The Impact of National Missile Defense on Nonproliferation Regimes

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The current US debate on national missile defense (NMD) has centered largely on two inter-related issues: (1) the likely impact on Russia's and China's strategic nuclear arsenals; and (2) the implications for US-Russian arms control treaties (particularly START I and II and the Anti-Ballistic Missile [ABM] Treaty).[2] While these issues are important to global security in the early 21st century, they miss a key yet under-researched problem: the possible impact of NMD deployment on nonproliferation regimes and norms. Much discussion has focused on whether the powerful states will adjust their existing strategic arsenals to assure that their missiles can penetrate any US NMD shield, while little analysis has been devoted to the reactions of a broader set of states in regards to their *nonproliferation* commitments. But the integrity and long-term viability of nonproliferation treaties and regimes could eventually have a much greater impact on the future international security environment facing the United States than the initial military responses of either Russia or China. Thus, the perceptions of other states—particularly those that do *not* possess nuclear weapons—matter. These concerns are the main focus of this article.

In the views of many states, nonproliferation treaties and regimes provide the primary means of restraining the global proliferation of weapons of mass destruction (WMD). They also provide the only internationally accepted means for conducting inspections in cases of suspected cheating and for strengthening international norms against the transfer of WMD-related technology. In the current NMD debate, however, these regimes and the compliance of member states are taken for granted, despite the fact that many of these countries see US efforts to revise (or withdraw from) the ABM Treaty and deploy NMD unilaterally as a violation of existing nonproliferation norms. These states see the various treaties that exist in the nonproliferation field as inextricably linked. They believe that, if one falls, then the credibility of the others is jeopardized.

In the current US NMD debate, there has been a marked absence of consideration of the views of the 182 non-nuclear weapon states (NNWS) that are members

of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Taken together, their continued embrace of nonproliferation norms internationally represents the single largest force promoting global proliferation restraint. These states are the main repository of the strong nonproliferation "norm" that exists in the international community in regards to WMD, which serves not only global security but also US national interests.

However, commitments by these states to nonproliferation agreements are not frozen in time or indefinite in nature. Each of the major arms control and nonproliferation regimes has withdrawal clauses that allow countries to leave these regimes if their "supreme national interests" are threatened. A US decision to leave the ABM Treaty in order to deploy NMD, for example, could be met with similar responses by other states in regards to other treaties, due to changes in *their* security environment. With three months' notice, the NPT could dissolve entirely. This risk highlights the importance of maintaining the nonproliferation norms that have been established over the past 30 years.

For this reason, a central point of departure for this article is the assumption that any possible NMD deployment—as with all past military innovations in history—will take place not in a *static* environment, but instead in a *dynamic* one. This study considers likely national responses in the context not simply of the strategic nuclear deployments of a few states, but of membership in and compliance with nonproliferation treaties, organizations, and regimes by a much larger group of countries. For both supporters and opponents of NMD alike, this exercise should help make possible a more complete evaluation of the policy implications of NMD deployment.

Surprisingly, neither supporters nor critics of NMD have paid much attention to the possible impact of NMD deployment on the key regimes seeking to stem proliferation, including the Missile Technology Control Regime (MTCR), the main agreement aimed at curbing the spread of ballistic missiles, or on incipient regimes like the Comprehensive Test Ban Treaty (CTBT) and proposed Fissile Material Cut-Off Treaty. Similarly, almost no discussion in the current NMD debate has focused on an important, but overlooked regime: the Outer Space Treaty. Some of the worst threats to global security may be realized if states decide to interpret NMD as a signal that past restraint has gone by the wayside in regards to military testing and deployments in space.

In addition, while initial "first order" reactions by Russia and China have been widely discussed in terms of military deployments, little attention has been paid to their equally (if not more) important "second order" reactions. Russia and China are major supplier states in the missile field. Whether they decide to comply with the NPT and the MTCR may in the long run affect the future security environment more significantly than even their own deployments.

If the nonproliferation regime is going to survive any future NMD deployment with its current norms of restraint intact, most states will have to see NMD either as non-threatening or as part of a gradual transition to a more defensive-oriented world, with accompanying offensive reductions. If NMD is embraced by states collectively as a positive development, it need not harm nonproliferation regimes and norms. However, as will be shown below, statements from various countries suggest that such an outcome is very unlikely. This is why further examination of the possible impact of NMD on nonproliferation norms is needed. It is also why various alternative approaches to combating missile proliferation (a legitimate concern of the United States and many other countries) need to be studied. Unfortunately, this is an area where the arms control community has offered few substantive proposals.

In order to accomplish the series of tasks laid out above, this article first explores briefly the nature of forecasting in the NMD debate. It shows how all three of the major schools of thought in the US debate tend to analyze NMD deployment in static terms. It then considers the perspectives of the NNWS in the context of nonproliferation norms, in order to provide a fuller range of relevant opinions on NMD than is normally discussed. These states, unlike Russia and China, have no reason to fear NMD in terms of possible threats to their nuclear arsenals, and yet the vast majority oppose it. Understanding why is important if the United States wants to maintain the integrity of the global nonproliferation norm and the strength of existing regimes. Next, the analysis turns to the specific nonproliferation treaties and regimes that might be affected by NMD deployment, asking how behavioral change in terms of regime membership and compliance might affect the future international security environment. Finally, the article proposes an alternative approach to combating missile proliferation by combining treaty-compliant military means and enhanced nonproliferation measures.

Although the article deals with the broader question of the future international security environment, the primary reference point in the analysis will be the narrower issue of how changes in this environment serve or do not serve US security interests. The reason for adopting this perspective is the simple fact that the decision to deploy or not deploy NMD will be made by the US government based on its determination of its national interests, not those of other states.

FORECASTING NONPROLIFERATION IMPLICATIONS OF NMD

The development of defenses—from air defenses in the 1940s and 1950s, to point defenses against missiles during the 1960s and 1970s, to concepts of national missile defense in the 1980s and 1990s—has long been attractive to those, who on strategic or moral grounds, have opposed US reliance on nuclear deterrence as a the sole means of defense. As David Goldfischer has succinctly captured the logic of this approach: "Managing a transition to defense is desirable because miscalculation, insanity, accident, or evil cannot be accommodated by any theory or practice of deterrence."[3] However, efforts to enact such a transition have been singularly ineffective due to a variety of technical problems.

The United States has conducted extensive research on a variety of defensive systems since the 1950s. These include the Nike Zeus missile, the Nike X program, Project Defender (which included the BAMBI system[4]), the Sentinel system, the Safeguard system, the Strategic Defense Initiative (SDI), the Global Protection against Limited Strikes (GPALS) system, theater missile defense (TMD), and now national missile defense. According to a recent study, the total cost of these research, development, and deployment programs has been $98.5 billion.[5] Unfortunately, none of these programs has succeeded in meeting the criteria required for reliable defense of the United States against missile attack.

Beyond effectiveness, the philosophical and strategic challenges of managing a transition to defenses and the possible costs associated with this process remain serious obstacles, preventing a move toward either "defense dominance" or toward a mixed "offense-defense" posture in US national security policy. Given these circumstances, nonproliferation treaties to encourage or enforce restraint by states in the WMD area have helped the United States to prevent new threats from emerging in a world where offensive systems have remained dominant.

If NMD deployment is to *improve* overall US national security, US policymakers must first attempt to forecast the implications of NMD on nonproliferation agreements. To date, US government statements and the criteria put forward for future decisionmaking do not provide much evidence of such an analysis. Instead, the debate has turned almost exclusively on the perceived threat.

In the past two years, the urgency to deploy defenses has been spurred by the 1998 Rumsfeld Commission Report, which concluded that a "rogue state" could develop a long-range missile in five years and the United States would not know in advance of such a program.[6] If this happened, the United States would be unprepared to defend itself. Missile tests by India, Iran, North Korea, and Pakistan, and continuing threatening behavior by Iraq, seemingly confirmed these fears. The passage of the "National Missile Defense Act of 1999" made it US policy to deploy defenses—regardless of international circumstances—as soon as it became technologically feasible.

Three basic approaches have emerged in the US debate on NMD (see Table 1). The first, promoted most actively by conservative Republicans in the US Congress, calls for near-term deployment of a robust NMD system that would include land-, sea-, and space-based elements. The conservatives' evolving approach to NMD is outlined in a recently released Heritage Foundation report.[7] Their concept would abandon the limited NMD emphasized by the Clinton administration in favor of immediate upgrades of existing sea-based elements on *Aegis*-class cruisers. It would then steadily build space-based assets (placing Space-Based Infra-Red Sensors [SBIRS] in high and low orbit) and a larger nationwide ground component than the Clinton plan envisioned, while discarding the "now defunct"[8] ABM Treaty.

The problem with this approach is that even a fully tested and operational NMD system with multiple layers will be either wholly or partially ineffective against a wide variety of threats. It will not work even against certain missile threats (such as cruise missiles or depressed trajectory sea-launched missiles). It will also do nothing to combat threats stemming from terrorism, suitcase bombs, or chemical and biological weapons not delivered by missile, which may be more likely threats

to face the US homeland. Given the expenditures that would be required to construct a full-scale NMD system, these trade-offs would need to be addressed. Beyond these concerns, a full-scale NMD system would also create a range of regime problems with respect to the ABM Treaty, the MTCR, and the Outer Space Treaty, among others. Yet, supporters have tended to ignore these dynamic aspects of full-scale NMD deployment.

A second approach has received extensive consideration and development by the Clinton administration. This policy aims at development of a limited NMD system that would eventually consist of some 100 interceptors and be designed to defend against launches of up to 20 to 30 missiles. It would have an optional upgrade after deployment to as many as 250 interceptors (total) at two sites.[9] The system would be deployed through amendment of the ABM Treaty with Russia. It would be expressly designed to counter rogue state threats, not Russia or China.

The Clinton/Gore plan has faced considerable criticism from conservatives and arms controllers alike, both for its failures when system components have been tested and for the system's likely inability to deal with countermeasures. Critics have also noted that its late midcourse interception point makes it vulnerable to sub-munitions and multiple warheads.[10] The Clinton/Gore administration's attempt to "sell" the system to Russia did not succeed, as a hoped-for deal in the spring 2000 summit with President Vladimir Putin failed to yield Russian cooperation. Moreover, the Clinton/Gore plan neglects the fact that an agreement with Russia would not necessarily mean that the rest of the international community would accept this decision as beneficial for them as well. Indeed, a perception could emerge that the two largest military powers in the world were simply banding together in opposition to the rest of the world community.

Finally, a third approach has been suggested by a wide range of critics in the arms control community, who have pointed out a range of purported flaws in the plans of the first two groups. Their arguments have challenged as well the seriousness of the threat facing the United States, noting the lack of long-range missile capability in any of the main states purported to threaten the American homeland (Iran, Iraq, and North Korea).[11] Unfortunately, this school of thought has done little to assuage the broad sector of the American public and the US Congress that is concerned with missile proliferation and wants the government to do something about it.

Despite these minority objections, there are clear areas of majority agreement within the US Congress and policymaking community that: (1) missile proliferation poses an increasing threat to US and allied security; (2) NMD is defensive and does not threaten anyone; (3) NMD may provide a means to render offensive missiles increasingly irrelevant; and (4) US leadership in this new area of technology is a valuable hedge, preventing the United States and the rest of the world from being held hostage at some future point. Indeed, at least until President Bill Clinton's announcement in early September 2000 that he would not make a decision on deployment of NMD during his term, the vast majority of Washington observers seemed convinced that the question was not whether, but when.[12] Most analysts still believe this to be the case.

Table 1: The Three Main Approaches to NMD

Group	Congressional Conservatives	Clinton/Gore Administration	Arms Control and NGO Community
Preferred Policy Option for NMD	"Robust" NMD, scrap ABM Treaty	Limited NMD, amend ABM Treaty	No NMD, maintain ABM Treaty
Problems Not Addressed	Full-scale NMD doesn't buy overall security and will inspire active and asymmetrical countermeasures	Cooperation with Russia may irritate the rest of the world; limited NMD likely ineffective	Simple anti-NMD approach fails to deal with the missile proliferation threat

The Clinton administration announced four criteria that would be the basis of any Clinton/Gore decision about NMD deployment: (1) the threat; (2) the cost of the system; (3) the system's possible impact on US-Russian arms reductions; and (4) the effectiveness of the system from a technological standpoint. Although even critics largely accepted these yardsticks, these criteria made no direct mention of the possible impact on nonproliferation regimes, much less the norms that support them.

Other questions remain unsettled or have not been discussed adequately. There is still an on-going debate between supporters and opponents of NMD as to whether the deployment of defenses will deter missile development programs among rogue states or instead encourage them. Clearly, a market for countermeasures would likely increase existing compliance problems in the MTCR. Other issues have to do with relative defense priorities once the more costly deployment of NMD begins. The US military has been reluctant, for example, to cut prized programs (such as costly aircraft purchases or submarine deployments) to make room for missile defenses.

Current analysis of NMD has also not focused much attention on state responses to NMD that might take the form of asymmetrical attack strategies (i.e., ones that would employ other means of delivery instead of missiles). Although military planners are well aware of the necessity of addressing these considerations, it is not clear that missile defense supporters—in their desire to win favor with their constituents—are prepared to admit that defense costs will be increased in other areas, should NMD move forward.

Finally, on the other side of the debate, it is not clear that opponents of NMD—in their zeal to halt what they see as a failed system aimed at an unlikely threat—have factored in the ability of a small number of conventionally armed missiles (or even the threat of these missiles being fired) to cause panic in US or allied cities in a time of crisis. Arguably, some missile defenses—or some other strategy for combating this threat—might be needed to calm these fears.

Thus, a more reasoned and dynamic assessment of the desirability of deploying NMD might be found in the following restatement and amplification of the Clinton/Gore criteria: (1) the current and future impact of NMD on long-range missile development programs that might be directed against the United States; (2) the cost of the NMD system *relative* to other defense priorities over the next decade, and the reliability of current cost estimates; (3) the possible impact of NMD deployment for US-Russian arms control *and* multilateral nonproliferation regimes; and (4) the likely degree of effectiveness of the system in both its technical mission of defeating the specific threats its was designed to combat (including countermeasures) *and* its political mission of reassuring the American people that its government is doing something against the rising missile powers. While these new considerations force us to think harder about how to evaluate the likely impact of NMD deployment, they are also likely to bring us closer to uncovering useful truths. The rest of this analysis will use this expanded set of criteria as a guideline for projecting possible costs, benefits, and previously unforeseen reactions, particularly in terms of nonproliferation.

US VIEWS VERSUS INTERNATIONAL PERSPECTIVES

The key contribution of existing nonproliferation treaties lies in their ability to facilitate reciprocal restraint. In each regime, countries accept some degree of vulnerability in return for the broader benefits of collective self-restraint in a particular field of weaponry. In the NPT, the NNWS are further asked to limit themselves while allowing five states to possess nuclear weapons, at least in the short term. Thus, if the greatest military power in the world is considering withdrawing from one of the major treaties, there is a natural perception by other states that it is trying to gain an unfair advantage, since the rest of the world (objectively) is much more poorly armed. As one analyst in East Asia has noted: "While sole possession of a missile shield may appear to put the US in an unassailable position…it will also make much of the rest of the world feel exposed and vulnerable, a situation that is guaranteed to provoke instability."[13] In the same sense that NMD supporters have made worst-case assumptions about North Korea's missile intentions and plans (despite the rather limited test program to date), the rest of the world may make similar worst-case assumptions about US intentions in deploying NMD.

Signs abound that many countries, including traditional US friends, are troubled by the recent direction of US policy. During the fall 1999 session of the United Nations, a broad coalition of states, including France, voted 80-4-68 at the United Nations to endorse a reso-

lution recognizing the ABM Treaty "as a cornerstone for maintaining global peace and security and strategic stability" and calling upon member parties to engage in "full and strict compliance" and "to limit the deployment of anti-ballistic missile systems and refrain from the deployment of anti-ballistic missile systems for the defence of the territory of their country…."[14] Despite official Clinton administration policy in support of the ABM Treaty, the United States voted against the resolution, along with only Albania, Micronesia, and Israel. Had the resolution been slightly less polemical in tone, however, it is likely that many more US allies would also have voted for the resolution.

The United States fared much worse in another UN resolution recognizing "the importance and urgency of preventing an arms race in outer space."[15] All of the NATO countries plus Japan and South Korea bucked US pressure and supported this measure, which passed 162-0-2. Given the resolution's possible ramifications for preventing more advanced NMD systems, the United States found itself alone with Israel in abstaining from the resolution.

While these resolutions were primarily declaratory (with no specific impact on the United States), they set a troubling trend of increasing US isolation on important nonproliferation and security matters at the United Nations, damaging America's reputation and encouraging the formation of new anti-US coalitions and voting blocs. Such developments, particularly in regard to our NATO allies, present possibly serious problems for long-term US interests.

In order to understand the views of the NNWS more fully, it is necessary to delve further into the question of existing nonproliferation norms. Perhaps surprisingly, the evidence suggests that the NNWS have adopted and internalized these norms even more strongly than have the very countries that led the efforts to establish the NPT. Part of the reason, certainly, is that these states do not possess nuclear weapons as a fallback.

NORMS AND BELIEFS OF THE NNWS

For our purposes, we can define "norms" as transnational beliefs and patterns of behavior regarding right action in a particular field of international relations. In some cases, they may be formal (such as in the bans on certain weapons or international codes against the hijacking of planes). In other cases, norms may be informal (including mutual understandings of self-restraint in regards to certain military technologies, such as lasers, or in shared "rules of the road" in terms of engagement in regional conflicts). Nonproliferation of nuclear weapons, thanks largely to the principles laid out in the NPT in 1968, has become a widely shared norm internationally. For the NNWS, the norm of nonproliferation has become a particularly strongly held principle because of its centrality to their security. The ultimate goal of nuclear disarmament embodied in Article VI of the NPT is part of the reason for the strength of this norm, since enforcement of it will eventually, in the eyes of these states, "level the playing field" with the NWS and make the world a safer place. This explains why states—many of which were fully capable of developing nuclear weapons—agreed to limit their freedom of action, in return for what they saw as a collective good: eventual global, nuclear disarmament.

At the same time, other norms, such as the ban on nationwide anti-missile defenses embodied in the ABM Treaty and prohibitions against possession or use of chemical and biological weapons, were embraced by the vast majority of states as part of the broader "nonproliferation regime." The logic underlying these related norms is that they help to ensure the security of the NNWS, in the absence of nuclear weapons possession. Thus, the various treaties that evolved during the Cold War became part not only of the national policies of these states, but also of their fundamental foreign policy beliefs.[16] When the Cold War ended, these countries saw these treaties reaffirmed and the goal of eventual nuclear disarmament closer than ever before.

Seen in this context, it is not surprising that the NNWS view the US attempt to develop NMD (a new type of weapon that could conceivably be used either defensively or to enhance the US ability to launch a first strike) as a threat to the nonproliferation regime and the foreign policies premised on its continued robustness. Similarly, the attempt by certain US congressmen to argue that the ABM Treaty no longer exists due to the dissolution of the Soviet Union[17] makes no sense within the perceptual framework of the NNWS. To them, the norm embodied in all the related treaties involves the desirability of preventing new arms races, a goal they see as incompatible with the development of a new category of weapon.

In his much-quoted book *After Hegemony,* Robert Keohane found that norms remain potent among the states in economic regimes even after the decline of a hegemon that established them.[18] Interestingly, the same dynamics seem to have emerged in the security field, despite the end of the superpower system that brought states into the NPT during the Cold War. For many states, the adoption of nonproliferation norms involved serious sacrifices and internal struggles with their own military-industrial complexes. To them, accepting NMD means admitting defeat and going "backward," forcing them to abandon new understandings of the relationship between armaments, society, and peace that they believe will lead in the long run to fewer wars and more harmonious international relations.[19]

For these states, nonproliferation is both a goal and a means. That is, they are committed to a process of working through regimes to limit proliferation, rather than relying primarily on military means, as states have done traditionally. Ironically, Washington and Moscow seem to have learned the least in terms of nonproliferation from the very treaty they helped establish.

VIEWS OF THE NNWS ON NMD

With the exception of a small number of US allies that are already committed to co-development of missile defense (Israel and Japan, primarily), there are very few security issues in modern memory where so much of the world has taken a different perspective from that prevalent in Washington. If one surveys national statements on NMD, one cannot help noting their remarkable consistency across all types of states in criticizing NMD efforts as a challenge to nonproliferation regimes and norms.

Beginning with US allies, the views of two countries that could stand to benefit significantly from NMD deployment are particularly telling. Both Canada and Denmark (which governs Greenland) could reap billions of US defense dollars if they agree to upgrade radars on their territories for inclusion in the NMD system. Yet both have rejected the "assumption" by the United States that their territories will automatically be available to serve as a platform for NMD hardware. As Canadian Foreign Minister Lloyd Axworthy stated recently, "I think sabre-rattling by American generals is not conducive to a serious debate in Canada."[20] At the G-8 summit in Okinawa, Axworthy sharpened his attack on NMD by arguing "There are so many other ways we could be pursuing security."[21] In Denmark, the parliament passed a resolution 13 years ago prohibiting the Thule early warning radars on Greenland from being used in violation of the ABM Treaty. That resolution is still in force and has the backing of the current Social Democrat-Social Liberal coalition government. Foreign Minister Niels Helveg Petersen stated in early 2000 that Denmark would reject any US request to use the Thule radar station in service of any NMD system, emphasizing that "The use of the Thule radar must not be in violation of standing international agreements."[22]

On Greenland itself, the regional premier Jonathan Motzfeldt has also stated his opposition to NMD, citing its implications for broader international security. In a recent interview he explained, "No one in Greenland wishes to take actions that would lead to recreating the atmosphere of the cold war era."[23]

Other key NATO allies in Europe have voiced particular discomfort about possible problems with Russia. As German Chancellor Gerhard Schroeder noted in June 2000, "We have to be very careful that any such project does not trigger…a renewed arms race." From the security perspective, Schroeder also expressed concern that, if only the United States is protected by NMD, it could create a "two-class security system" within NATO.[24]

NWS allies in NATO have expressed comparable reservations. In Britain, a report analyzing NMD for the government included the following advice: "We recommend that the government encourage the USA to seek other ways of reducing the threats it perceives."[25] Meanwhile, France has been even more forthright in its opposition to NMD. As French Minister of Defense Alain Richard stated in a speech delivered in Washington, DC, in February 2000, "…what is it we want? In a nutshell, […] to see the U.S. commitment to disarmament and non-proliferation strongly reaffirmed."[26] President Jacques Chirac has been even stronger in his criticisms, arguing: "[NMD will] retrigger a proliferation of weapons, notably nuclear missiles. Everything that goes in the direction of proliferation is a bad direction."[27]

In southern Europe, which is arguably more threatened by ballistic missiles from the Middle East than any other region, Greek Defense Minister Apostolos Tsochatzopolous noted in July 2000 that NMD deployment "will pose a threat to [the] peaceful balance in the world" and lead to a new arms race.[28] Speaking at the

2000 NPT Review Conference, Portugal's Minister of Foreign Affairs Jaime Gama stressed, "We affirm the importance of the ABM Treaty, as one of the pillars of strategic stability."[29]

There are some supporters of NMD among US allies. These include Japan, Australia, and Norway, although each of these countries harbors reservations about the program. Japanese Prime Minister Yoshiro Mori responded to critics in the Diet during the summer that Japan views missile proliferation as a "serious threat," but will seek to ensure that NMD will be "handled in a manner conducive to an improvement in the international security environment."[30]

Among countries with few military ties to the United States, the reaction to NMD has again been largely negative. Seeking to highlight the views of the Association of Southeast Asian Nations (ASEAN), Thailand's Foreign Minister Surin Pitsuwan stated in July 2000 that the countries of his region are concerned that NMD and TMD deployment might lead to countermeasures by other states, arguing "ASEAN in general is very much concerned about [a possible] arms buildup…."[31] ASEAN Secretary General Rodolfo Severino added regarding NMD and TMD alike that "ASEAN is against any development that would tend to destabilize the situation" in the region.[32]

South Africa, which joined the NPT as a NNWS in 1991, is viewed by numerous states as a leader in the nonproliferation movement. South Africa gained credibility as a state that voluntarily gave up nuclear weapons, led efforts to create a nuclear-weapons-free zone in Africa, and played a leading role in the indefinite extension of the NPT in 1995. Its officials have been critical of NMD for allegedly moving in the wrong direction in terms of nonproliferation: that is, toward more weapons instead of fewer. Speaking at the 2000 NPT Review Conference in New York, South African Foreign Affairs Deputy Director-General Abdul Minty listed the Clinton administration's attempts to amend the ABM Treaty and build an NMD system as a betrayal of the pledges made by the United States at the 1995 conference.[33] South Africa and other states in the New Agenda Coalition (Brazil, Egypt, Ireland, Mexico, New Zealand, and Sweden) have called instead for a new direction in the policies of the NWS and a clear commitment to reducing their arsenals. Speaking at the same meeting, UN Secretary General Kofi Annan cautioned that NMD deployment could "reduce, rather than enhance, global security."[34]

Brazil, which is one of the most recent signatories to the NPT, has expressed serious concerns about US NMD plans, suggesting that they indicate a US effort to achieve unilateral military advantages. At the 2000 NPT Review Conference, Ambassador Celso Amorim issued a thinly veiled critique of Washington's missile defense plans, saying, "The deployment of new weapons systems and the modernization of existing ones seem to indicate that the illusion of absolute security is again being pursued."[35]

Even Ukraine, which is threatened by Russian missiles perhaps more than any other country, took the opportunity at the 2000 NPT Review Conference to "…reaffirm the importance of the Anti-Ballistic Missile Treaty as one of the pillars of strategic stability."[36]

As former UN Special Commission on Iraq head and Swedish Ambassador to the United States Rolf Ekeus has noted, the United States is pursuing NMD without even making the pretext of linking it to the elimination of nuclear weapons.[37] Ekeus argues that while Reagan's Strategic Defense Initiative may have had serious problems, at least President Reagan pledged to the rest of the world that its deployment would eventually provide for the complete elimination of nuclear weapons. With NMD, the United States has provided no grander vision of a safer world that will result if it is deployed. Instead, the rest of the world foresees that NMD will lead to the creation of a new class of defensive weapons, while stimulating an arms race in missiles and counter-measures aimed at overcoming them.

If these are the views of a number of influential leaders of NNWS, what impact will a unilateral US withdrawal from the ABM Treaty and deployment of NMD have on their future commitment to nonproliferation, as well as on the behavior of other states in those same regimes?

EFFECTS OF NMD ON CRITICAL NONPROLIFERATION REGIMES

A major consequence of NMD proceeding in its current direction could be the unraveling of a number of key regimes. Specifically, if certain countries perceive that the United States is expecting or even "provoking" a confrontation, they are likely to see withdrawal from these treaties as justifiable and perhaps even rational.

Such "spirals" of defection may or may not lead US allies to defect from the regimes themselves, but they may sympathize with the arguments of these defectors and thereby drift away from the United States in key international arms control and nonproliferation fora. Ultimately, the result will be a worsening of US security and a fragmentation of current regimes, destroying currently prevailing nonproliferation norms.

Although the ABM Treaty has been widely discussed in terms of Russia, there has been little consideration of the views of the NNWS. While they are not members of the treaty, as noted above, they view its maintenance as a sign that the two largest military powers in the world take seriously their commitments to Article VI of the NPT and remain supportive of general disarmament trends, especially after the end of the Cold War. The US NMD initiative has put into question the apparent US commitment in this area, particularly since several US senators and some academic analysts have argued publicly that "As a result of the collapse of the Soviet Union, the ABM Treaty is no longer binding."[38] This view is not accepted by the NNWS, either from the perspective of international law or, perhaps more importantly, from that of the general practice of international diplomacy.

US critics have voiced some of the same concerns. As Michael O'Hanlon has pointed out, "This is a poor argument; the same reasoning would absolve Russia from the Soviet Union's other obligations, debts, and responsibilities in areas such as weapons nonproliferation."[39] Similarly, as George Bunn has noted, the international community has unanimously accepted Russia as the successor to the Soviet Union according to "the UN Charter and its provision giving the Soviet Union a permanent seat and veto on the UN Security Council—as well as bilateral and multilateral arms control treaties."[40] Thus, even if a case could be made on narrow legal grounds, this decision will be viewed as illegitimate by the rest of the international community. These developments might not be troubling on the face of them, but they sow the seeds of future difficulties. Russian President Putin has presented a number of new initiatives to the states of Europe in regards to missile defenses, attempting to split them off from the United States. Hasty US policies in regards to the ABM Treaty could push the Europeans further toward siding with Russia and against the United States.

For example, if the United States were to invoke the "supreme national interests" clause in the ABM Treaty—citing the seriousness of the third party missile threat—and withdraw from its obligations to limit missile defenses (after giving the required six months notice), Washington would be in an extremely weak position if other states sought to withdraw from other regimes, like the NPT, for similar reasons. After all, if the missile threat is severe for the United States, with the world's largest arsenal of nuclear weapons, then it must logically be far more threatening for states without nuclear weapons at all. While this would likely not involve US allies immediately, the defection of states like North Korea, Iraq, Iran, and China might be seen as having been "provoked" by the United States. Similarly, depending on the nature of the NMD deployment (that is, whether or not it involved space-based interceptors capable of hitting ground targets—whether or not that was their intention), it could lead even a broader range of states to consider the MTCR as also in jeopardy.

It is not hard to imagine other scenarios that might also undermine the NPT. For example, China might respond to a US decision to deploy NMD with a decision to expand its inter-continental ballistic missile and sea-launched ballistic missile forces or to develop multiple warheads for the missiles. Or China might even decide that the restrictions it has only recently accepted in joining the NPT (to disarm eventually and to limit its exports of nuclear technologies) are too limiting, causing it to withdraw from the treaty. In either case, US friends such as Taiwan and Japan might feel forced not to rely on dubious US-supported missile defenses, but to move instead to full-fledged nuclear options, particularly in a scenario where North Korea followed China in leaving the regime. Similar cascading withdrawals from the NPT in the Middle East are also imaginable. In these circumstances, US interests and US nonproliferation objectives would clearly suffer, and security would be made much more difficult (and expensive) to achieve.

A related problem, short of actual defections, would be the ultimate failure of efforts to achieve "universality" in the NPT. This issue has been a high priority for the NNWS in various meetings, particularly at the 1995 and 2000 NPT Review Conferences. The goal of bringing India, Israel, Cuba, and Pakistan into the NPT is viewed as one of the key responsibilities of the NWS, and aggressive NMD deployment by the United States could end any realistic chances, especially in the case of India. With the failure of efforts at universality, states that have long been loyal members of the regime may

express extreme frustration with the United States, leading them to reject US leadership and, among some, to question their own commitments to the regime (particularly as suppliers). More specifically, if the United States is viewed as "preventing" universality, some states might well conclude that the "cat is out the bag" and that supplying nuclear technology to countries outside of safeguards (including to NPT non-members) is now acceptable.

Other possible action-reaction spirals could affect the CTBT, an area in which the United States has already raised considerable doubts as a result of the Senate's rejection of the treaty and US continuation of programs like the National Ignition Facility at Lawrence Livermore National Laboratory and zero-yield nuclear tests at the Nevada Test Site. Here again, issues of universality are extremely important in the minds of the NNWS, which are eagerly awaiting full ratification of this important regime. If an NMD deployment by the United States involving large numbers of space-based components (whether weapons or not) moves forward, the process of ratification by states like India and China would undoubtedly be further delayed. These countries instead would have new incentives (and, perhaps justification, in the eyes of some) to resume nuclear testing. This kind of dynamic could spill over into a range of other countries (such as Pakistan, Israel, Iran, and perhaps North Korea). Key US allies—the United Kingdom and France—that have already ratified the CTBT would feel double-crossed by the United States for fomenting this disruption of the test ban regime. Such conditions could lead to a world where the United States is isolated from much of NATO, as other states outside of the regime legitimately resumed their testing of nuclear weapons. A particularly dangerous development might be the resumption of space-based testing (which was conducted by the United States and the Soviet Union before the 1963 Limited Test Ban Treaty [LTBT]). States like China and India, in particular, might find such activities advantageous in planning for possible military action against US satellites and space-based assets included in the NMD system.

Although rarely mentioned in the NMD debate, the Outer Space Treaty (1967) is another nonproliferation regime that is threatened by the US deployment of NMD. The issues involved here have to do with the clauses in Article III requiring that all states use space "in the interest of maintaining international peace and security" and in Article IX discouraging activities that would "cause potentially harmful interference with activities in the peaceful exploration and use of outer space." US abrogation of the ABM Treaty and deployment of space-based components of an NMD framework (such as Brilliant Pebbles interceptors) could easily lead to defections, given the existing norm against weaponization of space. States fearing US space-based assets could be motivated to invest in research and testing of anti-satellite (ASAT) weapons, fracturing the regime and leading to active arms racing. States like China, India, Pakistan, Iran, and Iraq could easily devise military space programs that would include orbiting mines stuffed with conventional projectiles, which would be highly effective against US satellites or even manned spacecraft. Even actions to limit the military use of space by launching large quantities of debris into low-Earth orbit could be effective in shutting down the peaceful use of space by the major industrial powers. While formal withdrawal from the treaty requires a year's notice, decisions by even a small number of states to leave the treaty could have serious repercussions, possibly bringing an end to such hopeful projects as the US-backed International Space Station.

Again, if states perceive the US move to build NMD as having initiated the weaponization of space, key US allies and non-allied NNWS could well be brought together in hard-to-predict new coalitions against US behavior. If, as is likely, this prompts US responses, the dynamics in this realm could quickly turn ugly. In the most worrisome scenario, states might leave the Outer Space Treaty in order to place WMD in orbit around the earth for possible use against ground-based targets. For example, a state that decided to leave the treaty—perhaps China—could place nuclear weapons in orbit (maneuvering them to higher or lower orbits as necessary) and have them available to call down on either US space-based assets or ground-based targets associated with early warning and targeting. Such an environment could ruin space for any meaningful commercial activities, jeopardizing international communications. While the United States could not be fully blamed for these dynamics, it could be widely branded as the instigator.

In space, Russian behavior may play an especially important role, but again of a "second order" nature. Unlike other states, it is bound by the LTBT not to test in space. However, if the US deployed NMD, Russia would be under no restrictions in developing its own missile defenses, which would likely include space-

based elements. One such program would likely be the restarting of Russia's space-based weapons program, particularly its previous (but currently mothballed) anti-satellite program. In the event of future US-Russian tensions, Russian resumption of testing on its co-orbital ASAT and deployment of additional cruise missiles on its submarines are likely responses. These technologies could also easily be sold to other states. Russia would likely face only limited international censure for such actions, even from US allies, particularly if they blamed US NMD deployment for provoking the change in Russian behavior.

In addition, military coalitions against NMD cannot be ruled out, given that even current US actions have led China and Russia to begin cooperation on joint use of Russia's GLONASS military satellite network and to consider joint missile defenses.[41] Although today the chances of China and Russia building a joint space defense against US forces seem unlikely, NMD could create strong pressure on them to move in this direction. Thus, the implications of NMD on future space activities, though often overlooked, could easily disrupt a relatively strong regime that has helped safeguard US and allied security for three decades. In addition, they could lead to military countermeasures that might make commercial space activities impossible and US NMD systems ineffective.

Finally, there is the MTCR. For a variety of reasons, the United States and other founders of the MTCR decided not to make it a formal treaty, but rather a set of guidelines intended to limit exports of missiles and missile-related technologies (specifically, those useful for developing rockets capable of carrying a 500-kilogram payload over 300 kilometers). The relationship between NMD deployment and the MTCR is not a direct one in the eyes of the United States, but it is in the eyes of many other countries. That is, a US decision to "proliferate" in defensive technologies could irritate key supplier states like Russia, France, Ukraine, and China, weakening the very regime that is currently doing the most to restrain exports of missile technologies. France and Ukraine have already provided considerable military technology to Pakistan (including submarines and tanks) and might increase these shipments if world opinion turned further against the United States as a result of its NMD actions.

Russian behavior in violation of a weakened MTCR could do even more damage than could be caused by its own rearmament. Russia's military industry would start to work on countermeasures, including standard devices, such as chaff, balloons, and dummy warheads, but also more sophisticated systems, such as maneuverable warheads. Given Russia's economic situation, it is highly likely that all of these technologies will quickly find themselves on international export markets, thus rendering much more difficult the task of defending against rogue state missile threats and requiring US development and deployment of more effective missile defenses. With major producer countries no longer subscribing to the MTCR guidelines, the missile threat would worsen very quickly, causing the United States to have to ratchet up its NMD system and leading to a self-defeating action-reaction arms race against multiple states.

Given this discussion, it appears that, in contrast to the static assumptions of at least some NMD supporters, there is good reason to believe that NMD deployment could lead to unexpected (and highly damaging) consequences for the interlocking nonproliferation regimes. What is particularly troubling to US interests is that the dynamics currently in place internationally in regards to the NMD question are creating alliances between possible defectors and erstwhile supporters of these regimes among the NNWS, even including some US allies. The existence of linkages among treaties—at least in the perceptions of many other major military powers—means that the United States cannot assume the status quo in the case of its withdrawal from the ABM Treaty. Instead, the more likely scenario is the opening of a Pandora's box of new international security relationships, involving defections from existing regimes, the weakening of nonproliferation norms, and the introduction of additional weapons into a variety of sensitive environments (particularly space). Without today's nonproliferation mechanisms, the United States would no longer have grounds for objecting to such military deployments, as it can now by pointing to specific nonproliferation treaties, norms, and regimes. All of these points suggest the need for the United States to proceed with extreme caution and to explore all other possible means of combating missile proliferation (military and diplomatic) before considering the drastic option of unilateral NMD deployment and withdrawal from the ABM Treaty.

If this is the case, are there policies that the United States could follow that would mitigate these possibilities, drawing on less controversial defenses and putting an emphasis instead on new nonproliferation initiatives?

ALTERNATIVE STRATEGIES FOR COMBATING MISSILE PROLIFERATION

As deliberations continue on missile defenses, a key factor in international reactions will be the nature of NMD deployment, if the decision is taken to move ahead. The exact international repercussions will depend on which of five possible routes is taken by the United States: (1) the continuation of general research only; (2) a rejection of NMD and a decision to focus on TMD deployments; (3) an NMD deployment that is compliant with the ABM Treaty; (4) a deployment that coincides with an amendment of the ABM Treaty; and (5) a deployment that violates the ABM Treaty and requires a US withdrawal. There are also possible combinations, such as option 2 initially, leading to option 3, 4, or 5 in follow-on stages. Indeed, this "slippery slope" progression is what worries many international observers the most. The current mood in Congress suggests that option 1 is unlikely, options 2 and 3 are possible, option 4 is most likely, and option 5 is possible (particularly under a George W. Bush administration). Naturally, the further down the scale the United States moves, the greater the likely foreign response and associated development of anti-US coalitions in major international organizations, like the United Nations and the Conference on Disarmament.

In the face of these concerns, three former senior US officials—John Deutch, Harold Brown, and John P. White—have proposed a new approach that would eventually lead to NMD deployment, but emphasizes only the more effective TMD elements for near-term deployment.[42] They cite the urgency of the intermediate-range ballistic missile threat and the lack of maturity in NMD technologies. From a military perspective, the proposal makes sense, and is a more cost-effective means of building up to NMD later on. However, while mentioning the need to negotiate with Russia on ABM Treaty revisions, the proposal falls short in terms of considering other possible approaches that draw on nonproliferation mechanisms as tools. Yet it is precisely here—in the nonmilitary field—where US allies and the NNWS are looking most to the United States for new leadership. Strangely, in the areas where US leadership might be most effective—expanding transparency, strengthening existing regimes, and reinforcing nonproliferation norms—there is no visible effort anywhere in the current debate, whether from the Clinton/Gore administration, conservative critics, or even from the arms control community. At the very least, a concerted diplomatic approach to the missile proliferation problem merits consideration.

Such an alternative, "nonproliferation" approach to the missile proliferation problem would aim at bridging the current gulf between the United States and the majority of other countries. It would likely involve a mixture of treaty-compliant defenses (*without* any implied inevitability of moving to full-scale NMD) and new diplomatic initiatives to strengthen nonproliferation objectives.

First, a key theme of any successful approach would be the use of treaties and other agreements to reduce the threat of missile proliferation. Not trying this route, as seen in current US NMD policy, risks spreading distrust and weakening the very nonproliferation regimes and norms that are central to US and global security. Among the range of options, the United States might first make public statements reaffirming the ABM Treaty and pledging itself only to the development of treaty-compliant TMD weapons. As Deutch, Brown, and White argue, this approach is more than adequate to deal with existing threats and provides at least a hedge against the possible (although unlikely) near-term deployment of more advanced systems. Such means could include revival of the boost-phase interceptor, an emphasis on treaty-compliant *Aegis* defenses in regions of concern, and the use of existing cruise missile forces on submarines or ships against fixed assets, such as North Korea's primitive launch sites for its current liquid-fueled missiles. None of these programs are likely to raise significant concern among key NNWS or US allies.

Second, a new nonproliferation-based approach might include a series of initiatives to strengthen key agreements like the MTCR and the Outer Space Treaty.

The MTCR, which is currently under siege by a number of factors, could be strengthened by offering states of concern a bargain: give up their missile programs in return for free or cut-rate access to space at an internationally run launch facility. This could put the onus on proliferators to come clean about their missile intentions or risk isolating themselves further from international opinion. The regime would be strengthened, and MTCR

members could claim credit for a positive new effort to break the NMD impasse.

In regards to the Outer Space Treaty, a new US-led initiative to ban the use and testing of anti-satellite weapons could produce several benefits. Such an effort would capture the spirit of the 1999 UN declarations, while protecting key civilian and military satellites upon which the United States economy and military rely. It would also strengthen US claims to peaceful intentions in space, creating new momentum for cooperation in solving missile proliferation problems in a cooperative rather than confrontational manner. Finally, still other nonproliferation initiatives might include offering states of concern the possibility of participation in the International Space Station, if they pledge to end long-range ballistic missile programs by agreeing to open their existing missile facilities to international inspection. Such an approach would provide states whose intentions are peaceful with clear incentives to cooperate, while casting legitimate suspicions on the intentions of states that choose not to.

Finally, a third area that might be investigated as part of a nonproliferation-based policy is the concept of reciprocal restraint. That is, the United States might join with its allies in various regions of the world in offering NMD or TMD restraint in return for missile flight-test bans among states of concern. Rather than assuming the emergence of new threats (and thereby likely helping to stimulate them), such an effort would offer suspected proliferators another option: agreeing to prevent an offense-defense arms race with the United States (which they would be likely to lose), thereby maintaining their security at no worse than its current level while saving them billions of dollars in development costs. An added carrot for such an approach might be side agreements by the United States to end non-military sanctions or assist these states in joining international aid or lending organizations to stimulate investment in their economies. Such a move would likely find great support among US allies and the NNWS. The willingness of the United States to "back down" on missile defenses would be taken as a positive sign and would strengthen the resolve of like-minded states to support US initiatives for regional arms control in a variety of areas. This would save US taxpayers money while also strengthening nonproliferation norms, thus allowing further reductions in the US and other nuclear arsenals.

CONCLUSION

Given the current perspectives of the NNWS, it is not surprising that a majority of countries have viewed unilateral US efforts to build NMD as a threat to their own security and to the regimes and norms in which they have invested considerable resources. An alternative nonproliferation-based approach to combating current missile threats could lead the way to a rapprochement with key allies and a refocusing of international attention on the proliferators themselves, rather than on unilateral US efforts to build effective defenses. Military means could still be resorted to later by Washington if these efforts failed, but US policymakers could make a clear statement to the world that they had tried the more peaceful route first. By using regime-based incentives to stop emerging missile threats at their sources, the United States could help create a stronger international security community, build respect for its leadership, and provide new venues for international cooperation against potential states of concern. Current US NMD policy is achieving none of these objectives. Thus, as a new administration takes office, reconsidering the direction of the US NMD initiative should be high on its policy agenda.

[1] The author thanks CNS staff members Eric Croddy, Sarah Diehl, Gaurav Kampani, Scott Parrish, William Potter, Amy Sands, Peter Saracino, Nikolai Sokov, and Fred Wehling for their comments and suggestions on an earlier draft of this study. The author also thanks members of the Monterey Nonproliferation Strategy Group, and particularly Ambassador Rolf Ekeus and Brad Roberts, for their more formal comments on a subsequent draft presented by the author at a meeting in Washington, DC, on March 18, 2000. He is grateful to Anjali Bhattacharjee for research assistance.

[2] See, for example, Charles Ferguson, "Sparking a Buildup: U.S. Missile Defense and China's Nuclear Arsenal," *Arms Control Today* 30 (March 2000); Michael O'Hanlon, "Star Wars Strikes Back," *Foreign Affairs* 78 (November/December 1999); and Lisbeth Gronlund and George Lewis, "How a Limited National Missile Defense Would Impact the ABM Treaty," *Arms Control Today* 29 (November 1999). These articles and others are quite useful, but they pay little attention to nonproliferation aspects of NMD.

[3] David Goldfischer, *The Best Defense: Policy Alternatives for U.S. Nuclear Security from the 1950s to the 1990s* (Ithaca, NY: Cornell University Press, 1993), p. 259.

[4] BAMBI stands for Ballistic Missile Boost Intercept. The early 1960s concept involved the launch of hundreds of interceptor missiles that would deploy a 400-foot wire web to intercept incoming Soviet missiles in their boost phase. It was never deployed.

[5] John E. Pike, Bruce G. Blair, and Stephen I. Schwartz, "Defending against the Bomb," in Stephen I. Schwartz, ed., *Atomic Audit* (Washington, DC: The Brookings Institution, 1998), p. 296.
[6] "Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States," House Committee on National Security, July 15, 1998, US Congress, Washington, DC (see version posted on the Global Beat website,<http://www.nyu.edu/globalbeat/usdefense/nsc017598.htm>).
[7] Jack Spencer and Joe Dougherty, "The Quickest Way to Global Missile Defense: First from the Sea," *Backgrounder*, The Heritage Foundation, No. 1384, July 13, 2000.
[8] Spencer and Dougherty, "The Quickest Way to Global Missile Defense," p. 5.
[9] For a fuller discussion and critique of the Clinton/Gore plan, see Stephen W. Young, *Pushing the Limits: The Decision on National Missile Defense* (Washington, DC: Council to Reduce Nuclear Dangers, April 2000); also "Statement of Lieutenant General Ronald T. Kadish, USAF, Director, Ballistic Missile Defense Organization, Before the House Armed Services Committee, Subcommittee on Military Research & Development," Thursday, June 22, 2000, <www.acq.osd.mil/bmdo/bmdolink/html/kadish22jun00.html>.
[10] See, for example, Joseph Cirincione, "Realistic Tests Needed to Validate Performance of Missile Defense Systems," Testimony for the Committee on Government Reform, Subcommittee on National Security, Veterans Affairs, and International Security, September 8, 2000 (posted on the Carnegie Endowment website, <http://www.ceip.org>); also, Union of Concerned Scientists/Massachusetts Institute of Technology report "Countermeasures: A Technical Evaluation of the Operational Effectiveness of the Planned US National Missile Defense System" (executive summary posted on the website of the Union of Concerned Scientists, <http://www.ucsusa.org/arms>).
[11] Joseph Cirincione, "Assessing the Assessment: The 1999 National Intelligence Estimate of the Ballistic Missile Threat," *The Nonproliferation Review* 7 (Spring 2000).
[12] See, for example, Ivo H. Daalder, James M. Goldgeier, and James M. Linsay, "Deploying NMD: Not Whether, But How," *Survival* 42 (Spring 2000).
[13] Frank Ching, "Eye on Asia: Fortress America?" *Far Eastern Economic Review*, December 2, 1999, p. 34.
[14] UN General Assembly A/RES/54/54, "Preservation of and Compliance with the Treaty on the Limitation of Anti-Ballistic Missile Systems," January 10, 2000, United Nations, *Treaty Series*, Vol. 944, No. 13446.
[15] UN General Assembly A/RES/54/53, "Prevention of an arms race in outer space," December 31, 1999 (General Assembly document).
[16] On the evolution of these kind of norms within and among states, see Ethan A. Nadelmann, "Global Prohibition Regimes: The Evolution of Norms in International Society," *International Organization* 44 (Autumn 1990).
[17] See, for example, Jesse Helms, "Amend the ABM Treaty? No, Scrap It," *Wall Street Journal*, January 22, 1999, p. A10.
[18] Robert O. Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton, NJ: Princeton University Press, 1984).
[19] Ernst B. Haas argues that there is a process of scientific learning occurring internationally across a variety of areas of modern human endeavor: "My thesis is evolutionary. It holds that human collectivities choose more complexly and discriminatingly as they come to know and understand more. It holds that things get better for us as our routines for choosing become capable of searching for solutions that get more sophisticated in recognizing complexity. Modern history seems to me to have unfolded in a direction consistent with this thought." See Ernst B. Haas, "Reason and Change in International Life: Justifying a Hypothesis," in Robert L. Rothstein, ed., *The Evolution of Theory in International Relations* (Columbia, SC: University of South Carolina Press, 1991).
[20] Mike Trickey, "Canada dismisses U.S. missile sabre rattling," *Vancouver Sun*, May 3, 2000, p. A1.
[21] Doug Struck, "G-8 Ministers: Shield Unwelcome," *Washington Post*, July 14, 2000, p. 19.
[22] "Denmark opposes use of Greenland radar in U.S. missile defense," Deutsche Press-Agentur, February 25, 2000.
[23] Motzfeldt cited in James Brooke, "Greenlanders Wary of a New Role in U.S. Defenses," *New York Times*, September 18, 2000, p. A6.
[24] "Clinton, Schroeder discord over U.S. missile shield plan," Deutsche Press-Agentur, June 1, 2000.
[25] Tom Buerkle, "U.K. Panel Questions U.S. Missile Shield Plans," *International Herald Tribune*, August 3, 2000.
[26] Quoted by David Yost, "Some French Statements about U.S. Missile Defenses" (unpublished paper), Naval Postgraduate School, March 2000.
[27] Chirac quoted in *New York Times*, July 22, 2000, as cited in "Quotations on Anti-Ballistic Missile (ABM) Treaty/National Missile Defense (NMD)," British American Security Information Center, <www.basicint.org/nuk_00global_quotes.htm>.
[28] Pavel Koryashkin, "Greek Defense Minister Fears US NMD Will Facilitate News Arms Race Spiral," ITAR-Tass (Moscow), July 8, 2000.
[29] Jaime Gama, quoted in "Statements on US National Missile Defense (NMD) made by officials attending the Nuclear Non-Proliferation Treaty Review Conference, 11 May 2000," British American Security Information Center website, <http://www.basicint.org/nuclear/revcon2000/NPTNMDquotes.htm>.
[30] "Japan expresses 'understanding' on US missile shield study," Agence France Presse (Tokyo), August 1, 2000.
[31] "ASEAN concerned with U.S. proposals on missile development," Kyodo News Agency (Bangkok), July 25, 2000.
[32] Ibid.
[33] Simon Barber, "SA attacks US plan for shield against nuclear war," *Johannesburg Business Day*, April 25, 2000.
[34] Ibid.
[35] "Statement by H.E. Ambassador Celso L. N. Amorim, Head of the Brazilian Delegation to the Sixth Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons, New York, 25 April 2000," British American Security Information Center website, <http://www.basicint.org/nuclear/recon2000/Apr25Brazil.htm>.
[36] First Deputy Foreign Minister Olexander O. Chalyi, as cited in "Statements on US National Missile Defense (NMD) made by officials attending the Nuclear Non-Proliferation Treaty Review Conference, 11 May 2000," British American Security Information Center website, <http://www.basicint.org/nuclear/revcon2000/NPTNMDquotes.htm>.
[37] Remarks by Amb. Ekeus before the Monterey Nonproliferation Strategy Group, Washington, DC, March 18, 2000.
[38] Baker Spring, "Why the ABM Treaty Is Already Dead and What It Should Mean For United States Security," *Nexus (A Journal of Opinion)* 4 (Spring 1999), p. 31.
[39] Michael O'Hanlon, "Star Wars Strikes Back," *Foreign Affairs* 78 (November/December 1999), p. 71.
[40] George Bunn, "Does NMD Stand for 'No More Disarmament' as Well as 'National Missile Defence?'" *Disarmament Diplomacy*, No. 42 (December 1999), p. 11.
[41] Aleksander Shaburkin, "Kitay ostayetsya strategicheskim partnerom Rossii" (China remains Russia's strategic partner), *Nezavisimaya gazeta*, January 19, 2000.
[42] John Deutch, Harold Brown, and John P. White, "National Missile Defense: Is There Another Way?" *Foreign Affairs* 79 (Summer 2000).