

# Policy Analysis

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## ***Arms Control and Missile Defense Not Mutually Exclusive***

by Charles V. Peña

### **Executive Summary**

Traditionally, strategic offensive arms control and ballistic missile defense have been viewed as mutually exclusive. During the Cold War, the general belief was that anti-ballistic missile (ABM) systems would call into question the ability of the superpowers to successfully survive a first nuclear strike and inflict sufficient damage with a second strike. That is, missile defense could allow one superpower to launch a first strike and then use its defenses to intercept a second strike with the other superpower's surviving warheads—thereby undermining deterrence and stability. Furthermore, the thinking was that this situation would result in a dangerous offensive arms race as each side sought to counter the effects of the other's defenses.

That logic had some merit during the Cold War. However, opponents of national missile defense (NMD) continue to cling to the outdated Cold War rationale and ignore or disregard the emerging ballistic missile programs in rogue states as a real threat to U.S. national security. Ardent supporters of missile defense argue that we should abandon the ABM Treaty to deploy missile defense—largely because they want to deploy a global rather than a national missile defense. Neither is correct.

The most prudent path is to pursue development of a limited NMD system to defend against rogue state threats, simultaneously renegotiate the ABM Treaty with the Russians, and continue further strategic arms control negotiations under the Strategic Arms Reduction Treaty (START) process. In fact, the Russians have intimated that they might be willing to accept changes to the ABM Treaty to allow for a limited NMD in exchange for even deeper cuts in strategic offensive forces.

The NMD system that makes the most sense for countering threats from rogue states is a limited ground-based system. Such a system should provide sufficient defensive capability against threats from rogue states but not pose a serious threat to Russian retaliatory capability. If the United States changed its nuclear doctrine from war fighting to deterrence, deep mutual reductions in offensive forces to levels below the START III framework agreement (perhaps as few as 1,500 warheads) would still allow the United States to deter Russia and smaller or emerging nuclear powers. Such a reduction combined with a limited land-based NMD would greatly enhance U.S. security.

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## **Introduction**

Traditionally, strategic offensive arms control and ballistic missile defense have been viewed as mutually exclusive. Proponents of the Anti-Ballistic Missile Treaty have argued that the treaty is a cornerstone of strategic stability. Their logic was (and continues to be) that deterrence (and stability) between the United States and Russia (and previously the Soviet Union) is based on the ability of both sides to have a survivable second strike capability (commonly referred to as the doctrine of mutual assured destruction, or MAD).

During the Cold War and before the collapse of the Soviet Union, to deter the other superpower, each side possessed large strategic offensive force arsenals consisting of land-based intercontinental ballistic missiles (ICBMs)—including a large number with multiple independently targeted reentry vehicles (MIRVs)—submarine-launched ballistic missiles (SLBMs), and bombers. The belief at the time was that ABM systems would call into question the ability of nation A to successfully survive a first strike and inflict sufficient damage on an attacker (nation B) with a second strike (that is, the attacker could inflict sufficient damage to nation A's forces with a first strike so that the attacker's missile defense system could effectively counter a second strike by nation A's residual offensive forces).<sup>1</sup> As a result, the attacker might have an incentive (especially during a crisis) to launch a strategic nuclear first strike—believing that a successful defense could be mounted against the retaliatory second strike by destroying enough of the opponent's warheads with an ABM system.<sup>2</sup> There would also be an incentive for each side to strike first with more attacking missiles or warheads against the defense rather than to risk having to penetrate the defense with far fewer weapons in a second strike. Such a situation in which each side has incentives to launch a first strike is unstable. The thinking was that a dangerous offen-

sive arms race could occur as each side sought to counter the effects of the ABM systems<sup>3</sup> (because it would be cheaper to deploy more offensive forces than to increase the ABM deployment).<sup>4</sup>

ABM systems were also viewed as creating disincentives to reduce and change the technical characteristics of strategic offensive forces in order to increase the stability of the nuclear balance—first through the Strategic Arms Limitation Talks and then the Strategic Arms Reduction Talks (START). The thinking was that ABM systems would encourage the deployment of MIRVed systems—with their ability to carry multiple warheads and decoys (also known as penetration aids, or penaids)—to help overwhelm and fool the ABM systems. MIRVed systems (in particular, land-based ICBMs) were viewed as destabilizing because of their tremendous first strike capability and because they were lucrative targets—given their ability to destroy multiple warheads in a single silo with a single attacking warhead or a few such warheads. As prime targets, MIRVed missiles had an increased probability of being launched preemptively in a crisis situation.

The logic of proponents of the ABM Treaty had some merit during the Cold War, but that face-off is over and the powerful Soviet Union no longer exists. Russia now has a smaller strategic offensive force that is older and less reliable than the former Soviet nuclear arsenal. Russia and the United States do not compete directly in the military sphere the way the two superpowers did during the Cold War. And Russia does not pose the same military threat to the United States, Western Europe, and the rest of the world as did the former Soviet Union.

As a result, an opportunity now exists to reexamine both strategic offensive force arms control and ballistic missile defense in the context of a post-Cold War world, a new U.S.-Russian relationship, and ballistic missile threats emanating out of Russia. Neither the United States nor Russia needs the same strategic nuclear arsenals they had during the Cold War. In 1991 both sides ratified the START I Treaty, which has already reduced

strategic warheads from more than 10,000 on both sides to fewer than 8,000 and 7,000 for the United States and Russia, respectively. Under the START I limits, each side will eventually be limited to 6,000 warheads. On April 14, 2000, the Russian Duma ratified the START II Treaty, which would further reduce each side's strategic nuclear arsenal to between 3,000 and 3,500 warheads. The United States ratified the treaty long ago (but it cannot be implemented until the Senate approves two protocols). Strategic arsenals at those low levels would have been inconceivable during the Cold War.

At a time when the two nations have made significant progress in strategic nuclear force reductions, NMD should not be viewed only in the context of defending against a Russian first or second strike. In fact, NMD needs to be examined outside of this context in light of threats to the United States from nations other than Russia. Thus, the possibility exists that neither strategic offensive arms control nor NMD should be dismissed out of hand. In the post-Cold War strategic environment, there may be sound national security reasons for and a workable path to achieving both.

## **Strategic Offensive Arms Control**

The United States first approached the Soviet Union in 1964 to suggest bilateral arms control talks on strategic nuclear weapons. The negotiations known as SALT I began in November 1969 and ended in January 1972. The result of those negotiations was the ABM Treaty and the Interim Agreement on the Limitation of Strategic Offensive Arms—both signed on May 26, 1972.

### **SALT I**

As its title suggests, the Interim Agreement between the United States and the Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation of Offensive Arms was limited in duration and scope. The two parties pledged

not to start construction of additional fixed land-based ICBM launchers after July 1, 1972. The treaty also limited SLBM launchers and ballistic missile submarines. Subject to the limits of the treaty, the two nations could modernize their offensive strategic missiles and launchers.<sup>5</sup>

At best, the result of SALT I was a holding pattern in which the Interim Agreement and the ABM Treaty complemented each other by limiting competition in strategic nuclear offensive arms and providing more time for further negotiations. Those negotiations were the SALT II talks, which began in November 1972 and resulted in the SALT II Treaty, signed on June 18, 1979.

### **SALT II**

A SALT II agreement was signed by President Jimmy Carter and General Secretary Leonid Brezhnev on June 18, 1979. Almost immediately, President Carter transmitted the treaty to the U.S. Senate for ratification. However, the treaty met with stiff resistance in the Senate. In January 1980, in view of the Soviet invasion of Afghanistan, President Carter requested the Senate to delay consideration of SALT II. However, later in 1980, President Carter announced that the United States would comply with the provisions of SALT II as long as the Soviet Union reciprocated. Brezhnev made a similar statement regarding Soviet intentions. Had SALT II been ratified, it would have provided for

- an equal aggregate limit on the number of strategic nuclear delivery vehicles—ICBM and SLBM launchers, heavy bombers, and air-to-surface ballistic missiles (ASBMs); initially, this ceiling would have been 2,400; it would have been lowered to 2,250 at the end of 1981;
- an equal aggregate limit of 1,320 on the total number of launchers of MIRVed ballistic missiles and heavy bombers with long-range cruise missiles; and
- a ban on construction of additional fixed ICBM launchers and on increases in the number of fixed heavy ICBM launchers.

**An opportunity now exists to reexamine both strategic offensive force arms control and ballistic missile defense in the context of a post-Cold War world.**

**NMD opponents argue that the threat posed by ballistic missiles does not represent a “clear and present danger.”**

**START I**

In May 1982, President Reagan stated that he would do nothing to undercut either SALT I or SALT II, as long as the Soviet Union did the same (and in response, the Soviet Union again agreed to abide by the unratified SALT II Treaty). At the same time, Reagan decided to pursue a different course in strategic arms control. Instead of trying to limit strategic arms—that is, ratify SALT II and pursue a SALT III agreement—President Reagan advanced a new proposal for START, which called for deep cuts in land-based ICBMs (in which the Soviet Union was perceived to have an advantage).

The START I Treaty was negotiated over a period of nine years and signed by President Bush and Soviet president Mikhail Gorbachev on July 31, 1991. With the subsequent breakup of the Soviet Union just five months later, Belarus, Kazakhstan, Russia, and Ukraine were recognized as the legal successors to the Soviet Union for purposes of the START I Treaty. START I called for significant reductions in strategic offensive arms to equal levels:

- 1,600 strategic nuclear delivery vehicles
- 6,000 accountable warheads
- 4,900 ballistic missile warheads

- 1,540 warheads on 154 heavy ICBMs
- 1,100 warheads on mobile ICBMs

**START II**

The START II Treaty was signed by President Bush and Russian president Yeltsin on January 3, 1993, in Moscow. The treaty provided that each side must reduce its total deployed strategic nuclear warheads to between 3,000 and 3,500. Of those, none may be on MIRVed ICBMs, including heavy ICBMs. Thus, all MIRVed ICBMs must be eliminated from each side’s deployed forces; only ICBMs carrying a single warhead will be allowed. No more than 1,700–1,750 deployed warheads may be on SLBMs. There will be no prohibition on MIRVed SLBMs.<sup>6</sup> Table 1 compares the limits of START I and START II.

The START II Treaty was presented by President Clinton to the U.S. Senate for ratification in January 1995 and was ratified on January 26, 1996. Russian president Yeltsin presented the START II Treaty to the Federal Assembly of Russia for ratification in June 1995. As a result of the U.S. missile attacks on Iraq in 1998 and the NATO bombing of Yugoslavia in 1999, the treaty met with resistance and was stalled in the Russian Duma. But Vladimir Putin, the newly elected president of Russia, has apparently made arms

**Table 1  
Comparison of START I and START II Limits**

	START I	START II	
		Phase One	Phase Two
Total strategic warheads	6,000 accountable	3,800–4,250 actual	3,000–3,500 actual
Ballistic missile warheads	4,900	No specific sublimit	No specific sublimit
MIRVed ICBM warheads	N/A	1,200	0
SLBM warheads	N/A	2,160	1,700–1,750
Heavy ICBM warheads	1,540	650	0
Mobile ICBM warheads	1,100	START I applies	START I applies
Total strategic nuclear delivery vehicles	1,600	START I applies	START I applies

control a top priority. As a result, the Russian Duma approved the START II Treaty on April 14, 2000. The treaty cannot be implemented, however, until the Clinton administration submits and the Senate ratifies two protocols associated with the treaty.

### **Beyond START II**

Table 2 shows strategic offensive forces of the former Soviet Union, and Table 3 shows strategic offensive forces for the United States. Those tables reveal the significant reductions that have already taken place as a result of implementing START I (from more than 10,000 warheads on each side to fewer than 8,000 warheads on each side), the even greater reductions that will take place as a result of START II (now agreed to by both the United States and Russia), and projections for START III.

Perhaps the most significant thing to note is the changes in strategic nuclear force structure as a result of the START process. Prior to START I, 60 percent of the Soviet strategic arsenal comprised land-based ICBMs (many of them—such as SS-18s and SS-19s—were heavily MIRVed), which were considered the most destabilizing weapons. In contrast, ICBMs made up only about 25 percent of the U.S. strategic force. Reductions under START I have resulted in about a 25 percent overall reduction in strategic warheads. Although the intended reductions of ICBM warheads have been achieved, those warheads still compose the bulk of the Russian strategic inventory (about 55 percent) and have actually become a slightly larger portion of the U.S. inventory (about 30 percent).

START II will result in significant overall reductions in warheads and a marked change in force structure for both Russia and the United States, and for each nation land-based ICBMs will make up less than 20 percent of total warheads. SLBMs will compose about half the inventory for each side. Overall, both sides' forces will be more or less symmetrical. Those trends would continue under START III, at even lower force levels.

## **The ABM Treaty**

The ABM Treaty is at the crux of the view that strategic offensive arms control and ballistic missile defense are mutually exclusive. The ABM Treaty was conceived and ratified as a bilateral treaty between the United States and the Soviet Union in 1972. The treaty states that

the United States and the Soviet Union agree that each may have only two ABM deployment areas, so restricted and so located that they cannot provide a nationwide ABM defense or become the basis for developing one. Each country thus leaves unchallenged the penetration capability of the other's retaliatory missile forces.

The Treaty permits each side to have one limited ABM system to protect its capital and another to protect an ICBM launch area. The two sites defended must be at least 1,300 kilometers apart, to prevent the creation of any effective regional defense zone or the beginnings of a nationwide system.

Precise quantitative and qualitative limits are imposed on the ABM systems that may be deployed. At each site there may be no more than 100 interceptor missiles and 100 launchers.<sup>7</sup>

The treaty's limit was subsequently reduced to a single deployment area with 100 interceptors and launchers to protect either the national capital or an ICBM launch area. The former Soviet Union chose to deploy its ABM system to protect Moscow, and the United States chose to protect the missile fields at Grand Forks, North Dakota, but did not permanently deploy a system there.

Spurgeon Keeny, president and executive director of the Arms Control Association, makes the argument often heard in support

**The Russians have given initial indications that they might be willing to amend the ABM Treaty to accommodate NMD if even deeper cuts in offensive forces can be achieved via START III.**

**Table 2**  
**Strategic Nuclear Forces of the Former Soviet Union: Past, Present, and Projected (warheads)**

	September 1990 <sup>a</sup>	July 1998 <sup>b</sup>	December 2007 <sup>c</sup>	December 2007 <sup>d</sup>
<b>ICBMs</b>				
SS-11	326	0	0	0
SS-13	40	0	0	0
SS-17	188	0	0	0
SS-18	3,080	1,800	0	0
SS-19	1,800	1,063	105 <sup>e</sup>	105 <sup>f</sup>
SS-24	890	920	0	0
SS-25	288	360	250	100
SS-27	0	2	180 <sup>g</sup>	180 <sup>g</sup>
Subtotal	6,612	4,144	535	385
<b>SLBMs</b>				
SS-N-6	192	16	0	0
SS-N-8	280	192	0	0
SS-N-17	12	0	0	0
SS-N-18	672	624	0	0
SS-N-20	1,200	1,200	1,000	600
SS-N-23	448	448	448	320
SS-NX-28	0	0	96 <sup>h</sup>	96 <sup>h</sup>
Subtotal	2,804	2,480	1,544	1,016
<b>Bombers</b>				
Bear	735	716	680	448
Blackjack	120	200	120	120
Subtotal	855	916	800	568
<b>Total</b>	<b>10,271</b>	<b>7,540</b>	<b>~3,000<sup>i</sup></b>	<b>~2,000<sup>i</sup></b>

Source: Arms Control Association, "Fact Sheet," January 1999, <http://www.armscontrol.org/FACTS/fsuct.htm>.

<sup>a</sup>Warhead numbers are based on START I counting rules. Figures include weapons in Belarus, Kazakhstan, Russia, and Ukraine.

<sup>b</sup>Warhead numbers are based on START I counting rules. Figures include weapons in Russia and Ukraine only. Although Ukraine returned the last of its strategic nuclear warheads to Russia in 1996, they remain START accountable until the delivery systems have been destroyed. The July 1998 START I Memorandum of Understanding lists Ukraine as possessing 54 warheads on SS-19s, 460 warheads on SS-24s, 200 warheads on Bear bombers, and 152 warheads on Blackjack bombers. Belarus and Kazakhstan have returned all of their nuclear warheads to Russia and have completed the destruction of their delivery vehicles, thereby removing them from START accountability.

<sup>c</sup>Assumes that START II enters into force but that START III is not successfully negotiated. Figures include weapons in Russia only and are based on START II counting rules. This means that the number of weapons counted for heavy bombers will be the number they are actually equipped to carry.

<sup>d</sup>Assumes that START III is successfully negotiated. Under this treaty, the United States and Russia will each be permitted to deploy 2,000–2,500 strategic warheads.

<sup>e</sup>START II permits Russia to download 105 SS-19s from 6 warheads each to 1 warhead.

<sup>f</sup>Assumes that Russia keeps those forces under START III.

<sup>g</sup>Assumes that Russia will achieve and is able to sustain a production rate of about 20 SS-27s per year.

<sup>h</sup>Russia laid the keel for a new class of ballistic missile submarines known as the Borey in November 1996. According to the Office of Naval Intelligence, the submarines will be fitted with a new SLBM, possibly the SS-NX-28. Borey-class submarines are expected to carry at least 12 SLBMs. It is assumed that each SS-NX-28 will carry 4 warheads. The first of the Borey-class submarines may be operational around 2005, depending on financial circumstances.

<sup>i</sup>That outcome depends in large part on Russia's economic situation. Under some scenarios, Russia would deploy significantly fewer warheads.

**Table 3**  
**U.S. Strategic Nuclear Forces: Past, Present, and Projected (warheads)**

	September 1990 <sup>a</sup>	July 1998 <sup>a</sup>	December 2007 <sup>b</sup>	December 2007 <sup>c</sup>
<b>ICBMs</b>				
MX	500	500	0	0
Minuteman III	1,500	1,950	500 <sup>d</sup>	300 <sup>e</sup>
Minuteman II	450	1	0	0
Subtotal	2,450	2,451	500	300
<b>SLBMs</b>				
Poseidon (C-3)	1,920	320	0	0
Trident I (C-4)	3,072	1,536	0	0
Trident II (D-5)	768	1,920	1,680 <sup>f</sup>	1,008 <sup>g</sup>
Subtotal	5,760	3,776	1,680	1,008
<b>Bombers</b>				
B-52	2,258	1,644	980 <sup>h</sup>	364 <sup>i</sup>
B-1	95	91	0	0
B-2	0	20	336	336
Subtotal	2,353	1,755	1,316	700
<b>Total</b>	<b>10,563</b>	<b>7,982</b>	<b>~3,500</b>	<b>~2,000</b>

Source: Arms Control Association, "Fact Sheet," January 1999, <http://www.armscontrol.org/FACTS/usct.htm>.

<sup>a</sup>Warhead numbers are based on START I counting rules, which result in bombers having fewer warheads attributed to them than they actually carry. However, even though all Poseidon submarines have been decommissioned, their C-3 SLBMs and associated warheads remain START accountable until the delivery systems have been destroyed.

<sup>b</sup>Assumes that START II enters into force but that START III is not successfully negotiated. Figures are based on START II counting rules. Those rules mean that the number of weapons counted for heavy bombers will be the number they are actually equipped to carry.

<sup>c</sup>Assumes that START III is successfully negotiated. Under this treaty, the United States and Russia will each be permitted to deploy 2,000–2,500 strategic warheads.

<sup>d</sup>Assumes 500 Minuteman IIIs, with each missile carrying 1 warhead.

<sup>e</sup>Assumes 300 Minuteman IIIs, with each missile carrying 1 warhead.

<sup>f</sup>Assumes 14 Ohio-class submarines carrying 24 Trident II (D-5) missiles each, with all D-5s carrying 5 warheads.

<sup>g</sup>Assumes 14 Ohio-class submarines carrying 24 Trident II (D-5) missiles each, with all D-5s carrying 3 warheads.

<sup>h</sup>Assumes that the United States maintains its entire fleet of 71 B-52 bombers but reduces the bombers' cruise-missile carrying capacity.

<sup>i</sup>Assumes that the United States maintains its entire fleet of 71 B-52 bombers but reduces the bombers' cruise-missile carrying capacity.

**Advocates of NMD often paint a “doom-and-gloom” picture of the threat posed by ballistic missiles.**

of the ABM Treaty: “It was recognized that deployment of ballistic missile defenses would accelerate the arms race since either side would deploy additional offensive strategic forces to ensure the viability of its deterrent, and that this could be done at a small fraction of the cost of the defensive system.”<sup>8</sup> The ABM Treaty is often seen as the cornerstone of strategic stability in the U.S. relationship with the Soviet Union and now with Russia.

However, according to Henry Kissinger, President Nixon’s national security adviser when the ABM Treaty was signed in 1972 and one of its architects, the purpose of the ABM Treaty was not so much to preserve strategic stability via MAD as to trade off U.S. missile defenses in exchange for getting rid of Soviet missile defenses.<sup>9</sup> According to Kissinger:

Nixon was far from converted to the MAD theory, but faced with a Congress that was gutting the ABM program, decided to freeze—and thereby preserve—a nucleus ABM deployment in return for equivalent limits on the Soviets’ own ABM deployment, and to use that decision to put a ceiling on the Soviet offensive buildup.<sup>10</sup>

Supporters of the ABM Treaty argue that deploying NMD will halt the current strategic offensive arms control process. They fear that a strategic offensive arms race will result as Russia tries to build more offensive systems to overwhelm and counteract any defensive deployment. That rationale was originally put forth during the Cold War; some analysts have argued that it was not valid even then. They maintain that the ABM Treaty—which limits defenses and thus the resources spent on those defenses—did not stop the Soviet Union from building up its offensive forces.<sup>11</sup> The implication is that the money the Soviets saved by not investing in ABM systems was poured into a buildup of

offensive missiles.

Strategic offensive reductions have accompanied the pursuit of missile defenses. At the same time that START I was being negotiated and signed, the Bush administration was pursuing the global protection against limited strikes (GPALS) missile defense system. Despite the Clinton administration’s pursuit of a path that could lead to a decision in October 2000 on whether to build a U.S. NMD system, the Russian Duma ratified START II. The Russians have continually made clear their objections to any changes to the ABM Treaty. Sergey Ivanov, secretary of Russia’s Security Council, stated that deployment of national missile defenses “would undermine the entire ABM regime and might open a Pandora’s box” that would threaten other arms control agreements. He added, “If we are talking about slightly modifying the ABM Treaty and establishing national missile defense systems, those two things cannot exist together.”<sup>12</sup>

After the Duma’s approval of START II, president-elect Vladimir Putin stated that “the ball is in their court”—alluding to follow-on START III talks and to Washington’s desire to modify the ABM Treaty to allow the United States to deploy a national missile defense.<sup>13</sup> The Duma attached a nonbinding amendment to START II that gives Russia the right to revoke the treaty if the United States violates the ABM Treaty.

Nonetheless, the door is open for discussion of potential changes in the ABM Treaty to permit the deployment of NMD. After the Duma’s vote on the treaty, Alexander Pikayev, of the Carnegie Endowment for International Peace, speculated that “Russia might be willing to give up the anti-ballistic missile ban in exchange for deeper American weapons cuts and a reworking of parts of START II.”<sup>14</sup> Pavel Podvig, at the Center for Arms Control, Energy and Environmental Studies in Russia, stated, “We should take advantage of the situation where Americans, at last, want something from us.”<sup>15</sup>

Clearly, the Clinton administration believes that there is room for both arms con-

trol and missile defense. According to former U.S. National Security Council staff member Robert Bell: "It has been our firm belief that there is balance and inter-relationship between offence and defence. . . . We recognise that the ABM [Treaty] is of fundamental significance to our strategic arms reductions through the START treaties. We see a very clear relationship and we're advancing on both tracks."<sup>16</sup> Bell acknowledged that renegotiating the ABM Treaty will not be without its difficulties: "The ABM treaty has been amended before and there is no reason to think it can't be amended again."<sup>17</sup>

Before Bush's electoral defeat in 1992, his administration was making substantial progress in renegotiating the ABM Treaty to win Russian acceptance of the administration's GPALS system (consisting of space- and ground-based weapons and sensors). Any renegotiation would have retained the basic aim of the ABM Treaty—limiting defenses so that neither the U.S. nor the Russian strategic arsenal would have been undermined—while permitting systems to protect against threats from potential regional adversaries and accidental or unauthorized launches by the major nuclear powers.<sup>18</sup> The Clinton administration—which was less enthusiastic about NMD than were previous administrations—dropped the renegotiation upon taking office. Russian receptivity to ABM Treaty renegotiation during the Bush administration was especially interesting because GPALS was a more ambitious missile defense deployment than what is now being proposed by the Clinton administration.

Therefore, despite the recent Russian rhetorical response to proposed changes to the ABM Treaty, some precedent exists for renegotiating the treaty to allow for NMD. Although the June 2000 summit meeting between President Clinton and Russian president Vladimir Putin did not result in an agreement to change the ABM Treaty, some initial progress may have been made. In a joint statement, the two leaders agreed that

the international community faces a dangerous and growing threat of proliferation of weapons of mass destruction and their means of delivery, including missile technologies, and stress their desire to reverse that process, including through existing and possible new international legal mechanisms. . . . This new threat represents a potential significant change in the strategic situation and international security environment.<sup>19</sup>

According to President Clinton, the two leaders also "acknowledged that the ABM Treaty perceives the possibility of changes in the strategic environment that might require it to be updated."<sup>20</sup>

## NMD

The current debate about NMD has its roots in the Strategic Defense Initiative. On March 23, 1983, President Ronald Reagan launched the SDI program, which was intended to be "a comprehensive and intensive effort to define a long-term research and development program to begin to achieve our ultimate goal of eliminating the threat posed by strategic nuclear missiles."<sup>21</sup> Critics of the plan quickly dubbed SDI "Star Wars"—referring to the widely popular George Lucas movie. Some of the proposed systems included directed-energy (that is, laser) and space-based weapons, as well as other futuristic ideas similar to those depicted in the movie. The critics' implication was that such systems worked in the movie but wouldn't in real life.

### NMD Opponents

Although the NMD program being considered today bears little resemblance to the SDI program conceived by President Reagan (which sought to defend against a full-scale Soviet ballistic missile attack), the tenor of the debate has changed little in the past 17 years.

**Attempting to build comprehensive missile defenses that could threaten the effectiveness of Russia's and China's future nuclear deterrents is likely to be costly and provocative.**

**The most ardent supporters of NMD seem to want more than just a defense of the United States against threats from rogue states.**

In fact, opponents often intentionally blur the distinctions between the old SDI and the new NMD; typical are these comments by former senator Paul Simon (D-Ill.):

The President and Congress . . . ought to acknowledge that SDI by any name remains nothing more than a 1990s version of the old French Maginot Line. The Maginot Line didn't work in World War II, and Star Wars can't work today, for reasons made clear over the past 10 years of congressional and public debate. Sadly, we are visiting an issue now that should have gone away in the late 1980s.<sup>22</sup>

Even if they acknowledge that NMD is not the same as SDI, opponents still argue that the threat posed by ballistic missiles does not represent a "clear and present danger." Andrew Koch, of the Center for Defense Information, writes:

While the U.S. media may hype the threat posed by the Saddam Husseins of the world, Chicago Bulls star Dennis Rodman has a better chance of winning the Nobel Peace Prize than these petty tyrants have of acquiring an ICBM. The fact is, among our potential adversaries today, only Russia and China have ballistic missiles with sufficient range to strike even one of the 50 states.<sup>23</sup>

Opponents have also previously claimed that NMD would undermine the arms control process, that is, START. Sen. Carl Levin (D-Mich.) has stated:

Even more important, it [NMD] would undermine our agreement with Russia, which is that we will not deploy these systems, and to go ahead now and commit, as this bill [Defend America Act] would do, to

the deployment of these systems will cause Russia, we've been told directly this by the Russian leadership, will cause Russia to not proceed with the dismantlement of weapons under START I and will cause them not to ratify START II and both of those agreements result in a great reduction of nuclear weapons. So if we pursued [NMD]—proceed now to deploy this system, we will, in fact, be increasing the number of nuclear weapons in this world because Russia will no longer comply with START I, as she's entitled not to if we go ahead with this illegal system, and she will not ratify START II.<sup>24</sup>

However, this argument would seem less compelling now that START II has been ratified by Russia and the Russians have given initial indications that they might be willing to amend the ABM Treaty to accommodate NMD if even deeper cuts in offensive forces can be achieved via START III.

Inevitably, opponents of NMD cite the ABM Treaty as their rationale for not deploying NMD. As Lisbeth Gronlund and George Lewis from the Arms Control Association argue:

- First, Russian planners will not be concerned about whether the NMD system would interfere with a Russian first strike against the United States, but about how it might affect Russia's ability to launch a retaliatory attack in response to a first strike on Russia's nuclear forces.
- Second, while it is true that Russia currently deploys thousands of nuclear weapons, it is not desirable to create a situation where Russia feels it needs to retain large forces to maintain deterrence in the face of a U.S. NMD system.
- Third, although China is not a party to the ABM Treaty, it clearly bases its

nuclear planning at least in part on the guarantees the treaty provides.

- Fourth, the modified treaty will permit the infrastructure (in particular, the sensors) needed for a much thicker nationwide defense.<sup>25</sup>

They conclude that “the deployment of the planned U.S. NMD system and the changes to the ABM Treaty needed to permit its deployment will eliminate the central security guarantees that the treaty provides.”<sup>26</sup> Interestingly enough, Gronlund and Lewis acknowledge “that a limit on the number of launchers and interceptors would place an upper bound on the number of warheads against which the NMD system could defend”<sup>27</sup> and that the “system clearly could not defend against a large-scale attack.”<sup>28</sup>

### **NMD Supporters**

On the other side, advocates of NMD often paint a “doom-and-gloom” picture of the threat posed by ballistic missiles. James Anderson at the Heritage Foundation states that “ballistic missiles are capable of destroying life and property on a massive scale. . . . Yet our country remains naked to these missiles.” He further states that “*every American already is a hostage to the threat of missile attack.*”<sup>29</sup> The Center for Security Policy (a Washington, D.C., think tank founded and directed by Frank J. Gaffney Jr., acting assistant secretary of defense for international security policy during the Reagan administration) accuses the Clinton administration of a “determination for seven years to resist deploying a national defense against ballistic missile attack”—which has enabled North Korea to blackmail the United States.<sup>30</sup> The administration’s resistance to deployment “has made it possible for even crazed, destitute countries like North Korea to try to dictate to ‘the world’s only superpower’ which security policies and programs the U.S. will pursue.”<sup>31</sup>

Ardent NMD supporters too often include Russia and China as threats against which the system must defend. Anderson

states:

North Korea’s is not the only dictatorship we have to worry about. Iran, Libya, and Syria are among the nearly two dozen states hoping to gain political and military leverage by developing ballistic missiles. *And we should not ignore Russia and China, two powerful states with uncertain political futures that already have long-range missiles capable of reaching our cities.*<sup>32</sup>

The Center for Security Policy states that the “clear and present danger” includes

recent threats made by Communist China to use nuclear weapons to attack the United States in the event the man just elected by the people of Taiwan came to power and the PRC retaliated with force. By all accounts, Russia is about to install a career KGB officer who nostalgically recalls the Soviet Union and seems bent on restoring to their former power its instruments of state terror and influence.<sup>33</sup>

Although Russia and China are powerful states with uncertain political futures, attempting to build comprehensive missile defenses that could threaten the effectiveness of their future nuclear deterrents is likely to be costly and provocative, with questionable effectiveness (especially if the goal is a near-perfect defense). Robust defense systems, such as the Reagan administration’s SDI, that would be needed to counter the Russian arsenal (and eventually the growing Chinese nuclear force) are currently of questionable technological feasibility and would require large quantities of space-based sensors and weapons, as well as heavy-lift launch capacity—all of which would be prohibitively expensive. Yet building a robust missile defense would aggravate the strains in the U.S.-Russian relationship that resulted from NATO expansion and the U.S.-led war in Kosovo and the tension in U.S.-Chinese relations that resulted from that same conflict. In

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**A more robust NMD that is a global (rather than truly a “national”) missile defense provides a shield for continued interventions around the world.**

addition, building a missile defense explicitly to counter the offensive deterrents of those nations would brand them as enemies of the United States—a status that they do not currently deserve—and would threaten a return to a Cold War relationship and environment. In short, what would probably turn out to be a costly defense with questionable effectiveness would needlessly sour long-term relations with what are likely to be the second and third most potent nuclear powers in the future.

Furthermore, the most ardent supporters of NMD seem to want more than just a defense of the United States against threats from rogue states. The Heritage Foundation is explicit that “a missile defense system should be global in nature.”<sup>34</sup> Furthermore, the foundation’s Commission on Missile Defense argues that “the fastest and least expensive way to build a global missile defense system would be to begin by building sea-based defenses and then to follow them as soon as possible with space-based defenses.”<sup>35</sup>

One of the reasons NMD advocates favor a sea-based approach (or at least an approach that explicitly incorporates sea-based interceptors) is that they want to abandon rather than renegotiate the ABM Treaty.<sup>36</sup> If they can successfully dispense with the ABM Treaty altogether, then they can move forward with a more grandiose defensive system—such as the original SDI or the GPALS system that was proposed during the Bush administration. GPALS, a layered system that included ground- and space-based weapons and sensors, was designed to intercept a limited ballistic missile attack from anywhere to anywhere. The system was designed to provide limited protection of the United States itself (including limited protection against a Soviet or Russian first strike or an accidental or unauthorized launch), U.S. forward-deployed forces overseas, and U.S. friends and allies.

Texas governor George W. Bush—the presumptive Republican candidate for president—seems to have endorsed a more far-reaching version of NMD, similar to his father’s GPALS system. At a speech at the

National Press Club, Governor Bush stated: “America must build effective missile defenses, based on the best available options at the earliest possible date. Our missile defense must be designed to protect all 50 states—and our friends and allies and deployed forces overseas—from missile attacks by rouge nations or accidental launches.”<sup>37</sup> He also stated that the Clinton administration’s limited land-based system consisting of only one interceptor site was inadequate and that the Bush administration would explore whether a space-based system would work.<sup>38</sup> Governor Bush had previously stated (early in the Republican primaries) that he would be willing to deploy NMD unilaterally—even over Russian objections—and abandon the ABM Treaty.

#### **The Need for a Limited NMD**

Such a comprehensive, layered system would be expensive<sup>39</sup> and is unwarranted in the post-Cold War environment. The United States does not need to be the world’s policeman.<sup>40</sup> The United States should not be pursuing an “interventionist” foreign and defense policy that requires forward-deployed forces and protects friends and allies. Our primary focus should be on protecting vital U.S. national security interests. According to Ivan Eland, the Cato Institute’s director of defense policy studies:

“Activist” foreign policy itself is the problem. To avoid catastrophic terrorist attacks on the American homeland in this new and dangerous strategic environment, the United States must abandon its policy of being a military nanny in every area of the world. The nation must adopt a policy of military restraint.<sup>41</sup>

A less globally interventionist foreign and defense policy means that the United States does not need a global NMD system; instead, a more limited system is needed. A limited

system is warranted to counter the emerging rogue state threat as described by the Rumsfeld Commission<sup>42</sup> and confirmed by the North Korean test firing of a Taepo Dong 1 three-stage rocket in August 1998. According to Robert D. Walpole, senior intelligence officer for strategic intelligence programs at the Central Intelligence Agency, “A three-stage configuration, with a light enough payload, could well give North Korea the ability to send warheads across the Pacific.”<sup>43</sup> As noted in a Cato Institute study on NMD:

The debate should not be about whether or not to build missile defenses. A limited ground-based NMD should be built when the technology is ready. The elements in the Clinton administration’s NMD program can provide the requisite capability to protect against the threat from rogue states. Instead, the debate should be about the nature and capabilities of a limited NMD system that will accomplish the mission of protecting the nation against threats from rogue states, and do it cost-effectively.<sup>44</sup>

And Eland points out:

A limited NMD system could be financed by cutting existing [unnecessary] defense programs [e.g., new types of fighter aircraft, new class of submarines, new aircraft carriers and associated aircraft]. In fact, a limited NMD system could be pursued even if the defense budget declined. Although an attack by a rogue state using long-range missiles is not the most likely threat facing the United States, *it is one of the few threats to U.S. security in the post-Cold War era* and should receive some attention and limited funds.<sup>45</sup>

The NMD envisioned by its most ardent

advocates and now seemingly supported by George W. Bush is a layered missile defense system intended to provide global coverage and protection. In other words, supporters of NMD use the term “national” in NMD to mean what they perceive to be U.S. national security interests around the world—not merely the United States as a geographical entity. Such a system is needed because their approach to foreign policy relies increasingly on military interventions around the world—that is, a more robust NMD that is a global (rather than truly a “national”) missile defense provides a shield for continued interventions around the world.

A more reasonable and prudent definition of the term “national” should be the United States as a geographic entity, because what is needed is a more limited NMD system designed to defend the United States against limited attacks from potential regional adversaries. The purpose of NMD should not be to protect allies and friends around the world. Furthermore, a less interventionist foreign policy would also lessen the need for NMD to protect U.S. forward-deployed forces around the world.<sup>46</sup> As the Cato study on NMD noted:

The threat from rogue states does represent a real danger that could justify a limited NMD deployment. That deployment does not have to be extensive or expensive. The threat from rogue states is likely to be relatively modest (a few ICBMs) and unsophisticated (their missiles are unlikely to have multiple warheads or sophisticated countermeasures), requiring an equally modest response. A limited ground-based NMD system of 100–300 interceptors should provide sufficient defensive capability against threats from rogue states.<sup>47</sup>

Although the powerful U.S. offensive nuclear forces should deter most leaders of potential regional adversaries from launch-

**What is needed is a more limited NMD system designed to defend the United States against limited attacks from potential regional adversaries.**

**A limited NMD could be an insurance policy against the threat of an accidental launch by one of the rogue states.**

ing long-range missiles carrying weapons of mass destruction against the United States, a limited NMD could act as a backup in the rare case that deterrence failed. More important, a limited NMD could be an insurance policy against the more likely threat of an accidental launch by one of those states. With newly acquired weapons of mass destruction and long-range missiles, those nations may have no nuclear doctrine, rudimentary command and control systems, and poor safeguards against accidental launches.

### **Combining Arms Control and NMD**

The conventional wisdom—that strategic offensive arms control and NMD are mutually exclusive—need not be the case. Both START I and START II have been ratified, which will result in the reduction of both the U.S. and the Russian strategic nuclear arsenals to approximately 3,500 warheads. If both sides continue to move toward a START III agreement, warhead levels could be further reduced to approximately 2,000 (see Tables 1 and 2). According to the *Washington Post*

Russia's nuclear arsenal is already headed toward lower levels because of dismantlement and obsolescence, especially of the submarines, airplanes, and missiles that deliver the warheads. By some estimates, at the end of the START II period in 2007, Russia will have fewer than 1,000 warheads if current trends continue.<sup>48</sup>

"If you assume that the Russian SS-17s, SS-18s, SS-19s, and S-25s have to come out of the inventory, do the Russians have enough money to build a new ICBM force of SS-27s up to the START II levels?" Bell asks. "Most of the assessments I've seen are pessimistic." However, "it's an academic debate about whether they can or cannot afford to stay at START II . . . because I assume we will agree

on START III."<sup>49</sup>

Thus, there are significant strategic offensive force reductions already, and even further reductions may be more or less inevitable. That favorable situation then opens the door to the possibility of deploying a limited NMD designed to defend against the rogue state threat without upsetting the balance and stability achieved by strategic offensive force reductions.

### **The Threat**

As should any weapon system, NMD should be threat and mission driven. In the post-Cold War environment, the United States is no longer engaged in a direct political-military competition with Russia, which possesses the only strategic nuclear arsenal that might threaten U.S. society. Therefore, reduced tensions mean that the threat of a deliberate large-scale Russian attack using ballistic missiles is significantly less likely than during the Cold War. The Chinese nuclear threat is much smaller than Russia's. According to the Natural Resources Defense Council, "China has only a handful of missiles able to go intercontinental distances."<sup>50</sup> Furthermore, according to the Department of Defense, "China increasingly sees ballistic missiles as important weapons for regional conflict or use as psychological weapons."<sup>51</sup> Thus, deliberate—as well as accidental or unauthorized—launches of ballistic missiles from either Russia or China pose an unlikely threat.

The "clear and present danger" is the ballistic missile threat posed to the United States by potential regional adversaries. The Rumsfeld Commission concluded:

The newer ballistic missile-equipped nations' [e.g., North Korea, Iran, and Iraq] capabilities will not match those of U.S. systems for accuracy or reliability. However, they would be able to inflict major destruction on the U.S. within about five years of a decision to acquire such a capability (10 years in the case of Iraq). During several of those years, the U.S. might

not be aware that such a decision had been made.

The threat to the U.S. posed by these emerging capabilities is broader, more mature and evolving more rapidly than has been reported in estimates and reports by the Intelligence Community.<sup>52</sup>

And in August 1998, the North Korean test firing of a Taepo Dong 1 missile—which confirmed that North Korea could have the ability to send warheads across the Pacific Ocean—served to further highlight the emerging threat from potential regional adversaries.

### **Response to the Threat**

The neo-Cold War paradigm—which uses Russia as a substitute for the Soviet Union or uses China as a successor threat as part of the justification for NMD—must be abandoned. The NMD system that makes the most sense to deploy is a limited ground-based system designed to defend against the emerging threats from potential regional adversaries.<sup>53</sup> Such a deployment does not have to be extensive or overly expensive. The threat is likely to be relatively modest (a few ICBMs) and unsophisticated (unlikely to be MIRVed or have sophisticated countermeasures) and requires only a modest response. And such a system would not pose a threat to deterrence and stability vis-à-vis Russia because it would not be large enough to defend against a large attack.

The most recent Congressional Budget Office cost estimate for an NMD deployment consisting of 100 interceptors based in Alaska, a new X-band radar, and upgrade for existing early warning radars is \$30 billion (\$4 billion more than the Pentagon's estimate of \$26 billion).<sup>54</sup> That sum includes design, procurement, construction, and operations costs from FY99 to FY15 (assuming an FY05 deployment). That system is representative of the type of system needed to defend against the rogue state threat. And while such a system might have some inherent, limited capability against a Russian or Chinese accidental

or unauthorized launch, it would not be designed to counter such scenarios.

By definition, any NMD deployment would be beyond the bounds of the ABM Treaty as it currently stands. But since the ultimate purpose of the treaty is to preserve nuclear stability and deterrence between the United States and Russia, there is no reason to automatically assume that the Russians would not accept any modifications to the treaty to allow NMD. Such acceptance would require that the United States provide convincing evidence that the NMD system was designed to protect against only relatively small attacks (for example, 20 warheads) from potential regional adversaries and that it would not be designed to defend against a much larger Russian strike.

Clearly, an expansive global system of space-, sea-, and ground-based weapons and sensors (as envisioned by many NMD advocates) would indeed be perceived by the Russians as threatening to deterrence and stability. And such a system is not warranted by the threat from potential regional adversaries. On the other hand, a limited ground-based NMD deployment would hardly represent a serious threat to Russian strategic nuclear capability and therefore would not undermine deterrence and stability.

Renegotiating the ABM Treaty with the Russians to allow deployment of NMD would probably be easier if the United States stopped engaging in actions that are clearly antagonistic to Russia (and are also not vital to the core national security interests of the United States)—for example, expansion of NATO and the bombing of Iraq and Yugoslavia. In addition, in ratifying START II, the Duma “called on Russia to cancel START II if the United States [stations] nuclear weapons on the territory of new NATO members.”<sup>55</sup> Such deployment of nuclear weapons would also prevent any changes to the ABM Treaty to allow deployment of NMD.

Also adversely affecting Russian willingness to renegotiate the ABM Treaty to allow for an NMD deployment is the heated

**The threat is likely to be relatively modest requires only a modest response.**

**A limited ground-based NMD deployment would hardly represent a serious threat to Russian strategic nuclear capability and therefore would not undermine deterrence and stability.**

rhetoric of the most ardent NMD proponents. A “hard-line” stand against the treaty and Russia certainly will not help. But battle lines are already being drawn. After the Duma’s approval of START II, John Czwartacki, spokesman for Senate Majority Leader Trent Lott (R-Miss.), said: “One thing is certain: We’re not going to be blackmailed into leaving the American people exposed and with no ability to provide a national missile defense.”<sup>56</sup> Sen. Jesse Helms (R-N.C.) has vowed to block approval of any arms control agreement—including changes to the ABM Treaty that would allow for deployment of a limited NMD system—that President Clinton might negotiate during his final months in office. Senator Helms has stated, “Any modified ABM Treaty negotiated by this [Clinton] administration will be DOA, dead on arrival, at the Senate Foreign Relations Committee.”<sup>57</sup>

Finally, changes to the ABM Treaty to allow deployment of NMD may hinge on START III and the ability to achieve even deeper cuts in strategic offensive force arsenals. According to Daniel Williams of the *Washington Post*: “In preliminary exchanges over START III, the United States suggested ceilings as high as 2,500 warheads while Russia pressed for limits of 1,500.”<sup>58</sup> Steven Mufson of the same newspaper noted that “Russia wants a new round of cuts to pare back deployments to about 1,500 *in exchange for ABM treaty modifications*.”<sup>59</sup>

### **Targeting Issues**

The question is whether NMD advocates would be willing to accept even deeper cuts in offensive forces as a condition for a nationwide missile defense capability or whether they simply want to do away with the ABM Treaty rather than accept NMD within the constraints of a modified treaty. According to Mufson, current American military thinking is that the United States “must maintain between 2,000 and 2,500 nuclear warheads to hit enough targets to effectively deter anyone else from using nuclear weapons and to maintain a three-legged nuclear force on

land, sea and air.”<sup>60</sup> John Pike of the Federation of American Scientists argues that

we’re still stuck in a MAD [mutual assured destruction] world with the Russians. . . . There are a lot of people at Strategic Command who continue to believe that we need to have about 3,000 warheads to keep Russia in a deterred frame of mind. There are clearly a lot of their counterparts in Moscow who feel that they still need to have a very robust laydown with high damage expectancies on a lot of targets in order to be able to sleep well at night.<sup>61</sup>

Again, that Cold War thinking of the U.S. and Russian militaries and the nuclear policy community will need to change if true progress is to be made in both arms control and national missile defense. During the Cold War, part of the reason a large number of warheads were required was that both sides pursued a war-fighting targeting strategy, which dictated the need to hold at risk a large number of so-called high-value targets with high probability (and high confidence) of inflicting damage. (For example, typically a minimum of two cross-targeted warheads—that is, warheads from different launchers—against each target was thought to be needed to achieve a high probability of kill.) But the United States is no longer engaged in direct military competition with Russia. Therefore, we do not need the same targeting requirements for effective deterrence. In the post-Cold War era, not only is the number of pure military targets likely to be smaller, but we may also be able to move away from “counterforce” targeting to fight a nuclear war and toward “countervalue” targeting to deter an attack. That is, we may not have to target all of the so-called high-value military targets (nuclear and conventional) that are currently listed in the Strategic Integrated Operating Plan (U.S. plan for fighting nuclear war). Although the SIOP is classified,

experts say that the Pentagon still maintains about 2,300 warheads on alert to hit military, leadership, and industrial targets in Russia and specifies that the United States should be able to destroy 80 percent of the 2,300 targets. Of those warheads, 1,100 are aimed at nuclear sites, 500 at conventional military targets, 500 at defense factories, and 160 at leadership targets. In addition to the 2,300 warheads, experts also say that DoD keeps about 500 spare warheads on alert.<sup>62</sup>

The United States could reduce the total number of military targets and shift away from a purely military targeting strategy—putting more emphasis on hitting economic targets for the purpose of deterring Russia. Far fewer warheads are needed to deter a nuclear war than to fight one. If a change from a war-fighting to a deterrent nuclear strategy is pursued, then 1,500 highly survivable warheads would probably be sufficient to deter each side—as well as other nuclear powers (that possess, at most, only tens of weapons that can strike the United States). For a START III agreement, even 2,000 warheads—as a potential compromise number between the upper end of the U.S. military’s preferred range of 2,000–2,500 warheads and the Russian proposal of 1,500 warheads—should be more than sufficient for deterrence. And accepting deeper cuts in a START III agreement would be a clear signal that the United States was not attempting to achieve a strategic nuclear advantage over Russia—thus making it easier for Russia to agree to the proposed NMD deployment.

## Strategic Nuclear Force Structure

A reduction to as few as 1,500 warheads on each side also raises the question of whether a strategic offensive nuclear triad of land-based ICBMs, sea-based SLBMs, and bombers needs to be maintained. During the Cold War, the rationale for the triad was that having three distinct basing modes and types of delivery vehicles complicated Soviet attack

planning and ensured sufficient U.S. force survivability to inflict a second strike on the Soviet Union. Land-based ICBMs provide the capability to kill hard targets (hardened enemy missile silos and command facilities) and are under the most secure control of the National Command Authority, but as fixed targets (that is, the missiles are housed in missile silos) they are relatively more vulnerable. Sea-based SLBMs can also kill hard targets and are more survivable but are not under the same secure control of the NCA and are not viewed as being able to be launched as rapidly as ICBMs. The bomber force is considered moderately survivable (based on its alert status) but does not have the same ability to kill hard targets as ICBMs or SLBMs. However, bombers are the only leg of the triad that can be recalled in a crisis situation; once a decision has been made to launch ICBMs or SLBMs, there is no way to stop them.

If the United States were to change its strategic nuclear force structure to a so-called dyad (two legs rather than three), two possibilities exist. With either option, the United States would keep the bomber force because bombers can be recalled in a crisis situation and because long-range bombers capable of carrying conventional heavy payloads might be needed to project power to overseas theaters of operations—maybe even from bases in the United States.<sup>63</sup>

The question would be whether to retain either the ICBM or the SLBM force. Compared with an equivalent SLBM force, ICBMs have the advantage of very secure command and control and lower operating costs. But fixed, silo-based ICBMs are relatively more vulnerable to attack. Moreover, relatively vulnerable ICBMs may be subject to a “use or lose” decision in a crisis situation (that is, a leader could be faced with the decision of launching ICBMs before confirmation of an attack—usually defined as the detonation of incoming warheads—or risking the destruction of the ICBMs by waiting for confirmation).

On the other hand, SLBMs are highly sur-

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**At very low warhead levels (that is, START II and beyond), scaling back to a dyad of nuclear forces may be more efficient and cost-effective than maintaining the current triad.**

vivable (when deployed at sea) but have less secure command and control than ICBMs (which makes their response times longer). And SLBMs are relatively more expensive than ICBMs because their costs include the procurement and operation of nuclear submarines—with the associated manpower and infrastructure for nuclear propulsion. At very low warhead levels (that is, START II and beyond), scaling back to a dyad of nuclear forces may be more efficient and cost-effective than maintaining the current triad. Even with a dyad, the United States would continue to have redundant and complementary forces to complicate the attack planning of any adversary and ensure the survivability of the force.

## Conclusion

There is no reason to assume that arms control and ballistic missile defense are mutually exclusive. Indeed, despite the Clinton administration's desire to amend the ABM Treaty to permit deployment of a limited NMD system, START II was finally ratified by the Russian Duma (although the U.S. Senate must still approve two protocols added to the treaty and ratified by the Duma), and initial progress is being made on a START III agreement. Although Russia has been initially resistant to amending the ABM Treaty, it also clearly recognizes the threat that is driving the U.S. rationale to deploy NMD. After their June 2000 summit meeting, President Clinton and President Putin agreed on a joint statement that "makes clear that there is an emerging ballistic missile threat that must be addressed, but we have not agreed on how best to do so."<sup>64</sup> And there have been some early indications that Russia might be willing to modify the ABM Treaty to permit NMD in exchange for deeper cuts in offensive arms beyond START II.<sup>65</sup>

Given what has been accomplished to date in the START process, the key issue is how to proceed with NMD without endangering future arms control agreements.

Those accomplishments in arms control make some of the key criticisms of NMD opponents appear less valid. For example:

- A limited NMD system designed to defend against rogue state threats from potential regional adversaries—that is, a land-based system consisting of 100 or 200 interceptors to defend against small-scale attacks—would not affect Russia's ability to launch a retaliatory attack in response to a first strike on Russia's nuclear forces.<sup>66</sup> Even with deep cuts in the number of warheads (that is, to the levels of START III), force structures will be SLBM heavy and thus highly survivable. Thus, Russia would retain enough warheads to overwhelm a limited defense.
- A limited NMD system would not create a situation in which Russia felt it needed to retain large forces to maintain deterrence in the face of a U.S. NMD system.<sup>67</sup> An NMD system designed to defend against attacks of, at most, tens of warheads would not be able to successfully defend against a larger-scale attack (hundreds of warheads), which the Russians could mount even under the low warhead totals of START III. Therefore, there would be no inherent incentive or need for larger Russian offensive forces, especially because Russian missiles are equipped with sophisticated countermeasures (for example, decoys) that can overcome defenses.

Although ardent supporters of NMD argue that the United States should abandon the ABM Treaty to deploy NMD (largely because they want to deploy a comprehensive, global rather than a national missile defense), that is not the most prudent path to follow. That course would endanger recent accomplishments in arms control (START II) and certainly prohibit any future reductions of offensive weapons (START III). Having lower numbers of warheads on alert status

would substantially reduce the risk of an accidental nuclear attack.<sup>68</sup> The lower inventory levels also mean that fewer nuclear warheads would be available to be stolen or sold to potential regional adversaries (that possibility is a particular concern for the aging and insecure Russian nuclear stockpile). In addition, in response to a unilateral withdrawal from the ABM Treaty, the Russians could sell potential regional adversaries the countermeasures to defeat any NMD system, refuse to help stem the proliferation of Russian weapons of mass destruction to potential regional aggressors, or maintain large numbers of nuclear weapons on alert.

Instead, the United States should pursue deployment of a limited NMD system to defend against intentional or accidental missile attacks from potential regional aggressors while simultaneously renegotiating the ABM Treaty with the Russians. That conclusion does not imply that the ABM Treaty is sacrosanct or the cornerstone of strategic stability. Rather, it simply acknowledges that concerns about stability and deterrence vis-à-vis Russia are legitimate and cannot be ignored. And to simply ignore the ABM Treaty and Russian concerns would needlessly antagonize Russia at an inopportune time (much as the United States did by expanding NATO)—potentially throwing away the gains of START II (and START III). Of course, any renegotiation would have to retain the basic aim of the ABM Treaty—limiting defenses so that neither the U.S. nor the Russian strategic arsenal would be undermined—while permitting systems to defend against potential regional adversaries.

If, after earnest negotiations, the Russians still resolutely refuse to amend the ABM Treaty to allow for a limited NMD deployment against those states, then, and only then, should the United States consider abandoning the treaty. A previous Cato Institute study on NMD noted:

In the final analysis, U.S. leaders should not permit the ABM Treaty to be an insurmountable obstacle to

NMD, if such a system can be shown to be in the best interest of U.S. security and to be cost-effective. Unlike the Constitution, the ABM Treaty—or any treaty—should not be considered a cornerstone of America’s political institutions and a way of life. A treaty should be retained only as long as it serves the security interests of the American people.<sup>6,9</sup>

The NMD system that makes the most sense against the threat from potential regional adversaries is a limited ground-based deployment of 100, or a few hundred, interceptors. Such a system should provide sufficient defensive capability against intentional and, more likely, accidental missile attacks from those states. And such a system would have some inherent capability against a small Russian or Chinese accidental or unauthorized launch but would not be designed to counter those specific scenarios. Furthermore, according to the Cato study:

Deploying a limited ground-based NMD system would not upset nuclear deterrence or stability between the United States and Russia. Even if the NMD system went beyond the bounds of the ABM Treaty (as is likely), it would not pose a direct threat to Russia. If the NMD system were designed to protect against relatively small attacks (for example, 20 warheads), it would hardly represent a defense capability sufficient to allow the United States to launch a nuclear first strike against Russia with the expectation that it could successfully defend against a Russian retaliatory strike.<sup>70</sup>

Therefore, it is possible to achieve a “balance” between strategic offensive arms control, the ABM Treaty (as a reflection of legitimate concerns about stability and deterrence between the United States and Russia), and national missile defense against the emerging threats. But such a balance

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**Reducing U.S. offensive forces below current START II and proposed START III levels might provide the incentive for Russia to accept U.S. efforts to deploy a limited land-based NMD.**

will not be achieved without dispensing with the overheated political rhetoric on both sides of the issue. Arms control advocates cannot continue to “cry wolf” about missile defense’s endangering the arms control process. Missile defense advocates cannot continue to ignore and dismiss the ABM Treaty. And, perhaps most important, we must view NMD in the context of a more “restrained” and less interventionist American foreign and military policy. Adopting such a policy should not be construed as “isolationist”; rather, it should be recognized that the United States should not be the world’s policeman, that friends and allies are responsible for their own defense, and that not every crisis around the world involves a core U.S. national security interest. Therefore, we do not need an NMD system that is global in nature (as advocated by many NMD supporters). Rather, we need a limited NMD designed to protect the United States against limited attacks from emerging potential regional aggressors.

Reducing U.S. offensive forces below current START II and proposed START III levels might provide the incentive for Russia to accept U.S. efforts to deploy a limited land-based NMD. Lowering the number of offensive warheads could reduce the chance of accidental nuclear war by shrinking the number of warheads on alert status and reducing the number of Russian warheads that could be stolen or sold to emerging nuclear powers. If the United States changed its nuclear doctrine from war fighting to deterrence, mutual reductions in offensive forces that allowed the United States to keep as few as 1,500 warheads would deter Russia and smaller or emerging nuclear powers. Such a reduction combined with the deployment of a limited land-based NMD system would greatly enhance U.S. security.

## Notes

1. James Woolsey, former director of the Central Intelligence Agency, Comments at the Heritage Foundation conference “Defending America: Meeting the Urgent Missile Threat,” March 23, 1999. Woolsey noted that, during the Cold War, the fear among U.S. policymakers was that robust

Soviet missile defenses would allow the Soviet Union to strike first and then absorb a second strike from U.S. residual forces with minimal damage.

2. Ivan Eland, “Abrogation of the ABM Treaty,” *Nexus* 4, no. 1 (Spring 1999): 59.

3. David B. H. Denoon, *Ballistic Missile Defense in the Post-Cold War Era* (Boulder, Colo.: Westview, 1991), p. 5.

4. Fred Kaplan, *Wizards of Armageddon* (New York: Simon and Schuster, 1983), pp. 349, 351; and Strobe Talbott, *The Master of the Game: Paul Nitze and the Nuclear Peace* (New York: Alfred A. Knopf, 1998), p. 103.

5. The U.S. Senate had ratified the START II Treaty on January 26, 1996, but the treaty as ratified by the Duma contains two protocols (agreed to by President Clinton and then-Russian president Boris Yeltsin in 1997) that must be approved by the Senate before the treaty is formally adopted. One protocol would clarify the difference between long-range strategic and short-range tactical weapons; the other would extend the time frame for meeting the START II goals from 2003 to 2007.

6. Treaty between the United States of America and the Russian Federation on Further Reduction and Limitation of Strategic Offensive Arms, January 30, 1995, <http://dosfan.lib.uic.edu/acda/factshee/wmd/nuclear/start2/start-95.htm>

7. Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, <http://www.state.gov/www/global/arms/treaties/abm/abm2.html>. Emphasis added.

8. Spurgeon M. Keeny Jr., Remarks at conference on “National Missile Defense, the ABM Treaty and the Future of START II,” Brookings Institution, Washington, January 27, 1999, <http://www.armscontrol.org/ACT/novdec98/trnd98.htm>.

9. See Eland, “Abrogation of the ABM Treaty,” p. 60.

10. Henry Kissinger, “The Next President’s First Obligation,” *Washington Post*, February 9, 2000, p. A21.

11. That argument was made by Henry Kissinger, Ed Meese, and Sven Kraemer in comments at the Heritage Foundation conference, “Defending America: Meeting the Urgent Missile Threat,” March 23, 1999.

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14. Quoted in Daniel Williams, "Putin Wins Vote on START II," *Washington Post*, April 15, 2000, p. A16.
15. Quoted in *ibid.*
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23. Andrew Koch, "Don't Sink Billions to Deflect a Hypothetical Threat While Ignoring the Real Dangers," Insight on the News Online, Center for Defense Information, May 25, 1998, <http://www.cdi.org/issues/bmd/symposium.html>.
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25. Lisbeth Gronlund and George Lewis, "How a Limited National Missile Defense Would Impact the ABM Treaty," *Arms Control Today*, November 1999, <http://www.armscontrol.org/ACT/nov99/lgno99.htm>.
26. *Ibid.*
27. *Ibid.*
28. *Ibid.*
29. James H. Anderson, *America at Risk: The Citizen's Guide to Missile Defense* (Washington: Heritage Foundation, 1999), p. 4-5. Emphasis in original.
30. Center for Security Policy, "The Face of Blackmail to Come—It's Time to Defend America," Decision Brief no. OO-D 8, January 24, 2000, <http://www.security-policy.org/papers/2000/00-D8.html>.
31. *Ibid.*
32. Anderson, p. 89. Emphasis added.
33. Center for Security Policy, "Protect Americans Now," Decision Brief no. OO-D 25, March 20, 2000, <http://www.security-policy.org/papers/2000/00-D25.html>.
34. Heritage Foundation, Commission on Missile Defense, "Defending America: A Plan to Meet the Urgent Missile Threat," March 1999, p. 43.
35. *Ibid.*
36. Some of the more ardent NMD advocates do not favor an NMD deployment within the framework of the ABM Treaty even if the treaty were amended to allow one. For example, Baker Spring states: "Some proponents of missile defense fear that the Administration's discussions with Russia on arms control could be used as a means to draft a new agreement with Moscow that would alter the ABM Treaty to allow the deployment of the system the President chooses. This is a legitimate fear, since such an agreement would hobble the U.S. missile defense effort. The treaty's restrictions would continue to impose limits on the capabilities of the defense architecture that are so severe that the system developed would not justify the expense." Baker Spring, "The President's Important Choice on Missile Defense," Heritage Foundation Backgrounder no. 1355, March 31, 2000, p. 5.
37. Quoted in Terry M. Neal, "Bush Backs Wider Missile Defenses," *Washington Post*, May 24, 2000, p. A4.
38. *Ibid.*
39. The Congressional Budget Office had previously estimated that a GPALS-like system consisting of 300 ground-based interceptors, 500 space-based interceptors, 20 space-based lasers, and SMTS satellites would entail \$60 billion in acquisition costs (including \$3 billion to hedge against technical risk). See Ray Hall and David Mosher, "Budgetary Implications of H.R. 3144, the Defend America Act of 1996," Congressional Budget Office, 1996.
40. Barbara Conry, "U.S. Global Leadership: A Euphemism for World Policeman," Cato Institute Policy Analysis no. 267, February 5, 1997.

41. Ivan Eland, "Protecting the Homeland: The Best Defense Is to Give No Offense," Cato Institute Policy Analysis no. 306, May 5, 1998, p. 35.
42. For a more detailed discussion of the threat from potential regional adversaries, see Rumsfeld Commission, *Report of the Commission to Assess the Ballistic Missile Threat to the United States* (Washington: Government Printing Office, 1998); and Charles V. Peña and Barbara Conry, "National Missile Defense: Examining the Options," Cato Institute Policy Analysis no. 337, March 16, 1999.
43. Quoted in Bradley Graham, "N. Korean Missile Threat Is Reassessed," *Washington Post*, September 25, 1998, p. A31.
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45. Eland, "Abrogation of the ABM Treaty," p. 71. Emphasis added.
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48. David Hoffman, "Russia Set to Ratify START II," *Washington Post*, April 11, 2000, p. A16, <http://www.washingtonpost.com/wp-dyn/world/exussr/A51028-2000Apr10.html>.
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50. William M. Arkin, Robert S. Norris, and Joshua Handler, *Taking Stock: Worldwide Nuclear Deployments 1998* (Washington: Natural Resources Defense Council, 1998), p. 45.
51. Office of the Secretary of Defense, *Proliferation: Threat and Response* (Washington: U.S. Department of Defense, 1997), p. 10.
52. Rumsfeld Commission, p. 5.
53. Peña and Conry, pp. 18–20.
54. Geoffrey Forden and Raymond Hall, *Budgetary and Technical Implications of the Administration's Plan for National Missile Defense* (Washington: Congressional Budget Office, April 2000), <http://www.cbo.gov/showdoc.cfm?index=1984&sequence=0&from=7>. See also Eric Planin and Roberto Suro, "Cost of Missile Shield Is Double Pentagon Estimate, CBO Says," *Washington Post*, April 26, 2000, p. A10. The cost estimate for an initial NMD deployment has steadily increased. In 1996 the Department of Defense estimate for 100 interceptors at an unspecified location was \$10 billion, and the CBO estimate for 100 interceptors at Grand Forks, N.Dak., was \$14 billion. See Hall and Mosher. In 1998 DoD estimated a cost of \$11 billion for the deployment of 20 interceptors in Alaska (\$9 billion to deploy them in Grand Forks, N.Dak.), which was subsequently increased to \$13 billion. See John Donnelly, "NMD Cost Estimate Up 30 Percent since Last Week," *Defense Week*, January 19, 1999. The current CBO estimate also shows that adding 150 interceptors in the continental United States would increase the system cost to \$49 billion; an additional \$10.6 billion would be needed to construct and operate 24 low-orbit infrared satellites for the detection of warheads and discrimination of them from decoys. Thus the total cost (development, procurement, and operation) could be as high as \$60 billion for a land-based NMD system.
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