening the viability of MEADS and the credibility of the United States as a partner in future NATO armaments projects. These influences revolve around several axes: the differing positions on TMD in the executive and legislative branches of government; the Congressionally mandated necessity for the Department of Defense (DoD) to balance funding among competing TMD requirements; and the interests at stake for the U.S. defense industry should MEADS collapse.

B. WHY DOMESTIC FACTORS MATTER

Although the United States could pursue a cheaper mobile TMD system on its own on the basis of work already underway, it has not declared the MEADS requirement a top priority. Yet, by selling the MEADS concept to Germany and Italy and, because of the project oversight role of the NATO MEADS Management Agency, America has invested a high degree of its perceived reliability within the Alliance in a program it does not consider as important as other TMD programs already underway. Gordon Adams, the deputy director of the London-based International Institute for Strategic Studies, emphasized the importance of MEADS this way:

> Will the United States be willing to put funding behind its trans-Atlantic defense rhetoric or will it cancel MEADS, sending a strong signal that such programs take lower priority to internal U.S. defense planning?[97]

[97] Gordon Adams, "Trans-Atlantic Crossroad: If U.S. Drops MEADS, European Relations Chill," *Defense News*, 9-15 November 1998, 27.

This statement alludes to the influence domestic U.S. politics could have on the post-Cold War relationship between the United States and its NATO European allies. Is the United States willing to sacrifice armaments cooperation with long-time allies at a time of great geostrategic uncertainty by allowing MEADS to fall victim to domestic priorities?

C. THE EXECUTIVE VS. THE LEGISLATURE

To understand where the long-term viability of MEADS fits within the larger U.S. missile defense debate, one must begin with the contentious relationship between the executive and legislative branches of the government—specifically, the differing views held by a Democratic executive and a Republican-controlled legislature.

Disagreement over strategic missile defense within the United States has been as profound as within NATO Europe. Since 1993, the Clinton Administration has held that the 1972 ABM Treaty remains the cornerstone to maintaining a stable relationship with Russia and preserves bilateral agreements on strategic arms reduction, such as START I and START II. This status-quo position is favored by Britain, France, Germany, and China. However, since the Republicans gained control of both the Senate and the House of Representatives in 1994, the legislative position put forward by the congressional majority has been that the emerging multi-stage missile threat to the United States from countries like North Korea and Iran is far more serious and immediate than the administration's assessment that a threat will emerge in 10 to 15 years. These legislators hold that NMD must become a top priority for immediate deployment. The perceived possibility of a limited, unauthorized, or accidental launch from Russia or China also has

been raised to justify NMD. Furthermore, the Republican consensus holds that since the Soviet Union collapsed in 1991, the ABM treaty has become an anachronism and should either be re-negotiated or scrapped altogether.[98]

Congress has maintained the push for NMD deployment as a co-equal priority to TMD. Until 20 January 1999, the administration maintained TMD's primacy over NMD by delaying any substantive decision with its "3-plus-3" policy—designed to be less costly fiscally and politically as well as to prevent a major schism in U.S.-Russian relations. The 1997 3-plus-3 policy envisaged evaluating the emerging missile threat to the United States for a three year period while continuing research and development on NMD in order to deploy a system by 2003 if the threat so warranted. The administration's January 1999 policy shift, shaped by the findings of the *Rumsfeld Report,* the August 1998 North Korean test launch, and the probable need to appear responsive in anticipation of the 2000 Presidential election, moves the administration's policy closer to that of the Republican-controlled Congressional position by calling for the tripling of the NMD budget to $10.5 billion with a potential deployment date of 2005.[99] This decision, the administration now concedes, will require modifications to the ABM Treaty.

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[98] The treaty was concluded in 1972 between the United States and the Soviet Union, but was changed in September 1997, with Russia, Ukraine, Belarus, and Kazakhstan as successors to the Soviet Union. As of January 1999, the modified treaty had not been submitted to the Senate for approval where, it is believed, it will be voted down by the Republican majority. The Administration has stated that it will submit the treaty to the Senate after the Russian Duma has ratified START II, an event expected in 1999.

[99] Department of Defense, *News Release: Cohen Announces Plan to Augment Missile Programs* (20 January 1999), Office of the Assistant Secretary of Defense (Public Affairs).

Differences between the two branches of government over TMD have been equally sharp. Because of the Gulf War and the resulting rapid pace of missile proliferation, both the executive and the Congress have remained firmly committed to the objective of TMD, which is to deploy, as soon as feasible, an affordable and effective means of protecting forward-deployed forces of the United States as well as those of its allies from theater ballistic missiles.[100] However, the contention between the executive and legislative branches stems from divergent interpretations of the ABM Treaty and different views on funding the assortment of competing TMD systems.

1. The ABM Treaty and TMD

The views of the administration and Congress regarding the significance of the ABM Treaty for TMD do not directly affect lower-tier systems like MEADS, but as in the case of NMD, this issue has soured the relationship between the two branches of government. Since 1993, the administration has been severely criticized by Republicans for including theater missile defenses in treaty discussions. As Republican Senator John Warner pointed out in a 1995 letter to General John Shalikashvili, then Chairman of the Joint Chiefs of Staff:

> I was there, General, in Moscow in May 1972 when this Treaty was signed. ...I have since—recently—spoken with some of the people [treaty negotiators] to confirm that short-range systems were not the subject of their work. The ABM Treaty was intended only to apply to strategic, long-

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[99] Congress, Senate, "Ballistic Missile Defense Act of 1995," Title II, Subtitle C, sec. 233 of the *National Defense Authorization Act for Fiscal Year 1996* (February 10, 1996). Available [Online]:<http://thomas. loc.gov/cgi-bin/query/z?c104:S.1124.ENR:>.

range systems. It should not now be stretched to cover the short-range, or theater, systems.[101]

What remains a hot issue for dispute is the Clinton administration's agreement since 1993 to accept limitations on the speed at which a TMD interceptor may engage a target, which, according to the demarcation set with Russia, is designed to prevent U.S. and Russian theater defenses from having a capability to counter strategic missiles. These limitations do not affect the status of the lower-tier systems, but there were concerns about the impact on upper-tier programs, such as THAAD and Navy Theater Wide (NTW), which are intended to defeat longer range TBMs at greater distances and speeds. Russia claims that technology developed for upper-tier systems could evolve into an NMD capability prohibited under the administration's interpretation of the ABM Treaty. Republicans continue to view the application of ABM Treaty-related constraints to TMD as hampering the U.S. ability to develop more sophisticated and effective TMD systems, and question whether the Administration is more concerned about sustaining positive relations with Russia or protecting the lives of forward-deployed American servicemen and women.[102] For this reason, among others, the Congress has been very critical of the Administration's position on TMD, including MEADS.

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[101] John W. Warner, Senator, US Congress, to General John M. Shalikashvili, USA, Chairman, Joint Chiefs of Staff, 18 July 1995. Available [Online]: <http://www.fas.org/nuke/control/abmt/chron.htm> [30 Dec 98].

[102] "Another ABM Giveaway?," *The Wall Street Journal*, 24 March 1997. Available [Online]: <http://www.fas.org/nuke/control/abmt/news/bmd970325c.htm>.

2. Competition for DoD Dollars

For Germany and Italy, MEADS has always been a top priority. MEADS is intended to protect both their national territories (like U.S. NMD) and deployed power projection forces. Additionally, fielding MEADS on schedule is viewed as critical because neither country currently has a TMD capability in place, except for Germany's limited Patriot batteries. For the United States, however, while a mobile TMD capability remains a stated requirement, TMD programs other than MEADS are deemed a higher priority and more urgent than MEADS. MEADS' vulnerability has resulted from the refusal by the administration to elevate its status to the core TMD system level and program the necessary long-term funding to see it through to completion, as Germany and Italy have done.

Based on the Pentagon's preferences, four TMD systems were designated as core systems or systems that have dedicated funding—two lower-tier (Patriot PAC-3 and NAW) and two upper-tier (THAAD and NTW).[103] Missile systems that are not core programs, but that are nonetheless deemed important, like MEADS, are designated as "follow-on" systems that lack dedicated funding and that are subject to strict guidelines. For example, follow-on systems have to satisfy requirements not met by the core programs and have to utilize technologies, infrastructure, and battle-management capabilities derived from the work done on the core systems. Additionally, the "Ballistic Missile Defense Act of 1995" restricts the DoD from proceeding with any follow-on system past the initial phase of development (definition/validation) unless the DoD

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[103] Congress, Senate, "Ballistic Missile Defense Act of 1995," sec. 234.

upgrades it to core status. Along with this declaration comes the requirement to program a complete development and acquisition strategy into DoD budgets. Hence, upgrading a follow-on system to core status would affect the funding levels of the original core programs without an overall increase in the BMDO budget.

Since 1995, however, the DoD has been unwilling to declare MEADS a core system and as a result its long-term viability has been faltering. When MEADS was initially threatened with termination by Congress during FY1996 budget deliberations, William Perry, then Secretary of Defense, personally intervened on behalf of MEADS by stating that its mission capabilities were vital for U.S. forces.[104] Secretary Perry, it should be remembered, developed the "renaissance in armaments cooperation" promise as a means of acquiring European partners and improving America's reputation in international projects. Likewise, Ashton Carter, then Assistant Secretary of Defense for International Security Policy, stressed the importance of MEADS' international flavor by describing it as "the centerpiece of our armaments cooperation with Europe, ...and they [the European allies] would have the rug pulled out from under them if we were to terminate the program abruptly."[105] Finally, General George Joulwan, then Commander-in-Chief of U.S. European Command (EUCOM) and NATO's top military officer, in a letter to the Senate Armed Services Committee, stressed MEADS' criticality for NATO's defense as well as for demonstrating America's commitment to Europe.[106]

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[104] David Hughes, "Senate Restores Funding For Corps-SAM.MEADS," *Aviation Week & Space Technology*, 7 August 1995, 59-61.

[105] Ibid.

[106] George A. Joulwan, General, US Army, letter to US Senator Sam Nunn, Ranking Member, Senate Armed Services Committee, 20 July 1995, available [Online]: <http://www.fas.org./abm06217.htm.>

In 1998, the DoD requested $43 million for FY1999 to complete the first program phase, but excluded any listing of the trans-Atlantic MEADS project in the 1999-2004 Project Objectives Memorandum (POM)—also referred to as the Future Years Defense Plan (FYDP)—which accompanied the budget submission.[107] The POM is a six-year budget plan specifying what the DoD will spend on everything from individual programs to general equipment and infrastructure.[108] The DoD failed to submit any plan for America's future part in MEADS because of competing domestic systems. According to a 1998 General Accounting Office (GAO) report on MEADS, the BMDO cannot afford to allocate the $1.4 billion required from 2000 to 2005 to get MEADS (with all mission capabilities) through the second program phase (design and development) without either (1) an increased overall budget, (2) delaying the deployment schedules for the core systems, or (3) taking money away from infrastructure activities such as targets, management, and systems integration and testing.[109] More damaging yet was a late 1998 internal BMDO cost reassessment that estimated the 60 percent U.S. share from 2000 to 2005 at $3.5 billion—more than double the original amount.[110] The 2000 to 2005 time frame is critical for U.S. TMD since all four core systems are expected to begin operational fielding during that period. Without additional funding, MEADS, as envisaged, would prevent the United States from having its core upper and lower-tier

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[107] Lisa Burgess, "MEADS Faces Difficult Fight for Funding in Congress," *Defense News*, 12-18 October 1998 edition, 18.

[108] Ibid.

[109] General Accounting Office, *Defense Acquisition: Decision Nears on Medium Extended Air Defense System*, 9 June 1998, GAO/NSIAD-98-145. Available [Online]: <http://www.access.gpo.gov/cgi-bingetdoc.cgi?dbname=gao&docid=f:ns98124.txt>

[110] Muradian, "Germans Question U.S. Motives On Pressing PAC-3 For MEADS"

TMD architecture in place and on time when the threat from ballistic missile proliferation is anticipated to be even more menacing.

Congress, for its part, has supported the mission requirement MEADS is to satisfy, but has been critical of the program's estimated cost, even before the 1998 reassessment. It therefore placed the onus on the administration to demonstrate its commitment to MEADS by dedicating long-term funding to it in DoD/BMDO budgets. When Congress recommended terminating MEADS in the FY1996 budget, it believed the project was too expensive in the long run. What saved MEADS then was verbal support from the Pentagon and senior field commanders. Congress did stipulate, however, that in order to receive funding for the initial phase, the Pentagon would have to study whether a mobile version of Patriot PAC-3 could provide a feasible alternative to MEADS.[111]

Members of Congress criticized the Administration's handling of MEADS again in 1997. Although it agreed to fund the full $48 million request for FY1998, the House of Representatives expressed uneasiness about MEADS' viability in its comments on the DoD budget submission:

> The Administration's apparent lack of long-term commitment to MEADS threatens both program stability and perceptions of U.S. reliability as a partner in current and future international cooperative programs. The committee's support for MEADS is dependent on the Administration's willingness to fund its continued development and the Secretary of Defense is urged to provide adequate funding for this development in the FYDP and to designate strongly MEADS as a core TMD program.[112]

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[111] Hughes, "Senate Restores Funding For Corps-SAM.MEADS," 58.

[112] Congress, House, *House FY98 DoD Authorization Bill*, 105 Cong., H.R. 1119, H. Rept. 105-132 (16 June 1997): 230.

Yet, in September 1998, when FY1999 funding for the initiation of the development phase was to be decided, Congress was less conciliatory than in previous years and eliminated further funding, effectively killing the program. From Congress' viewpoint, supported by the "Ballistic Missile Defense Act of 1995" (signed by the President in February 1996), there was no other option. The administration had failed to take the necessary steps to continue to support the program as required under the 1995 legislation. Congress did, however, specify that MEADS could be saved if the Secretary of Defense provided a plan by 1 January 1999 on how to fund the program in the FYDP; otherwise, the requested funds would be used to support alternative and less expensive ways of meeting the mobile TMD requirement. David Martin, the BMDO's Deputy Director for Strategic Relations, explained in October 1998 that "when the Pentagon failed to list MEADS in the 1999-2004 POM...the omission signaled to Congress that the Defense Department had no interest in supporting the program in the future."[113] This impression was also strengthened by the lack of verbal support from senior DoD civilian leadership that had been evident in the past. In fact, in a November 1998 joint news conference with the German Defense Minister, U.S. Secretary of Defense William Cohen stated, "we understand the importance that Germany and Italy place upon this program...we're trying to finds ways in which perhaps it can re-formulated in a way that's acceptable to all parties and affordable."[114] By Secretary Cohen's own admission, the United States had decided that it would not pursue the original MEADS concept for reasons of cost.

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[113] Burgess, "MEADS Faces Difficult Fight for Funding in Congress," 18.

[114] "Cohen: Pentagon Hopes to Resolve MEADS Issue Soon," *Armed Forces Newswire Service*, 25 November 1998, available through Nexis-Lexis [9 December 1998].

Nearly two months later, on 20 January 1999, Secretary Cohen announced that the United States would not fund the second phase of MEADS' development, but instead would downgrade it to a technology development program.[115] The U.S. plan included $150 million for research and development from 2000 to 2002, while, it was hoped, the three partners could pursue a less costly option by taking advantage of existing missile development programs, such as PAC-3. Secretary Cohen stressed that he hoped Germany and Italy would join the United States in this new approach.[116]

Germany and Italy expressed outright frustration regarding the U.S. executive and congressional decisions about MEADS. Officials from both countries have warned that future trans-Atlantic armaments cooperation is at stake if MEADS collapses due to a political failure on the part of the United States. One German defense industry official commented on his perception of how the U.S. decision has been seen within the German Ministry of Defense by stating, "I am beginning to feel a sharp sense among formerly pro-American officials in the German Ministry of Defense that they no longer wish to work with the United States, because they're always getting cheated."[117] The Italian defense attaché to the United States, Brig. General Giuseppe Bernardis, was equally adamant about the possible effect on trans-Atlantic cooperation:

> I can give you my impression, which is not an official view, but the answer is a positive no. If we don't have MEADS we will have to revert to something with a different type of specification. We will be forced to go back to a European system, like Astor [SAMP-T], on which we have

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[115] Department of Defense, *News Release: Cohen Announces Plan to Augment Missile Programs* (20 January 1999), Office of the Assistant Secretary of Defense (Public Affairs).

[116] Ibid.

[117] Burgess, "MEADS Faces Difficult Fight for Funding in Congress," 18.

> established cooperation with France. ...If they [the Americans] want to call it something else that's fine, we need that kind of system with those capabilities. But the PAC-3 is not an appropriate answer because PAC-3 is the top end of an old system and we need a new system, MEADS, that is more capable. ...Our concern is for the bad example this would set...[If MEADS dies] the message would be that there is no [U.S.] reliability for international programs, namely within NATO. [118]

Yet reaction to Cohen's January 1999 announcement was more positive. General Bernardis commented that "if we [the United States, Germany, and Italy] can go ahead with an interim program and field something by the end of the decade, as planned, that would be sufficient."[119] Germany, however, was not willing to accept immediately the alternative option. German Brig. General Hunrich Meunier, the general manager of the NATO MEADS Management Agency, expressed frustration that the United States would not fund the development of MEADS as per the original agreement. Nevertheless, the General stated that Germany needed time to study the option.[120] At the same time, however, neither Germany nor Italy definitively accepted or rejected the new American proposal.

3. The Perception of a Hidden Agenda

Regardless of the final outcome, what will likely leave a lasting negative impression on trans-Atlantic cooperation is the perception by Germany, Italy, and the rest of NATO Europe that the DoD's lack of commitment to MEADS was part of a hidden agenda to bolster funding for the Patriot PAC-3 program. PAC-3 has always been the

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[118] Muradian, "Congress Zeroes MEADS Funding, Puts Money into Mobile PAC-3," *Defense Daily*, 1 October 1998.

[119] Collin Clark, "European Partners Rap U.S. MEADS Funding," *Defense News*, 18 January 1999, 3.

[120] Greg Seigle, "MEADS Needs Budget Boost," *Jane's Defence Weekly*, 20 January 1999, 5.

most important of the core TMD programs because of its FY2000 deployment deadline and its easier integration into the existing Patriot infrastructure. Several factors support this interpretation of events.

First, as has already been illustrated, the DoD has refused to dedicate long-term funding to MEADS because it would disrupt the progress of the four core programs. In fact, both PAC-3 and THAAD have experienced program cost overruns and require additional funding beyond what has already been appropriated. While THAAD is vulnerable to termination because of a lack of demonstrated success and will not reach IOC on schedule, the cost of each PAC-3 missile has doubled to $2 million since the program began.[121] The BMDO is under pressure to ensure that PAC-3 remains on schedule, which it could not do if MEADS became a core system and without major restructuring of the overall BMDO budget.

Second, MEADS' prohibitive long-term estimated cost—to say nothing of the 1998 BMDO reassessment—has been an issue the DoD has been unable to resolve vis-à-vis the core programs. Moreover, Congress has consistently viewed MEADS as too expensive and has encouraged the DoD to seek cheaper alternatives. In early 1998, the BMDO completed a feasibility study that concluded that the PAC-3 missile could in fact meet MEADS' requirements.[122] The less costly option Secretary Cohen spoke of was a

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[121] Bryan Bender, Current U.S. Cash Cannot Back All Missile Systems," *Jane's Defense Weekly*, 9 September 1998, available through Lexis-Nexis [9 December 1998].

[122] Scott Gourley, "U.S. May Withdraw from Joint MEADS Program," *Jane's Defense Weekly*, 14 October 1998, available through Nexis-Lexis [9 December 1998].

so-called "PAC-3 hybrid" that would incorporate the PAC-3 missile but mount it on a mobile platform with a new mobile radar.[123]

Finally, it seems that the DoD's decision to abandon development of MEADS in favor of the PAC-3 alternative had been made long before it informed its international partners of its intention to do so. Within weeks of Congress officially eliminating funding for MEADS (and before the 1 January 1999 deadline to save MEADS), Jacques Gansler, the Under Secretary of Defense for Acquisition and Technology, informed his German counterpart that the only option to continue the international program was for Germany and Italy to accept the PAC-3 alternative.[124] This action appears to have been intended to generate a quasi-crisis environment, in which if each partner did not move quickly to support PAC-3, any semblance of a NATO system would be lost.

According to some reports, German and Italian officials increasingly believe that to help defray the rising cost of the PAC-3 program, the DoD purposely left MEADS out of the 1999-2004 FYDP knowing full well that Congress would be thereby be forced to kill the program and redirect funds to the PAC-3 hybrid.[125] The result is a win-win situation for the DoD—it gets increased funding for PAC-3 as well as funding for a mobile PAC-3 variant replacing MEADS. German and Italian officials also suspect that the DoD's pressure for the two countries to join the alternative program is designed to exploit the fact that without the 60 percent share carried by the United States, neither

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[123] Muradian, "Congress Zeroes MEADS Funding, Puts Money into Mobile PAC-3," *Defense Daily*, 1 October 1998.

[124] "Germans, Italians Mull DoD Proposal to Use PAC-3 for MEADS," *Armed Forces Newswire Service*, 2 November 1998, available through Nexis-Lexis [9 December 1998].

[125] Muradian, "Germans Question U.S. Motives On Pressing PAC-3 For MEADS," 7.

country will have the TMD system both require. Germany and Italy are forced to accept the U.S. alternative or be left without a system designed specifically to counter the current TMD threat. The SAMP-T's TMD capability, it should be recalled, would come as a future upgrade.

German and Italian reactions to the prospect of having to concede to the PAC-3 alternative provide glimpses into the importance each places on satisfying the MEADS mission. Both nations are wary of the Pentagon's claim that the PAC-3 hybrid can accomplish what MEADS was supposed to do and have demanded that an independent verification of U.S. claims be completed, before either commits itself to the new concept.[126] Their concern is that the capability to intercept slow and low altitude cruise missiles and aircraft might be sacrificed to save money. Furthermore, acceptance of the mobile PAC-3 variant would depend on Italy and Germany retaining their 40 percent share of the work in order to retain the employment, financial, and technological benefits that attracted them to the trans-Atlantic project in the first place.[127]

The German and Italian shift from threatening to block future trans-Atlantic cooperation or reverting to the European system reveal the value each places on MEADS' success. Yet the more conciliatory reaction following the January 1999 announcement of MEADS' downgraded status also reflects a high interest in acquiring a technologically sophisticated TMD system. However, even if both nations decide to join the PAC-3

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[126] "Germans, Italians Mull DoD Proposal to Use PAC-3 for MEADS."

[127] Ibid.

variant, the damage done to U.S. credibility for future cooperative ventures may be irreversible.

D. U.S. INDUSTRY AND FORTRESS EUROPE

The U.S. defense industry's role in the MEADS question has been as an advocate for its success out of fear of what its failure might mean to trans-Atlantic armaments cooperation. That seems to be its public position. Another motive for supporting the trilateral MEADS project is that should it succumb to domestic politics, as may already be the case, the European arms market might be closed to U.S. defense firms by the creation of a "Fortress Europe" mentality. Commenting on the Congress' elimination of FY1999 funding, an industry official from MEADS, Inc., one of two tri-national defense industry teams competing for the system's multi-billion dollar contract, stated:

> A U.S. withdrawal from MEADS would most likely lead to a "fortress Europe" mentality. U.S. credibility among its NATO allies would be damaged and the European governments would be quite wary of engaging in future cooperative efforts with their American counterparts.[128]

This industry position is consistent with statements made by MEADS International, the other competing entity, and, as we have seen, the positions of the two European governments involved. For the U.S. industrial sector, it is not so much about the merits of NATO's interoperability, America's commitment to European security, or shared burdens as it is about business—U.S. exports, to be precise. U.S. industry officials

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[128] "MEADS Officials Frustrated Over DoD's Stance on Program," *Inside Missile Defense*, 28 October 1998, 1. MEADS Inc. is a joint 50-50 U.S.-European team comprised of Raytheon and Hughes with Germany's Siemens and Italy's Alenia. The competing team, MEADS International, is made up of Lockheed Martin, Siemens, and Alenia.

believe that the DoD's handling of MEADS will harm America's ability to conduct business in Europe.

If the Cold War were still being waged, the U.S. defense industry might support the DoD's action to secure the MEADS contract for itself. But the economic realities of the post-Cold War security environment now favor the benefits of what MEADS was intended to represent—a model for trans-Atlantic armaments cooperation.

Given the perceptions of reduced threats with the end of the Cold War, Western spending on weapon systems declined in tandem with defense budgets, and the ability for industry to make up this shortfall through exports suffered because of similar attitudes among America's allies. In fact, by 1995 the world arms market had dropped 73 percent from its peak in 1984.[129] This environment had two immediate consequences: (1) it encouraged the major U.S. defense companies to merge to remain viable domestically and competitive globally, and (2) it led nations to think that they could no longer afford to develop unilaterally all the expensive high technology weaponry they needed. Hence, the push for multinational solutions to expensive problems like BMD.

By the late 1990s, European industry followed the U.S. lead. Some of the major European aerospace firms began to merge for global competitiveness as well as to resist the growing market dominance of U.S. aerospace giants like Lockheed Martin and Boeing.[130] Yet the separate mergers on both sides of the Atlantic evolved into a desire among some industry captains to form limited trans-Atlantic mergers as well. The

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[129] Robert Grant, "Transatlantic Armament Relations Under Strain," *Survival* 39 (Spring 1997): 120.

[130] John D. Morrocco, "U.S. Assesses Shifting Transatlantic Ties," *Aviation Week & Space Technology*, 14 December 1998, 59.

motivation for such a move would be the reciprocal access to a greater share of each other's domestic defense markets.[131] U.S. companies wished to increase their ten percent share of the $50 billion a year European market.[132] But America's poor record in trans-Atlantic cooperation has left Europe wary of merging with U.S. industry because of the governmental hamstringing exemplified in the MEADS case. Ironically, the Administration's push to internationalize Corps-SAM/MEADS was intended to restore European confidence in America's reliability as a partner. Now, however, U.S. industry fears that the combination of a more assertive European Union (EU) and a consolidated European defense industry could allow European governments to respond to U.S. behavior in the MEADS case by moving to satisfy major military requirements from within a "Fortress Europe."

E. CONCLUSION

Whereas Chapter IV explains the unique role and mission MEADS would fill for the United States, Germany, and Italy in the post-Cold War security environment, and how the United States secured additional funding for the program by selling the concept to its NATO allies, this chapter illustrates how U.S. political and bureaucratic factors have undermined MEADS and may have a similar effect on future trans-Atlantic armaments cooperation. Although they understood the potential pitfalls of cooperating with the United States, the German and the Italians believed that their need for a national and deployable missile defense system was critical enough to accept the risk of potential

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[131] Stanley Reed, "Europe's Defense Industry: No More Flying Solo?," *Business Week*, 21 December 1998. Available [Online]:<http://ebird.dtic.mil> [22 December 1998].

political failure. They believed that because of its dominating lead in BMD technologies and experience, its leadership in NATO, and its likely leadership in multinational coalition operations, the United States would be equally committed to MEADS. After all, MEADS was an American initiative. Unfortunately, the United States did not in the event consider MEADS important enough to allow it to compete against "core" U.S. TMD systems for funding.

Political differences between Democrats and Republicans on TMD, particularly over opposing interpretations of the 1972 ABM Treaty, have led the Congress to focus a critical eye on President Clinton's missile defense programs. Moreover, Republican-sponsored legislation forced the Democratic administration to declare and defend its priorities for TMD. MEADS ended up not being one of them. The DoD was unwilling to jeopardize the status of its core TMD systems for the international effort, but instead offered an alternative based on a U.S.-developed missile that may be cheaper, but that may also be less capable than the original MEADS design envisaged.

What is damaging is the perception among America's partners and allies that the administration manipulated the defense bureaucracy and the legislative process to back out of MEADS to increase funding for a domestic TMD system. Although the United States has assured its partners that the PAC-3 hybrid's work share will be carried out according to the 1996 MEADS agreement, the Germans and the Italians increasingly believe that the U.S. renaissance-in-armaments-cooperation policy is nothing but rhetoric. And, in light of the recent trend to merge national defense industries into a consolidated,

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[132] Ibid.

competitive European entity, as well as the increased EU rhetoric on establishing greater autonomy in security and defense matters, the U.S. failure to adequately support MEADS could draw a backlash from European governments; they might attempt to exclude the United States from their arms markets. But what impact would such a decision have on NATO cohesion? At a time when NATO cannot agree on how far to expand its collective security mission, its boundaries, or even the extent to which ballistic missile proliferation threatens its territory, can NATO bear the weight of an intra-alliance quarrel resulting from the MEADS debacle? This is the question examined in the next chapter.

VI. INTERACTIONS AND ANALYSIS

A. INTRODUCTION

NATO Europe considers the outcome of MEADS project as a bellwether by which to judge U.S. credibility as a partner in future cooperative armaments ventures. If successful, MEADS would undoubtedly pave the way for further collaboration of equal scale. Conversely, a failure could very possibly result in a NATO Europe that sees little future value in cooperating with the United States in developing arms.

MEADS was on the verge of collapse because the United States failed to extend sufficient political support to the project and instead sought to satisfy the mobile TMD requirement with an alternative based on the U.S. Patriot PAC-3. What remains is alliance management, or the process of bargaining between the United States and Germany and Italy over how to reconcile their competitive interests (the terms of an agreement on MEADS) without jeopardizing their common interests (preservation of the Washington Treaty).[133] But could disagreement over MEADS actually destabilize the Atlantic Alliance's *raison d'être* of collective defense? With the European geostrategic landscape far from certain, it is unlikely that MEADS would be allowed to jeopardize the trans-Atlantic relationship that has maintained peace and stability in Western Europe for over fifty years.

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[133] North Atlantic Treaty Organization, *NATO Handbook: The Alliance's Strategic Concept, Appendix IX*, 1995, 21. The Washington Treaty, also known as the Treaty of Washington or the North Atlantic Treaty, is the formal treaty of alliance signed by the original twelve nations on 4 April 1949 in Washington D.C.

B. THE STAKES: NATO COHESION

What is potentially at stake is a near-term reduction in the value and cohesion of NATO, with a longer-term possibility for mutual abandonment or breakup of the Alliance.[134] During the Cold War, when the threat to NATO's common interest was high, competing interests, like armaments cooperation, generated contention but never jeopardized the commitment to maintaining a collective defense against potential Soviet aggression. Since 1991, however, when the Soviet threat vanished, relative gains associated with competing interests within the Alliance have become more important to the governments in Bonn/Berlin, London, Paris, and Rome. And, according to Snyder's theory, when the outside threat declines, alliance cohesion will also decline and become harder to maintain.

Threats from within NATO about the potential political and economic consequences of a failure of MEADS are the same today as they were in 1995 when a U.S. cancellation of MEADS seemed likely. In 1995, Robin Beard, then Assistant Secretary General of NATO for Defense Support, warned the U.S. Senate that canceling MEADS would have two serious consequences for NATO.[135] First, it would jeopardize the effort to develop a cooperative approach to counter the threat from ballistic missile proliferation, which is one of the top security challenges listed in NATO's Strategic

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[134] By "value" it is meant that either the United States or European countries would seek alternative arrangements or institutions to resolve security issues, such as non-NATO coalitions, the Western European Union (WEU), or the Organization for Security and Cooperation in Europe (OSCE). Cohesion simply implies that unanimity between the United States and NATO Europe on key issues would be harder to achieve.

[135] Robin Beard, Assistant Secretary General, NATO, letter to US Senator Ted Stevens, Chairman, Subcommittee on Defense Appropriations, 25 July 1995. Available [Online]< http:// www.fas.org / abm06214.htm>.

Concept.[136] Canceling MEADS, Beard argued, could undermine the Alliance's ability to meet its territorial defense commitments or to execute out-of-area operations. Managing the political and military complexities associated with collective security operations, while simultaneously preserving the Alliance's traditional core mission of collective defense, is a great challenge; and a MEADS failure could inflict additional stress.[137] The second reason was that a cancellation of the MEADS project would strengthen the hand of those European states, France in particular, which advocate the exclusion of U.S. defense industry from the European arms market. Observers of trans-Atlantic politics conclude that the pursuit of a "Fortress Europe" policy by NATO European governments would draw a hostile response from Congress and result in a trans-Atlantic crisis.[138]

The two previously listed scenarios represent extreme possibilities of what a breakdown in the bargaining process could produce. Bargaining, however, is about attempting to reach a solution that satisfies the competing interests of each ally. None of the three nations involved has yet to abandon MEADS because each desires a compromise that is beneficial to all—and to the Alliance as a whole. Yet the outcome of MEADS will depend on each nation's relative bargaining power, which is derived from three interlocking variables: dependence, commitment, and interests at stake.

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[136] North Atlantic Treaty Organization, *NATO Handbook: The Alliance's Strategic Concept, Appendix IX*, 236-37.

[137] David S. Yost, *NATO Transformed: The Alliance's New Roles in International Security* (Washington: United States Institute of Peace, 1998), 89-90.

[138] Robert P. Grant, "Transatlantic Armament Relations Under Strain," 129.

C. DEPENDENCE

In assessing the relative dependence of the United States, Germany, and Italy on the ability of MEADS to satisfy their respective TMD requirements, it is appropriate to first readdress what is meant by dependence. Snyder defines military dependence as a product of three factors: (1) a state's need for military assistance, (2) the degree to which an alliance fills that need, and (3) alternative ways of meeting the need—to include one's own resources.[139] Accordingly, the more dependent one's partner, the greater one's power over it or, in this case, the influence of the United States to move Germany and Italy toward accepting the PAC-3 hybrid or the influence of Germany and Italy to get the United States to fully fund MEADS.

1. The United States

The United States is not dependent on MEADS for meeting its mobile TMD requirement, just as the United States is not dependent on NATO to defend its borders and shorelines. Furthermore, the United States is not reliant on either Germany or Italy for critical components or key technologies needed to develop a sophisticated TMD capability. The United States has the option to fall back on its own TMD resources for at least two reasons. First, by 2007, when MEADS was projected to begin operational fielding, the United States would have its core upper and lower-tier TMD architecture already in place.[140] While the core systems do not provide for the mobile capability

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[139] Snyder, 166-167.

[140] Daniel G. Dupont, "Pentagon Set to Announce Major Missile Defense Program Changes Today," *Inside the Pentagon*, 20 January 1999. Available [Online]:< http://ca.dtic.mil/cgi-bin/ebird?doc_url=/Jan1999/e19990120pentagon.htm>.

inherent in MEADS, upper-tier systems will have the capability of projecting TMD coverage over the entire theater in which coalition maneuver forces would be operating. Second, the shift of U.S. political support from MEADS to the PAC-3 variant is the clearest demonstration of America's ability to do without MEADS. Regardless of the dispute over the comparable mission capabilities of the PAC-3 hybrid, it would still fill the basic requirement for battlefield mobility missing from the current U.S. TMD architecture.

2. Germany and Italy

The same cannot be said for Germany and Italy. If MEADS were abandoned and neither Germany nor Italy accepted the PAC-3 hybrid as a suitable alternative, each would be left without a TMD capability designed specifically to counter existing and projected SRBMs and MRBMs. While Italy is a partner with France on the SAMP-T, and Germany would surely be welcomed as a partner for financial and political reasons, the SAMP-T's TMD capability is purely notional.[141] The SAMP-T will not have a capability to counter SRBMs before 2005 and even later for MRBMs.[142] Conversely, the PAC-3 missile was designed to intercept both SRBMs and MRBMs and as a result should prove a timelier and more capable TMD option than the SAMP-T.

Associated costs of MEADS are also a factor when determining dependence. Germany and Italy could not unilaterally or bilaterally pursue MEADS without the United States,[143] and it is doubtful that Britain, France, Germany, and Italy together could

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[141] "Ground-to-Air Weapons in Europe Reviewed," *Paris Air & Cosmos/Aviation International* (France), 29 May 1998, pp. 29-32. Available [FBIS]: Doc ID: FTS19980610000459 [11 September 1998].

[142] Ibid., 30.

[143] The United States cannot afford MEADS unilaterally as long as it is not a core program.

shoulder the total cost of the program in light of their defense priorities and the prevailing European trend for reduced defense spending.

From a broader perspective, NATO Europe would face enormous financial and technological hurdles to replicate U.S. early warning and intelligence collection capabilities, as well as to construct a ballistic missile command, control, communications, and intelligence (BMC3I) architecture that fuses critical satellite and terrestrial-derived information for effective BMD. In November 1995, NATO accepted a U.S. offer to share early warning data from America's Defense Support Program (DSP) satellites with the Alliance. This put to rest any plans for an independent early warning satellite network.[144] Additionally, NATO's accepted dependence on the United States is also evident in the details of the Missile Defense Ad Hoc Group's (MDAHG) 1997 proposal for a NATO TMD model. The group's recommendation for a NATO TMD capability consisted of: an upper-tier defense that would rest exclusively on THAAD and NTW; a lower-tier defense that would rely on MEADS and Patriot PAC-3; a naval aspect of TMD that would be met by NAW and NTW and possibly by two NATO European frigate programs under development; and an early warning capability provided by the United States.[145]

The U.S. role in NATO's defense against ballistic missile attack is not likely to change for at least for the next 10 to 15 years, if not longer. Although France has taken the lead in advocating and implementing an autonomous European space-based early

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[144] Alcibiades Thalassocrates, "NATO Launches TMD Effort," *Military Technology* (Germany) 22 (August 1998): 87-91.

[145] Ibid., 89. The MDAHG was not confident that a TMD-capable SAMP-T would be realized for financial reasons.

warning and intelligence collection capability, French progress has been limited. France has had some success with its first-generation military imaging satellite, *Helios I*, which besides predominantly serving French national interests, also provides the Western European Union (WEU) with imagery support. However, plans for a European early warning satellite network analogous to the U.S. DSP have not materialized.[146] Additionally, as a result of its complete dependence on the United States during the Gulf War for strategic level intelligence, France has placed a higher priority on developing a space-based intelligence and communications capability than on BMD. France has chosen for the time being to develop TMD capabilities on the basis of existing systems, like SAMP-T. Moreover, there are currently no known plans for a European upper-tier TMD capability independent of the United States. As a result of the European dependence on U.S. BMD-related assets, even France has acknowledged that close trans-Atlantic cooperation is necessary for any realistic European missile defense capability.[147]

D. COMMITMENT

Commitment is the second component in determining the relative bargaining power of the United States, Germany, and Italy vis-à-vis MEADS. A high degree of commitment weakens bargaining power. The more firmly committed the ally , the less

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[146] John D. Morrocco, "Costs, Politics Impede European Efforts," *Aviation Week & Space Technology* (3 March 1997): 55.

[147] Henri Conze, "Transatlantic Cooperation on Missile Defense," *Comparative Strategy* 14 (1995): 439-440.

credible, and therefore the less effective, are threats to withdraw support from a joint project.[148]

According to Snyder's alliance management model, commitment is derived from two sources: (1) explicit or tacit promises in the alliance contract, or in this case, the 1996 trilateral agreement to develop MEADS; and/or (2) commitment-by-interest—a state's underlying strategic interest to come to the aid of another state apart from a formal agreement or contract.[149]

1. The United States

In light of the previous chapter's detailed examination of U.S. political and bureaucratic actions, it is clear that the U.S. commitment to MEADS has been tepid. The United States has not been willing to sacrifice the stability of its four core TMD programs in order to commit the long-term funding required to see MEADS through development and fielding. According to Snyder, contractual agreements generate a sense of obligation to carry out the pledge of support; such agreements engage political values, such as prestige and reputation for honoring contracts, and these values are sacrificed if the commitment is not honored.[150] The United States failed to fulfill its part of the 1996 trilateral agreement by not giving the program the necessary political support. German and Italian threats, such as the assertion that future trans-Atlantic armaments cooperation was at stake or that Rome or Bonn/Berlin might revert to the European SAMP-T, are designed to highlight these political values and bring about a reversal of the U.S. position.

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[148] Snyder, 168-170.

[149] Ibid.

[150] Ibid., 169.

This sense of obligation to Germany and Italy appears to have influenced the administration. Although not what Germany and Italy had expected, the DoD's decision to continue to fund MEADS as a technology development program instead of a full development effort represents an increased level of commitment to the program. Furthermore, Secretary of Defense Cohen's expression of hope that Germany and Italy will accept the restructuring option represents a commitment to continue to pursue jointly TMD development. Thus, the degree of the U.S. commitment to MEADS (in modified form) could be assessed as having increased from low to medium.

America's decision not to unilaterally abandon a trans-Atlantic TMD effort, however, originates to a greater extent from its strategic interests than from any sense of moral or legal obligation associated with the original MEADS agreement. According to Snyder, "a strong state will have a clear interest not only in the existence and independence of a weak partner but also in acting to protect the partner, since the partner cannot defend itself."[151]

Because of the increasing ballistic missile threat to NATO territory and out-of-area deployed NATO forces, and because of the inability of NATO Europe to provide for its own missile defense, the United States has a strategic interest in assisting its European allies with BMD protection and cooperation. The United States has strategic security and economic interests in a stable and friendly Europe, and it has long been accepted that Europe's long-term stability depends on continued U.S. political and military engagement

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[151] Snyder, 170.

in European security affairs.[152] NATO is the conduit by which the United States exercises political and military influence in Europe . If contention over MEADS has the potential to erode NATO cohesion, then it is in America's strategic interest to demonstrate a mutually acceptable level of commitment to its MEADS partners. This commitment-by-interest is addressed in the "Ballistic Missile Defense Act of 1995" legislation:

> It is in the interests of the United States to develop its own missile defense capabilities in a manner that will permit the United States to complement the missile defense capabilities developed and deployed by its allies and possible coalition partners. Therefore, the Congress urges the President...to pursue high-level discussions with allies of the United States and selected other states on the means and methods by which the parties on a bilateral basis can cooperate in the development, deployment, and operation of ballistic missile defenses...[153]

The level of commitment the United States has thus far demonstrated to the MEADS initiative was increased slightly in January 1999 by the restructuring of MEADS and by the offer to include Germany and Italy in the development of the PAC-3 hybrid. However, America's less than complete commitment to the 1996 MEADS agreement is offset by its strategic commitment to NATO Europe's security. Thus, America's Alliance commitment in relation to MEADS is high.

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[152] David S. Yost, *NATO Transformed: The Alliance's New Roles in International Security*, 286-290.

[153] Congress, Senate, "Ballistic Missile Defense Act of 1995," sec. 236.

2. Germany and Italy

Germany and Italy have both manifested a high level of commitment to MEADS. Both nations, it should be recalled, have secured full project funding from their respective parliaments.[154]

Despite the economic constraints associated with meeting Maastricht Treaty convergence criteria and the costs associated with reunification, the German government has consistently programmed MEADS into its budget. Germany has also demonstrated a high level of commitment to MEADS by its decision not to join France and Italy on the SAMP-T.[155]

Italian defense spending also has been reduced to meet Maastricht Treaty convergence criteria, but Italy has had the smallest defense budget of the four major European nations. Even so, Italy also has demonstrated a high level of commitment to MEADS by maintaining its promised share of the project's estimated original cost. Italy's perceived commitment is further strengthened by the fact that, despite heavy pressure from France, Italy has not yet committed itself to the TMD version of the SAMP-T.[156]

The commitment-by-interest that raised America's level of commitment is not applicable to Germany and Italy. Each has a strategic interest in a healthy trans-Atlantic relationship, as has been addressed in chapter II, yet neither is in a position nor possesses

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[154] Joseph Anselmo, "MEADS Faces Tough Sell," *Aviation Week & Space Technology*, 3 March 1997, 57.

[155] Jean DuPont, "Europe Wary of US Aims in Joint Defence Programme: Medium Extended Air Defense System," *Interavia Business & Technology* 51, 42.

[156] Muradian, "Germans Question U.S. Motives On Pressing PAC-3 For MEADS."

the military strength to defend the United States. Commitment-by-interest, according to Snyder, only applies to the stronger state—in this case, the United States.

E. INTERESTS

The final variable of alliance bargaining power is the parties' interest in the specific issue about which they are bargaining.[157] Whereas the degree of dependence has to do with the harm allies could inflict on each other by withholding needed support, interests-at-stake concern the ability of allies to persuade each other to concede by the threat of punishment. In this case, for Germany and Italy the challenge is to convince the United States to move ahead with MEADS' development by threatening the prospects for future trans-Atlantic armaments cooperation. For the United States, the challenge is to convince Germany and Italy to join the PAC-3 hybrid and thereby shore up America's image as a reliable partner. Snyder hypothesizes that the higher a bargainer values what it is being asked to give up, and the lower it values what the partner would give in return, the more it will resist a particular proposal.

In intra-alliance bargaining, the parties threaten to frustrate the realization of their common interest (trans-Atlantic cohesion) in order to prevail on the issue on which they disagree. The credibility of their threats depends not only on the degree of dependence or the firmness of their commitments, but also on the comparative intensity of their interest in the issue being bargained over. An ally that is more dependent and more committed than its partner (s) might nevertheless have superior bargaining power if it can convince its ally that it places a greater value on the subject of the negotiation. This is the essence

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[157] Snyder, 170.

of interest in determining bargaining power—which ally places a greater value on the pursuit of the MEADS project.

1. The United States

The interests at stake for the United States are high. The United States needs Germany and Italy to remain as partners not only in a restructured MEADS program, but also in the PAC-3 hybrid. Their continued participation would serve to stifle any serious threats to the status quo relating to trans-Atlantic cooperation.

Yet U.S. interests in MEADS in 1999 are different from those of the early-to-mid 1990s when the U.S. Army needed international partners to keep Corps-SAM alive. The United States introduced the "renaissance in armaments cooperation" approach specifically to entice its NATO European allies into joining the program, and subsequently raised expectations by claiming that MEADS was the model for future cooperation. Besides averting the U.S. domestic funding shortfall, MEADS was intended to restore credibility to America's dismal Cold War reputation for carrying through with trans-Atlantic armaments projects. By offering a renaissance in armaments cooperation, the United States placed what remained of its perceived credibility on the line.

Now, however, after downgrading MEADS to a technology development program, the primary U.S. interest is to keep Germany and Italy as partners to preserve its credibility. Failure to preserve any portion of the tri-national TMD program has greater implications in the post-Cold War environment because, if German and Italian threats are credible, America's leadership in NATO could be in jeopardy as could be the U.S. defense industry's access to the European arms market.

2. Germany and Italy

Unlike the United States, Germany's and Italy's interests in MEADS have not changed since the three nations agreed to jointly design, develop, and produce the system. Snyder's axiom—"the higher a bargainer values what it is being asked to give up, and the lower it values what the partner would give in return, the more it will resist a particular proposal"—provides for a clear correlation to MEADS. German and Italian reactions to U.S. policy decisions on MEADS in 1998 and 1999 show that both nations place a higher value on MEADS than on the PAC-3 hybrid. They have, therefore, refused to unconditionally accept it. For example, Germany and Italy have consistently held fast on two demands that are crucial to gaining their acceptance of PAC-3: (1) that the United States prove that a PAC-3 hybrid can satisfy the envisaged mission capabilities of MEADS, and (2) that Germany and Italy retain their combined 40 percent workshare of any alternative program.[158]

Whereas for the United States MEADS was only one aspect of its deployable TMD architecture, for Germany and Italy it had the added importance of serving as a national missile defense system. Italy, it should be recalled, currently has no BMD system. Italy's frontline position on NATO's southern flank makes it one of the most vulnerable of all NATO European countries to the growing ballistic missile threat on NATO's southern and southeastern periphery. The 1986 Libyan attempt to strike southern Italy with SCUD SRBMs as well as the reported 1998 Serbian threat to retaliate

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[158] "Germans, Italians Mull DoD Proposal To Use PAC-3 For MEADS," *Armed Forces Newswire Service*, 2 November 1998, available through Nexis-Lexis [19 November 1998].

against NATO bases in Italy demonstrate its increasingly vulnerable position. And, as Germany is forced to undertake a greater role in NATO's overall military capabilities, especially in out-of-area missions, it may increasingly become a target for asymmetrical forms of reprisal—as the Italian experience demonstrates. Therefore, Germany's interest in MEADS is its critical role as part of a modernized and interoperable NATO integrated air defense/missile defense network.[159]

The primary military downside in accepting a mobile version of the PAC-3, or the fixed PAC-3 for that matter, is that it would be a temporary gap-filler until the United States decided to move ahead with what remains of the MEADS program. Germany's and Italy's primary concern is that, until proven otherwise, the PAC-3 system may not be effective enough against cruise missiles and low and slow aircraft. Additionally, MEADS' procurement was projected to run from 2007 to 2016, which meant it would likely remain in service until at least 2025.[160] A PAC-3 hybrid, based on existing technologies, would probably only remain technologically desirable until 2010, at which time the three nations would need to consider a follow-on.

Economic and industrial benefits also are central to German and Italian interests. Germany's and Italy's combined 40 percent share of MEADS ensured full access to technology development, which would further strengthen specialized aerospace defense industries. Moreover, a nearly equal share of the large government contracts would translate into increased employment benefits. A PAC-3 hybrid would not provide the

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[159] Holger Mey, "Extended Air Defense—Germany Between European and Transatlantic Orientations," 82.

[160] General Accounting Office, *Defense Acquisition: Decision Nears on Medium Extended Air Defense System.*

same benefits. Because the U.S. alternative is based on existing U.S. TMD achievements, like the PAC-3 missile, Germany's and Italy's economic and industrial advantages would be less well-defined. For example, according to BMDO statements in February 1999, instead of jointly developing the PAC-3 hybrid's interceptor, Germany and Italy would be allowed to co-produce the U.S.-developed missile—a familiar-sounding throw back to U.S. practices during the Cold War.[161] Therefore, even if Germany and Italy get an equal share of the work relating to the launcher and radar, they have already lost the potential benefits from the development of a whole TMD system.

F. ASSESSING THE IMPACT OF THE BARGAINING PROCESS

Alliance management is the process of bargaining with the intention to reconcile competitive interests without jeopardizing common interests—in other words, to find a mutually agreeable solution to the MEADS question and thereby prevent any long-term damage to the trans-Atlantic link. The United States and Germany and Italy have been engaged in the bargaining process since the Clinton administration excluded MEADS from the FY1999-2004 POM. The process is not over, however, until Germany and Italy either accept or reject the January 1999 U.S. proposal. Depending on either acceptance or rejection, the bargaining process may either continue until a mutually agreeable solution is found or terminate to each side's dissatisfaction.

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[161] "MEADS Decision Puts Maneuver Forces At Risk For At Least Next Decade," *Inside the Pentagon*, 4 February 1999, 16.

1. Determining Relative Bargaining Power

Snyder postulates that the outcomes of bargaining episodes between allies depend on their relative bargaining power. A state's bargaining power will be greater, the lower its dependence, the looser its commitment, and the greater its interests at stake. The ally that possesses the greater bargaining power will prevail on the issue about which they are negotiating. For example, if the United States possesses greater bargaining power than Germany and Italy, it would be expected that its two allies would choose to accept the PAC-3 hybrid unconditionally or be left without an autonomous TMD capability. Conversely, if Germany and Italy held the advantage, the United States would decide to fully fund its share of MEADS or face the possibility of being shut out from the European arms market. However, if variations exist in the interrelationship among the three determinants that give neither side a clear advantage in bargaining power, then the allies will seek a compromise.[162]

Snyder's theoretical blueprint for assessing bargaining power and the earlier discussion of each ally's relative level of dependence, commitment, and interests suggests that neither the United States nor the duo formed by Germany and Italy holds a dominating position in the bargaining process. While the United States possesses the clear advantage in terms of dependence, the relative levels of commitment and interests-at-stake do not distinctly favor one side over the other.

The dependence factor clearly favors the United States for two reasons. First, even in the event that MEADS was abandoned, the United States possesses sufficient

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[162] Snyder, 175.

resources of its own to satisfy the mobile TMD requirement. Second, NATO Europe is completely dependent upon the United States for missile defense protection.

In terms of commitment, both the United States and the duo composed of Germany and Italy have a high level of commitment invested in MEADS. Germany and Italy have both demonstrated their commitment to MEADS by maintaining full funding in accordance with the 1996 agreement. America's low commitment to the MEADS project is offset by its strategic interests in Europe, or its "commitment-by-interest." Therefore, because current U.S. strategic interests dictate aiding Europe in BMD, America's commitment to its allies can be viewed as high.

Finally, the interests-at-stake among the three nations are more balanced. By its own internal actions, the United States weakened its position vis-a-vis the two European countries. The trans-Atlantic nature of MEADS was intended to improve future cooperation, but has instead turned into an effort to avoid any further loss of America's credibility in armaments cooperation. The position held by Germany and Italy is strengthened by the higher political-military and economic value each places on MEADS over PAC-3, as demonstrated by their refusal to accept the alternative.

While the United States possesses greater bargaining power in terms of dependence, its commitment-by-interest and interest in avoiding any further loss of credibility as a partner in armaments cooperation equilibrates the relationship with its two partners. Germany and Italy do not achieve an advantage because the high credibility of their interests is offset by their almost total dependence and high demonstrated commitment. Thus, because the perceived bargaining power is relatively equal, the

United States and Germany and Italy will likely strike a compromise to avoid the risk of disrupting the strategic status quo.

2. MEADS

The pursuit of a compromise in the bargaining over MEADS has been evident in the responses to threats. The best example of this is the U.S. decision to resurrect funding for MEADS. When the administration initially cut its support for MEADS in its 1998 POM submission and the Congress eliminated all funding as a result, the two branches of government were essentially in agreement that a PAC-3 hybrid would better meet America's current BMD priorities. Because of the impact this decision had on Germany and Italy (and their assertions that future armaments cooperation was at stake), the administration found funds for MEADS. Germany and Italy, for their part, have demonstrated their willingness to compromise by softening the terms of acceptance on the PAC-3 hybrid, but have thus far stopped short of actual acceptance.

Germany and Italy will likely accept the PAC-3 hybrid once the United States provides assurances that the original workshare structure will be retained and technology sharing will continue. The linchpin, however, may be a demand by the two NATO European allies that the United States provide a clear commitment to the restructured MEADS program once technology development funds run out. But it does not appear likely that any of the three nations will unilaterally abandon the partnership, because each seeks a compromise that is beneficial to all.

3. Future Trans-Atlantic Armaments Cooperation

A compromise on MEADS will mean that the status quo in trans-Atlantic armaments cooperation will continue. As long as the United States, Germany, and Italy agree to continue to cooperate on a mobile TMD system that follows the conditions of the 1996 agreement, then the MEADS test case will not be viewed as a complete failure. Nonetheless, NATO Europe's raised expectations for a new, post-Cold War relationship —as promised through a "renaissance in armaments cooperation"—have again been dashed by U.S. political and bureaucratic hamstringing.

The result for the United States is that instead of having restored its credibility as a trusted armaments partner, its European allies will continue to remain wary of entering into joint projects. Cooperation will continue on a limited scale and in areas that Europe cannot proceed with on its own, such as BMD and space-based intelligence and communications.[163] However, future European involvement in programs of a scale comparable to MEADS will likely depend on U.S. guarantees that funding problems will not reemerge. In fact, the primary recommendation resulting from the 1998 GAO review of the MEADS program was the need for the DoD to closely scrutinize the availability of long-term funding before approving future international projects.[164]

Compromise also benefits U.S. plans to attempt to close the growing "technology gap" that exists between U.S. and NATO European forces. The technology gap concerns the widening capabilities of the United States over its European allies in high technology

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[163] Robert Grant, "Transatlantic Armament Relations Under Strain," 132.

[164] General Accounting Office, *Defense Acquisition: Decision Nears on Medium Extended Air Defense System.*

sensor and information warfare systems, logistics, strategic lift, and BMD. Concurrent with the bargaining over MEADS' outcome, the administration has been pushing for a revamping of how NATO goes about acquiring new information technologies to ensure that coalition forces possess modern and interoperable equipment to meet the challenges brought about by the increase in regional instability.[165] A central aspect of the initiative is to harmonize trans-Atlantic armaments cooperation in order to keep NATO Europe in step with U.S. military advances in high technology warfare systems and methods. The model for industrial cooperation by which this harmonization is to occur is strikingly similar to how the MEADS project is structured. It seems doubtful that NATO Europe would regard the U.S. initiative as credible if a mutually agreeable solution to MEADS were not found.

4. NATO Cohesion

A compromise also will further the prospects for preserving NATO cohesion. The threat of a massive Soviet attack on NATO soil had gone away, but the Alliance's 1991 Strategic Concept pointed out that new emerging threats could also menace Europe; security required continued maintenance of its collective political and military strength. While NATO adapted to respond to peripheral regional crises, its core function of collective defense remains the foundation of NATO cohesion.[166]

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[165] Jacques S. Gansler, "Technology, Future Warfare, and Transatlantic Cooperation," (speech presented at the NATO Workshop, Norfolk, Virginia, 12 November 1998).

[166] David S. Yost, *NATO Transformed: The Alliance's New Roles in International Security*, xiv and 191.

After regional crises and the uncertain future that accompanies Russia in its process of transformation, the 1991 Strategic Concept identifies the proliferation of WMD and ballistic missiles as a top challenge to NATO's security.[167] During the 1990s, the threat of a theater ballistic missile attack has been the clearest prospective military challenge to NATO's collective defense commitment. From 1990 to 1999, NATO has repeatedly forward deployed TMD-capable Patriot units to Turkey as part of its Article 5 commitment to defend allied territory against a possible Iraqi missile attack.[168] And, as has been illustrated in chapter III, the proliferation of ballistic missiles on NATO's southern and southeastern periphery has accelerated during the 1990s and shows no signs of abating as the 21st century approaches.

From the 1991 Strategic Concept's initial focus on the threat from ballistic missile proliferation to the 1997 Missile Defense Ad Hoc Group's recommended model for integrated TMD, the Alliance has made progress in its efforts to develop an allied response to collective defense and collective security challenges. At a February 1999 security conference attended by the top defense officials from the United States, Britain, France, Germany, and Italy, U.S. Defense Secretary William Cohen called on the need for NATO to improve its defenses against WMD in preparation for the Alliance's new Strategic Concept expected to be unveiled in April 1999 when NATO celebrates its 50th anniversary.[169] More important in terms of reflecting trans-Atlantic unity, the new

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[167] North Atlantic Treaty Organization, *NATO Handbook: The Alliance's Strategic Concept, Appendix IX*, 1995, 237 (paras 9-12).

[168] Bill Gertz, "U.S. Sending Patriots To Turkey Over Iraqi Missile Threat," *Washington Times*, 16 January 1999, 2.

[169] Charles Adlinger, "Cohen Speaks of Need For New Strategy," *Philadelphia Inquirer*, 7 February 1999, 12.

German Chancellor, Gerhard Schröder, also identified the proliferation of WMD and ballistic missiles as a key challenge for the Alliance's next strategic vision.[170]

[170] Ibid.

VII. CONCLUSION

The desire of the United States, Germany, and Italy to develop MEADS jointly was born out of the post-Cold War reality of reduced defense budgets and the need to share the costs of expensive systems. For the United States, a NATO MEADS was the only way to keep its original Corps-SAM concept funded. It had the added benefit of demonstrating that some European members of NATO were equally concerned about the ballistic missile threat to Europe and forward-deployed forces. But to gain international support, the United States promised a new approach to armaments cooperation that eased technology sharing and equitably divided the program's development and production work share.

Germany and Italy understood the importance of the role TMD would play in NATO's traditional territorial defense mission as well as in the new role of conducting operations in support of collective security. Cooperation with the United States was necessary not only for fiscal reasons, but because of the dominant lead the United States possesses in missile defense technologies, research and development, and operational experience. At the same time, however, German and Italian wariness over the tendency for internal U.S. bureaucratic processes to derail international projects was set aside because of the promise of a renaissance in armaments cooperation.

Domestic U.S. political and bureaucratic factors reminiscent of Cold War experiences resurfaced and jeopardized America's participation in MEADS, which all but killed the project's chances of being realized. The United States was unwilling to place

the stability of higher priority domestic TMD systems at risk in order to fund MEADS. Instead, the United States presented an alternative U.S. concept to Germany and Italy that would be cheaper but probably less capable than MEADS. The German and Italian response to the U.S. maneuver was to assert that the likelihood of future trans-Atlantic armaments cooperation would be diminished unless the United States remained committed to MEADS. The Europeans declared that, if MEADS failed because of U.S. political actions, NATO Europe would exclude U.S. defense industries from European markets and turn inward to a policy of developing and procuring arms exclusively from within Europe.

However, according to Snyder's theory on alliance management, the United States, Germany, and Italy will probably compromise on a mutually acceptable solution to the MEADS issue because of their shared common interest in preserving a strong NATO to ensure continued European stability. This compromise will not likely erase the obvious failure on the part of the United States to live up to its promises, and will only serve to increase the wariness of NATO European countries in any future effort to cooperate with the United States in major trans-Atlantic armaments endeavors. A compromise on MEADS has not improved America's credibility and has only prolonged the status quo in trans-Atlantic armaments cooperation.

Finally, a compromise on MEADS reflects NATO's strategic necessity to remain unified in the face of an emerging ballistic missile threat that promises to eventually reach beyond the southern flank and into the Alliance's heartland—Bonn/Berlin, London, Paris, Rome, and even Washington. Together with the proliferation of WMD and ballistic

missiles, the continued focus on regional instabilities and the uncertainty over Russia's future have ensured that preserving the Alliance's common interest remains more important than competitive interests. As long as the perceived outside threat to NATO remains credible, less than successful attempts at trans-Atlantic armaments cooperation such as MEADS will not be allowed to undermine NATO cohesion.

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