U.S. FOREIGN POLICY AGENDA

VOLUME 7 AN ELECTRONIC JOURNAL OF THE U.S. DEPARTMENT OF STATE NUMBER 2

WMD

Weapons of Mass Destruction

THE NEW STRATEGIC FRAMEWORK

JULY 2002

The gravest danger to freedom lies at the perilous crossroads of radicalism and technology. When the spread of chemical and biological and nuclear weapons, along with ballistic missile technology — when that occurs, even weak states and small groups could attain a catastrophic power to strike great nations. Our enemies have declared this very intention, and have been caught seeking these terrible weapons. They want the capability to blackmail us, or to harm us, or to harm our friends — and we will oppose them with all our power.

President Bush receives salutes from cadets at the United States Military Academy at West Point, N.Y., June 1, 2002. *(AP Photo/Stephan Savoia)*

For much of the last century, America's defense relied on the Cold War doctrines of deterrence and containment. In some cases, those strategies still apply. But new threats also require new thinking. Deterrence — the promise of massive retaliation against nations — means nothing against shadowy terrorist networks with no nation or citizens to defend. Containment is not possible when unbalanced dictators with weapons of mass destruction can deliver those weapons on missiles or secretly provide them to terrorist allies.

We cannot defend America and our friends by hoping for the best. We cannot put our faith in the word of tyrants, who solemnly sign nonproliferation treaties, and then systemically break them. If we wait for threats to fully materialize, we will have waited too long.

Homeland defense and missile defense are part of stronger security, and they're essential priorities for America. Yet the war on terror will not be won on the defensive. We must take the battle to the enemy, disrupt his plans, and confront the worst threats before they emerge. In the world we have entered, the only path to safety is the path of action. And this nation will act.

George W. Bush
President of the United States of America

(Remarks at West Point commencement ceremonies, June 1, 2002)

Editor's Note: This 22nd issue of *U.S. Foreign Policy Agenda* discusses the threat posed by weapons of mass destruction and the means to deliver them, and the development of a new strategic framework to counter that threat, through a series of articles and reference materials from experts within the United States Government and from the academic and private sectors.

U.S. FOREIGN POLICY AGENDA

An Electronic Journal of the U.S. Department of State

WEAPONS OF MASS DESTRUCTION: THE NEW STRATEGIC FRAMEWORK

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President of the United States of America

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COVER: *Illustration shows, clockwise from bottom left, symbols for chemical, biological, and radiological-nuclear weapons, and a ballistic missile.*

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AGENDA

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THE NEW STRATEGIC FRAMEWORK: A RESPONSE TO 21ST CENTURY THREATS

By John R. Bolton
Under Secretary of State for Arms Control and International Security

The New Strategic Framework is an "appropriate reflection not only of the post-Cold War relationship between the United States and Russia, but of the new security threats we face in the 21st century," says John R. Bolton, Under Secretary of State for Arms Control and International Security. He says the framework, agreed to by Presidents Bush and Putin during their Moscow summit in May, involves "reducing offensive nuclear weapons, creating defensive systems that protect against missile attacks, strengthening nonproliferation and counterproliferation measures, and cooperating with Russia to combat terrorism."

Since the tragic events of September 11, when the world was made witness to the deadly ambitions of terrorists, the Bush administration has moved rapidly to counter imminent terrorist threats and identify future ones. While the attacks on New York and Washington were delivered by relatively low-tech means, they inflicted enormous damage and unprecedented casualties. As we combat the threat of terrorism, we must be prepared for ever-escalating means of attack from weapons designed to kill far greater numbers of people and wreak havoc on our infrastructure.

The risks posed by the spread of weapons of mass destruction (WMD) have been with us for some time, but now, as the United States works to rid the world of the terrorist threat, we must not discount the real and added danger posed by chemical, biological, and nuclear weapons falling into the hands of terrorists. As President Bush warned, "Every nation in our coalition must take seriously the threat of terror on a catastrophic scale — terror armed with biological, chemical, or nuclear weapons." Dictators in hostile states such as Iran, Iraq, and North Korea already possess some WMD and are developing others. Their terrorist allies are in search of such weapons, and would waste no opportunity to use them against us.

As we survey the security environment, a strong link between terrorist-sponsoring states and the spread of WMD becomes readily apparent. We believe that with very few exceptions, terrorist groups have not acquired and cannot acquire WMD without the support of nation-states. Thus we are moving to end state sponsorship of terror, and to expose those states that are acquiring WMD, often in violation of global nonproliferation treaties.

In countering these urgent threats, the Bush administration believes that the Cold War concepts of mutual assured destruction — the threat of an overwhelming retaliatory strike in response to provocation — and containment are no longer appropriate. These tactics made sense when our greatest threat came from a nuclear-armed enemy superpower. But they do not make sense in a world where itinerant terrorists are poised to do the bidding of dictatorial regimes hostile to the United States and its allies. The international security situation has changed, and we must adapt our defenses and resources to it.

In response to this new international security situation, Presidents Bush and Putin agreed upon a comprehensive security strategy called the New Strategic Framework during their May 2002 summit meeting in Moscow. The New Strategic Framework involves reducing offensive nuclear weapons, creating defensive systems that protect against missile attacks, strengthening nonproliferation and

counterproliferation measures, and cooperating with Russia to combat terrorism. It was created out of the belief that the more cooperative, post-Cold War relationship between Russia and the United States allows for new approaches to arms control issues.

Accordingly, Presidents Bush and Putin signed a historic document pledging to reduce their countries' strategic nuclear forces over the next 10 years to a total of between 1,700 and 2,200 operationally deployed strategic warheads. This reduced reliance on offensive nuclear weapons forms a key component of the New Strategic Framework, along with a new concept of deterrence based on a limited missile defense.

In June the United States formally withdrew from the Anti-Ballistic Missile Treaty, allowing it to develop and deploy a system to protect against the ballistic missile threat from rogue states. The ABM Treaty, signed by the United States and the Soviet Union in 1972, posed fundamental problems to the U.S. need to defend against the growing missile threat — a threat not in existence when the treaty was written. The treaty also hampered the development of normalized, constructive relations with the Russians, based as it was on the Cold War notion of mutual assured destruction. The United States is now at work on six underground missile interceptor silos in Fort Greely, Alaska, and plans are under way to deploy layered defenses — from the ground, sea, and air — that will provide protection against a limited missile attack for our country, our friends, and our allies. We plan to work with Russia and our allies on the research and development of such a system, as the missile threat from rogue states lies on their doorstep as well.

Stopping the spread of missile and nuclear technology through nonproliferation efforts forms another critical element of the New Strategic Framework. Presidents Bush and Putin have agreed to step up cooperation on preventing the spread of WMD. We and the Russians have reaffirmed our support for important global treaties such as the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Biological Weapons Convention (BWC), and the Chemical Weapons Convention (CWC), and the United States will continue to insist upon full compliance among their respective members. In addition to these global treaties, multilateral regimes such as the Missile Technology Control Regime (MTCR) and the Wassenaar Arrangement also play a critical role in controlling the export of sensitive or dual-use technology.

We have ongoing discussions with the Russians about our concerns over the proliferation of missile and nuclear technology by some Russian entities to countries like Iran. We have pledged to work with Russia to insure that it makes strong efforts to stop proliferation by enforcing export control laws and punishing violators. Above all, we must insure that would-be proliferators are not allowed access to the materials and technology needed to develop WMD.

The New Strategic Framework's comprehensive security arrangement is a more appropriate reflection not only of the post-Cold War relationship between the United States and Russia, but of the new security threats we face in the 21st century. These will be characterized by transnational terrorist threats that are harder to isolate and identify, and by the very real dangers that biological, chemical, or nuclear technology pose when hijacked by hostile forces. Partnership and cooperation between the United States and Russia has been a key objective of the Bush administration from the beginning, and our countries will work together to halt the dangers that threaten us and the rest of the civilized world.

U.S. APPROACHES TO NONPROLIFERATION

By John S. Wolf
Assistant Secretary of State for Nonproliferation

Denying proliferators WMD technology and expertise is "a central framing element" of U.S. nonproliferation policy, says Assistant Secretary of State for Nonproliferation John Wolf. He sees the key U.S. challenges as: reducing and ceasing WMD materials production; stopping Iran's acquisition of WMD and missiles; stopping nuclear and missile proliferation in and from South Asia; strengthening export controls, especially on Iraq; and strengthening the International Atomic Energy Agency.

"Every nation ... must take seriously the growing threat of terror on a catastrophic scale — terror armed with biological, chemical, or nuclear weapons.... Some states that sponsor terror are seeking or already possess weapons of mass destruction; terrorist groups are hungry for these weapons, and would use them without a hint of conscience.... In preventing the spread of weapons of mass destruction, there is no margin for error, and no chance to learn from mistakes. Our coalition must act deliberately, but inaction is not an option."

(President George W. Bush, speaking on the six-month anniversary of the September 11 attacks)

Marshalling international efforts to deny proliferators the material, equipment, expertise, and technology necessary to pursue weapons of mass destruction (WMD) and the means to deliver them has long been a priority of the U.S. government. But the terrorist attacks last September 11 and the subsequent anthrax deaths spurred a new sense of urgency in the fight against proliferation. What the president was making clear is that this effort is not just one of many foreign policy challenges; it is a central framing element, and we must win.

What is clear, too, is that our challenge has grown in complexity as WMD and missile technology has proliferated. Today's threat is shaped by non-state as well as by state actors, including extremists who will not hesitate to use WMD if they can get their hands on them.

We also must be concerned by the increase in regional instability that comes from the spread of WMD and their delivery systems. It is true in the Middle East; it is true in East Asia; and it is most clearly true today in South Asia. Moreover, WMD and missiles constitute a clear and direct threat to U.S. forces deployed around the world, as well as to our allies and friends.

Our first priority has to be security against WMD and missile use, development, deployment, and export. With that in mind, let me offer my views of key global nonproliferation challenges and steps we are taking to address them.

REDUCE AND STOP PRODUCTION OF WMD MATERIALS

Dealing with the large quantities of excess WMD systems and related material, technology, and expertise in the former Soviet Union continues to be our most immediate challenge and highest nonproliferation priority. The United States is pursuing a wide array of cooperative programs in Russia and the new Eurasian republics. Our objective is not only to help them meet their arms control obligations, but also to control and dispose of excess WMD materials — in particular excess nuclear weapon materials — and to ensure that

nuclear, biological, and chemical weapons and missile expertise does not leak to states of concern and terrorist organizations.

To these ends, the United States is working to: speed up material protection, control, and accounting programs at up to 40 sites in the former Soviet Union to reduce vulnerabilities of fissile materials; secure material in fewer, consolidated sites; and dispose of fissile materials declared excess to defense needs. We have further reinforced efforts to permanently shut down Russia's three remaining reactors producing weapon-grade plutonium. We are working with Russia and allies to develop more cost-effective programs to dispose of excess weapon-grade plutonium, and working with Kazakhstan to secure 300 metric tons of spent fuel — containing three tons of weapon-grade plutonium — from its BN-350 breeder reactor.

Another priority is securing dangerous biological pathogens in the former Soviet Union and resuming assistance to destroy chemical weapon stockpiles in Russia. The United States is concerned about the rate at which Russia is moving to comply with its obligations under the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC). We are searching to find common ground with Russia on this issue. We are also committed to the scientist redirection programs at the Science Centers in Moscow and Kiev, which are designed to prevent former Soviet weapons experts from providing WMD and missile expertise to proliferators and terrorists.

STOP IRAN'S ACQUISITION OF WMD AND MISSILES

The proliferation threat posed by Iran is stark and multifaceted. Iran has an ambitious nuclear program, longstanding chemical/biological programs, and a rapidly increasing ballistic missile program. At the same time it is a leading exporter of support for terrorist groups. Iran is actively seeking to develop and improve all aspects of its WMD and missile programs. Its clandestine effort to produce fissile material is a particular worry. We should be under no illusions: Iran is intent on acquiring nuclear weapons and is actively seeking the foreign assistance it needs to achieve this objective.

We continue to have an active dialogue with Russia on this issue. In our dialogue, we are forced to juxtapose those broad areas of cooperation that have developed over the past year-and-a-half as a result of meetings between Presidents George Bush and Vladimir Putin with Russia's continued assistance to Iran on missiles, sensitive nuclear technology, and advanced conventional weapons. We are working hard to convince Russia that cooperation with Iran on missile- and nuclear-related technology and destabilizing conventional weapons is a threat both to regional stability and to Russia's own security interests. Meanwhile we are working to ensure that China and other countries do not step in to replace Russia as a supplier of WMD- and missile-related technologies to Iran. Stopping North Korea's missile-related exports to Iran and elsewhere is a key part of the agenda we wish to pursue with Pyongyang.

STOP NUCLEAR AND MISSILE PROLIFERATION IN AND FROM SOUTH ASIA

The threat that WMD and missile programs pose to regional stability is nowhere more evident than in South Asia, where one million troops face off on the India-Pakistan border. The presence of WMD and missiles in the region has increased dramatically the danger of miscalculation during times of crisis, and the resulting regional instability magnifies the risk of these weapons falling into the hands of terrorists. Yet there is no near-term prospect of getting India and Pakistan to relinquish their nuclear weapons and missiles.

While the recent sharp escalation in tension between India and Pakistan has reminded us all of the pressing danger of unchecked proliferation, it is not yet clear that Pakistan and India have drawn the right conclusions from this crisis about the dangers their WMD and missiles pose. We hope that confidence-building measures like keeping weapons and delivery systems separated, halting fissile material production,

and restraining nuclear and missile programs can be implemented. Tightened export controls are also vital to ensure that India and Pakistan do not become sources of, or transshipment points for, sensitive materials and technology.

STRENGTHEN EXPORT CONTROLS, INCLUDING ON IRAQ

All efforts to secure existing WMD- and missile-related items will be futile if we are not able to cut off the flow of arms and sensitive WMD/missile technologies through strengthened export controls. We urgently need to strengthen the implementation and effective enforcement of export controls on a multilateral basis and add terrorism to the scope of their coverage. Without broad cooperation among export and transit countries, sensitive dual-use items and technologies cannot be effectively controlled. Adherence to the guidelines and control lists of the multilateral export control regimes is vital to the success of our nonproliferation efforts. To help, the United States is expanding its Export Control and Related Border Security Assistance cooperation with other countries, particularly those in Central Asia, to help them strengthen their controls. But even with well-intentioned laws, it is essential that governments commit to vigorous enforcement and exemplary judicial action for those caught violating controls.

Strengthening and enforcement of export controls is particularly important in the case of Iraq. Iraq flaunts its hostility to the world; remains in violation of its U.N. and Nuclear Non-Proliferation Treaty (NPT) obligations; supports terrorism; and has continued to pursue WMD, missile, and conventional military programs in contravention of U.N. Security Council resolutions.

In May 2002 the U.N. Security Council unanimously adopted Resolution 1409, which puts in place new U.N. export controls on Iraq that focus on denying Iraq the wherewithal to reconstitute its weapons programs. By freeing up trade in goods for purely civilian use while maintaining controls on militarily useful items, this system makes clear that the international community interposes no obstacles to efforts to assist the Iraqi people.

STRENGTHEN THE INTERNATIONAL ATOMIC ENERGY AGENCY

Mindful of the world's near miss with Iraq, and of new risks from countries like Iran and North Korea, we must improve and fund effective safeguards on nuclear power users and the ability of the International Atomic Energy Agency (IAEA) to ferret out covert weapons efforts. The Additional Safeguards Protocol sets an important new nonproliferation norm that every country should accept. The IAEA also has a central role in verifying the Agreed Framework with North Korea.

But carrying out new tasks requires more resources. We need to ensure that the IAEA gets the financial, technical, and political support that it needs. The Board of Governors endorsed proposals to strengthen and expand IAEA programs for the worldwide protection of nuclear materials, radioactive sources, and nuclear facilities against acts of terrorism. The United States strongly supports those initiatives and is urging member states to ensure that the IAEA has the resources needed to put them into practice.

Strengthening the IAEA is part of our overarching goal of strengthening international agreements, arrangements, and organizations devoted to nonproliferation and of strengthening compliance measures. It should be clear that the United States places great importance on multilateral efforts to control WMD and technologies, but I want to emphasize this point. The United States is strongly committed to the existing international nonproliferation treaties, including the Nuclear Non-Proliferation Treaty, Chemical Weapons Convention, and Biological Weapons Convention, as well as to nonproliferation regimes like the Zangger Committee, the Nuclear Suppliers Group, the Missile Technology Control Regime, the Wassenaar Arrangement, and the Australia Group.

CONCLUSION

September 11 has given a new sense of urgency to a danger that we all have been concerned about for some time, and in that sense it provides an opportunity. The scope of those attacks has

underlined the need to take vigorous action now to end the possibility that terrorist groups or rogue states could launch even more devastating attacks in the future. Proliferation of WMD and missiles is an urgent and profound threat to the security of all states and requires urgent action.

- All states should elevate security against WMD and missile proliferation to an overarching imperative that trumps other, secondary considerations.

- Suppliers of WMD- and missile-related technology should end such cooperation now. Security against WMD and ballistic missile attacks is a first-order imperative on which there should be no compromise.

- All states should strengthen nonproliferation regimes such as the Nuclear Suppliers Group.

- Nations should immediately secure their WMD and missiles to the highest possible extent and help other states that lack the resources to do likewise.

- Similarly, states should immediately increase the effectiveness of their export control systems and assist other states to the same end.

The United States appreciates the cooperation and assistance the world community has shown since September 11. We hope now to build on that cooperation to move forward in strengthening nonproliferation efforts across the board. We have had clear warning of the enormous danger posed by WMD and missile proliferation. Now it is incumbent on us all to act decisively.

MISSILE DEFENSES AND NEW APPROACHES TO DETERRENCE

By Kerry M. Kartchner
Senior Adviser for Missile Defense Policy, Office of Strategic and Theater Defenses, Bureau of Arms Control, U.S. Department of State

In order to respond to contemporary and emerging threats, the United States must change the way it thinks about and practices deterrence, says Kerry M. Kartchner, Senior Adviser for Missile Defense Policy, Office of Strategic and Theater Defenses in the State Department's Bureau of Arms Control. "We must redesign deterrence to be proactive rather than reactive," he says.

STRATEGIC SETTING

The world has changed dramatically since the end of the Cold War. Then, the focus of our foreign and defense policy was on the regulation of an extremely dangerous military standoff between two heavily armed superpowers. NATO and the Warsaw Pact were locked into an implacably hostile relationship with tens of thousands of nuclear weapons on high state of alert pointed at each other. The United States and its allies depended on nuclear forces to deter not only Soviet nuclear forces but also the more than one million conventional troops in Europe. It was from this world that the concept of mutual assured destruction emerged.

Today's world is fundamentally different. Contemporary security conditions, including both challenges and opportunities, display little resemblance to those of the past. Russian strategic capabilities have suffered a decade of decline and the formerly formidable Soviet armed forces have severely deteriorated in all categories. For the first time in half a century, it is difficult to conceive of a situation in which our relations with Russia could deteriorate into armed conflict. In fact, former members of the Warsaw Pact are now members of NATO, Russia participates in Balkan peacekeeping and is, itself, a member of the Alliance's Partnership for Peace program.

Yet our security — and that of friends and allies in regions of vital interest — is threatened. We are confronted with a more diverse and less predictable set of threats than in the past. This includes both terrorists and states that operate outside the boundaries of international law and seek to threaten and employ force to achieve their political, territorial and ideological objectives. While our conventional military capabilities have served for the past decade to deter aggression by such states, and have defeated it when it occurred, these adversaries are actively pursuing new means to further their goals. Perhaps the most significant threat comes from rogue states armed with growing arsenals of chemical, biological and, in the future, nuclear weapons, as well as increasingly capable ballistic missiles as a means of delivery.

In a speech at the National Defense University on May 1, 2001, President Bush stated that "deterrence can no longer be based solely on the threat of nuclear retaliation." He called for "new concepts of deterrence that rely on both offensive and defensive forces." These new concepts of deterrence should help underwrite a comprehensive strategy for combating the proliferation of weapons of mass destruction and ballistic missile technology. Such a strategy will require the following components:

- Maintaining and improving core alliance relations, and reassuring friends that we are committed to ensuring a stable international order and that our security interests are inseparable from their own;

- Resolving challenges, rather than postponing them in a way that delays but makes even more dangerous the threats we will face in the future;

- Recasting our foreign policy to better integrate all sources of influence available to us; and

- Dissuading adversaries from undertaking hostile courses of action while retaining the capability to defeat aggression.

To be effective, our strategy must encompass a broad range of policies and programs, including proactive nonproliferation and threat-reduction efforts, counter-proliferation measures, and effective response capabilities to mitigate the consequences of the use of weapons of mass destruction (WMD). One essential ingredient for the success of this strategy is reshaping our military doctrine and capabilities to be responsive to contemporary and emerging threats. This will require the transformation of our deterrence posture. The strategic concepts and military forces of the past are ill-suited to counter the more pressing elements of today's threats. As a result, it is imperative to manage the transition to a more stable security environment by changing the way we think about and practice deterrence. We must redesign deterrence to be proactive rather than reactive. Deterrence of new threats requires new and different concepts and capabilities. The Department of Defense's recently completed Nuclear Posture Review is an important step in this direction. It lays the foundation for a diversified approach to deterrence that incorporates both conventional offensive strike capabilities and missile defenses, thus reducing our reliance on nuclear weapons.

CHANGED NATURE OF THE THREAT

A number of factors make the deterrence of these new threats more complex and more problematic. First, the discipline that came from the bipolar structure of the Cold War is no longer operative. Regional states have more opportunity to acquire the technologies and expertise needed for weapons of mass destruction and missiles and are less constrained in their use of force against their neighbors.

Second, while we assumed the Soviet leadership to be fundamentally risk-averse, the leaders of regional adversaries have shown a willingness to take substantial risks, even if such gambles have involved a major sacrifice of the lives of their people and their national treasure.

Third, the conditions we believed were necessary for successful deterrence in the past — such as mutual understandings and effective communications — may not be achieved easily with these states.

And finally, the symmetry of interests that existed in the U.S.-Soviet deterrent relationship, in which both sides put their very survival at stake, is not likely to exist in this new setting. Our potential adversaries may well believe that while their survival is at stake in a regional conflict, ours is not. As a consequence, they may calculate that we can and will back down when confronted with dire threats, such as WMD use, but that they cannot. This undercuts the effectiveness of using offensive threats alone to deter their decision-makers.

Such states see long-range missiles as especially valuable tools of coercion to deter the United States and its allies from coming to the assistance of their intended victims. The disparities in our favor in both conventional and nuclear forces are far less relevant in this type of desperate but rational calculation.

Adversaries may believe that they need hold only a handful of our cities or those of our allies at risk to prevent us from intervention. If they cannot win conventionally when the United States intervenes, and they are nevertheless determined to pursue goals that require the use of force, they must find a means of keeping the United States and other coalition members out of the fight and of overcoming their conventional military disadvantages. For this reason, WMD and missiles have become weapons of choice, not weapons of last resort as we formerly viewed them. As a result, the likelihood of the actual use of such weapons, including early in a conflict to shape the military and political battlefields, is much higher now than in the past.

ELEMENTS OF DETERRENCE

Effective deterrence will continue to depend on the perception by potential adversaries that the United States and its allies possess the capabilities and resolve to respond to aggression. However, the changed nature of the threats we face requires a fundamental realignment among the traditional elements of deterrence — reassurance (of friends and

allies), retaliation, denial and dissuasion. For the past 50 years each of these elements has supported our deterrence strategy. Although the relative contribution of each element fluctuated over time as a result of evolving political, military, and technological considerations, deterrence of the Soviet threat relied principally on a ready capability to retaliate massively with nuclear forces. We believed we understood what Soviet leaders valued and we held those assets at risk. Allies and friends, in turn, understood that our defense was inseparable from theirs and believed, accordingly, that deterrence was sound.

Exclusive reliance on offensive retaliation, while perhaps appropriate when our principal task was to deter Soviet expansion, is no longer appropriate. Deterring leaders of rogue states is much more dynamic: While we will seek to deter their use of force against neighbors and their use of weapons of mass destruction, they will try to use these very weapons to deter us from coming to the assistance of our friends and allies. To counter such threats, we can no longer rely on a posture founded primarily on the prospect of massive retaliation. Instead, we must seek to restructure the elements of deterrence, giving greater balance to denial and dissuasion. Such restructuring presents both challenges and opportunities.

The first challenge is to take advantage of technological opportunities to develop and deploy effective missile defenses that will devalue weapons of mass destruction and their delivery systems. The emergence of regional adversaries armed with chemical and biological weapons has already created a new emphasis on active and passive countermeasures. Acquisition by these adversaries of longer-range missiles capable of delivering nuclear weapons places an even greater premium on missile defenses, both to strengthen deterrence and to enable the United States and its allies to operate and prevail in theater conflicts if deterrence fails. Put simply, effective missile defenses can diminish the threat of missile attack against us or our allies by raising the costs required to make such an attack successful, and by threatening to defeat such an attack should it occur. Deterrence would be strengthened because an attack would be seen both as futile and as triggering a devastating response.
A second challenge is to restructure U.S. nuclear capabilities — in numbers and characteristics — to be responsive to today's threats. Moving to lower numbers will bring U.S. nuclear force levels in line with present-day requirements, while preserving the ability to respond to unexpected future events. This will be accompanied by a change in the way we think about nuclear weapons in particular and deterrence in general, while also providing a new foundation for the political relationship with Russia — one based on common interests and cooperative efforts to address shared threats.

A third challenge will be to examine advanced non-nuclear technologies which may enable the use of conventional weapons against targets that today can be destroyed only with a nuclear weapon.

REQUIREMENTS FOR DETERRENCE

The mix of offensive and defensive forces will vary depending on the different challenges ahead and will be guided by the following considerations:

Regional Challengers
Our relationship with states like North Korea, Iraq, and Iran will be defined largely by the threats they pose to U.S. interests, friends and allies. While there is substantial diversity among these states, they share a number of important characteristics. These states define the United States as their enemy and believe it stands as a major barrier to the accomplishment of their goals. One clear trend among these states is their aggressive pursuit of biological and chemical weapons, and in some cases nuclear weapons. Each of these states is also seeking longer-range ballistic missiles and each sponsors international terrorism.

In addition to strengthening deterrence, defenses contribute to dissuasion. A clear commitment to deploying defenses against ballistic missiles of all ranges makes evident that their intended intimidation and military use is likely to fail. This, in turn, could prompt regional challengers to forego their ballistic missile programs. Moreover, and perhaps most important, missile defenses could provide indispensable insurance against deterrence failure — a prospect of much greater likelihood than in the past. Missile defenses also could provide the means to defeat a missile attack once it is launched and to limit the damage which an enemy would seek to inflict.

The prospect of overwhelming response makes a critical contribution to the deterrence of today's threats from WMD. Forces that are visible and deployable offer perhaps the best prospect of influencing the calculation of adversaries and reassuring allies in the theater of conflict. The number of weapons required for this task is small even if the challengers were to act in concert.

Russia

Our political relationship with Russia involves a broad spectrum of activities — political, economic and military. This was formally registered in the Joint Declaration signed by Presidents Bush and Putin at the May 2002 Summit in Moscow. The United States will seek further integration of Russia into the international community and its full adherence to international norms and regimes. The U.S. goal — rather than accepting the legacy of an adversarial relationship based on weapons counts, decade-long arms control negotiations, and mutual hostility — will be to build a more positive relationship based on common objectives and mutual interests. Therefore, U.S. nuclear requirements today differ greatly — both in terms of numbers and posture — from those needed to deter the Soviet Union. These greatly reduced requirements are reflected in the Treaty on Strategic Offensive Reductions signed in Moscow on May 24, 2002.

China

China is an ascending power in Asia. Like Russia, China highly values and will continue to possess a significant nuclear capability, even though the size of its strategic nuclear forces will likely remain very small.

The United States will seek to avoid an adversarial relationship with China and instead will try to build affirmative political, economic and cultural relations. However, the outcome of these efforts will depend largely on Chinese choices.

China has adopted a "wait-and-see" attitude toward U.S. missile defense developments, and has chosen not to react negatively to the U.S. decision to withdraw from the 1972 Anti-Ballistic Missile Treaty. The United States intends to use this opportunity to continue consulting with Chinese officials. U.S. officials hope to convince them that missile defenses are not directed at China and to urge them not to overreact as missile defense plans evolve.

ALLIANCE DIMENSIONS OF DETERRENCE

Throughout the Cold War the United States structured its deterrence and defense posture to reflect the central importance of meeting commitments to allies in Europe and Asia. The United States extended an explicit security guarantee to its allies, backed by large nuclear and conventional capabilities and the forward deployment of hundreds of thousands of U.S. troops. Nuclear weapons were an indispensable basis for achieving stability in the alliance context. The participation of allies in nuclear risk and burden sharing and, in some cases, in nuclear roles themselves, was a critical component of our collective determination to deter common threats.

Today, although the threats are fundamentally different, allies remain an essential element of our deterrence posture. As demonstrated in the Persian Gulf War, our ability to conduct military operations in regions of interest will depend on allies, both as hosts and as coalition partners. Regional adversaries are aware of this vital relationship and perceive WMD and ballistic missiles as their best means to break coalitions poised against them. By placing friends and allies in Europe and Asia at risk, adversaries may believe they can coerce our prospective partners from supporting our military operations, either through denying permission to use critical facilities or opting out of participation in military combat. For this reason, our missile defenses must be capable of protecting not only U.S. forces and territory, but also those of our allies. And our nuclear offensive forces must continue to provide assurances to allies that our collective security is indivisible.

NUCLEAR OFFENSIVE ARMS REDUCTIONS — PAST AND PRESENT

By Richard A. Davis
Director, Office of Strategic Negotiations and Implementation
Bureau of Arms Control, U.S. Department of State

The Moscow Treaty, under which the United States and Russia will reduce their strategic nuclear warheads by nearly two-thirds, "is not just a new treaty, but a new kind of treaty," says Richard H. Davis, Director of the Office of Strategic Negotiations and Implementation in the State Department's Bureau of Arms Control. It reflects the mutual trust and cooperation in the new U.S.-Russian strategic relationship by affording "a great deal of flexibility to each Party to meet unforeseen future contingencies."

EARLY EFFORTS

Since the beginning of the atomic age, experts have debated the question of whether and how nuclear arms would be subject to international controls. During the 1950s, these debates were largely theoretical, as the United States and Soviet Union sought to develop and deploy arsenals they thought necessary to satisfy their military and political requirements. In the 1960s, increasing public concern over both the nuclear arms race and the effects of nuclear testing led to major international agreements, including the Atmospheric Test Ban Treaty, the Threshold Test Ban Treaty, and the Nuclear Non-Proliferation Treaty. However, while these agreements had some effect on limiting the scope of both the arms race and nuclear testing, they did not preclude the two superpowers from continuing to build up their strategic nuclear arsenals.

Efforts to limit the superpower arms race through the Strategic Arms Limitation Talks (SALT) in the 1970s kept a dialogue going between the United States and the former Soviet Union, but did little to slow the development and production of more powerful and accurate nuclear weapons. Political controversy over the SALT II agreement in 1979, coupled with the Soviet invasion of Afghanistan late that year, curtailed immediate prospects for halting the arms race.

REAL REDUCTIONS

In the period from 1985 to 1991, the United States and the Soviet Union took a series of dramatic initiatives to reduce the threat of nuclear war. A major foreign policy objective of the Reagan administration was to negotiate a new kind of treaty, one that would do more than merely limit the growth in the number of strategic weapons in the arsenals of the two superpowers, but rather would actually require a significant reduction. The 1986 Reagan-Gorbachev Summit in Reykjavik marked the beginning of the process that stretched the envelope of what was achievable beyond anything negotiated before, and set the stage for the arms reduction treaties to follow. This process spanned the Reagan and George H.W. Bush administrations, and the results — the INF (Intermediate-Range Nuclear Forces) and START (Strategic Arms Reduction) treaties — were groundbreaking in many ways. As a result of the 1987 INF Treaty, for the first time an entire class of nuclear weapons (all intermediate- and shorter-range missiles possessed by the United States and the Soviet Union) were eliminated. Under the 1991 START Treaty, each side's strategic offensive arms were reduced by over 40 percent. INF and START also broke new ground in providing for extensive and intrusive verification regimes — including a host of on-site inspections — to verify reductions and declarations under the treaties.

The collapse of the Soviet Union in the early 1990s made clear that the need to deter a general war between East and West in Europe was greatly diminished. However, despite the success of START and INF in dealing with strategic and theater-level nuclear weapons, thousands of so-called "tactical" nuclear weapons remained in the arsenals of NATO and the Russian Federation — from gravity bombs designed to be carried by small aircraft to nuclear landmines, torpedoes, and depth charges. As an important initial step to address this situation, President Bush and Soviet President Gorbachev took parallel actions in September 1991 to remove most non-strategic nuclear weapons from deployment. These actions, taken without benefit of formal negotiated agreement, resulted in all Soviet short-range nuclear weapons being relocated to sites within the Russian Federation itself by June 1992 and the removal to storage of all nuclear weapons from U.S. and Russian surface ships and attack submarines.

Additionally, to reduce tensions further and to encourage Russia — in the wake of the attempted coup in Moscow in 1991 — to lower its nuclear alert status, President Bush announced sweeping unilateral measures regarding strategic systems. These included removing strategic bombers from an alert posture, accelerating the deactivation of those missiles that were to be eliminated under START, and terminating the development of road- and rail-mobile ICBM (intercontinental ballistic missile) systems. Russia took similar steps. With these initiatives, the foundation was laid for prompt ratification of the START Treaty.

IMPLEMENTING TREATIES IN THE REAL WORLD

The process of implementing arms control agreements that reduce nuclear arms has been complicated, especially with the backdrop of the collapse of the Soviet Union and the rise of the new states that took its place. Future historians will debate whether the increased openness regarding the implementation of both START and INF contributed to a more general easing of relations between the United States and the former Soviet Union.

The implementation commissions established under INF and START have played a continuing role in ensuring that the treaties are implemented effectively. The START Treaty, in particular, contains hundreds of pages of painstakingly detailed provisions for implementing everything from what kind of equipment inspectors can use during inspections, to how missile telemetry broadcast during flight tests must be formatted for exchange with the other side.

Treaty inspections — once virtually the only contact that the U.S. and Soviet/Russian military had with each other — are now part of a host of other activities, from reciprocal military exchange visits and joint training exercises to a joint U.S.-Russian center being established near Moscow to share early warning data on missile launches. Ironically, the millions of dollars in aid that the United States has provided to states of the former Soviet Union in order to help dismantle their aging strategic arsenals often means that at some Russian facilities, American contractors are busy disassembling the same items that U.S. inspectors are there to count.

To regard ongoing treaty inspections and other monitoring activities as a relic of the past would be a mistake, however. Every aspect of the new openness between our countries makes its own unique contribution, and inspectors are allowed to go places and verify data that would still otherwise be closed to our eyes. They are only part of the new relationship, but still an important part.

UNFINISHED BUSINESS

The verification mechanisms of the START Treaty are still a useful and productive tool for both sides. However, the nuclear weapons inventory left over from the Cold War remains large — larger than needed to ensure for U.S. national security today. START has reduced strategic nuclear weapons by approximately 40 percent from the highest levels achieved during the Cold War, but the remaining forces are just under 6,000 warheads deployed on each side. Neither the United States nor Russia requires such a large inventory of weapons. However, a combination of congressional restrictions,

the need to secure predictability in an uncertain future, and the difficulty in keeping up with the dynamic political world, left each side with larger inventories of nuclear weapons than they needed or desired.

As President George W. Bush assumed office, his administration faced a paradox on the strategic weapons front. Although the numbers of nuclear weapons were clearly higher than the United States and Russia needed for their legitimate security concerns, during the 1990s neither side had felt it could reduce unneeded weapons in the absence of a formal agreement. START inspections were working relatively smoothly, providing valuable insight into each other's forces, but carried with them a small mountain of rules resulting from detailed procedures written for the Cold War relationship.

Clearly something needed to be done. Negotiating a whole new treaty equal in scope and detail to START was not the answer. Not only had the antagonism and mutual suspicion of the Cold War receded, but also the START regime itself was still in place, and did not need to be duplicated. Moreover, any addition or expansion to that regime would have been lengthy and complicated to negotiate. Cold War fears may have vanished, but writing the rules for inspecting the facilities where each side manufactured, stored, or disassembled nuclear weapons would have required additional painstaking negotiations and ever more formal and complex rules. Visiting an airfield to count bombers is one thing; getting inside a nuclear weapon factory is another.

In a major foreign policy address at the National Defense University on May 1, 2001, President Bush said the United States "must move beyond the constraints of the 30-year-old Anti-Ballistic Missile Treaty" and replace it with a "new framework." Although the president did not elaborate what the new strategic framework would look like, he reaffirmed his intention to deploy ballistic missile defenses as well as to cut further the U.S. nuclear arsenal. "My goal is to move quickly to reduce nuclear forces," Bush declared.

In keeping with his pledge to reduce the overall level of deployed strategic nuclear warheads to one consistent with the U.S. need to safeguard its interests, President Bush decided to seek a new solution. He announced at a summit meeting with President Putin in Crawford, Texas, in November 2001, that the United States intended to reduce its operationally deployed strategic nuclear warheads to a level of 1,700- to 2,200- over the next decade. Shortly thereafter, President Putin announced a similar goal for Russia, and the two presidents later agreed to work on recording their plans in a legally binding document.

Less than six months later, Presidents Bush and Putin signed the Moscow Treaty on Strategic Offensive Reductions. Under this treaty, the United States and Russia will reduce their strategic nuclear warheads to a level of 1,700-2,200 by December 31, 2012, a reduction of nearly two-thirds below current levels. This new, legally binding treaty codifies the deep reductions announced by Presidents Bush and Putin.

THE NEW WAY

The Moscow Treaty is not just a new treaty, but a new kind of treaty. Reflecting the mutual trust and cooperation in the new U.S.-Russian strategic relationship, the Moscow Treaty affords a great deal of flexibility to each Party to meet unforeseen future contingencies.

It is simple — just five articles and 485 words, barely two pages long, with no annexes or protocols, as opposed to the 47 pages and 19 articles of START, with its hundreds of pages of annexes and protocols. It gives each side the flexibility to carry out reductions, for example, by removing warheads from bomber bases and missiles, or by removing missiles, launchers, and bombers from operational service. In contrast, START mandated precise "counting rules" that force — sometimes unrealistically — over- and under-counting of actual weapons in the name of strict parity and unambiguous accounting.

The flexibility provided by the new treaty allows each side to determine how to make its own reductions.

Secretary of Defense Donald Rumsfeld announced that the United States plans to deactivate all 50 of its 10-warhead Peacekeeper ICBMs and convert four Trident submarines from strategic to conventional service. Additional steps to reduce the number of U.S. operationally deployed strategic nuclear warheads to the 1,700-2,200 level will be decided subsequently. Some of the warheads that are removed from deployment will be used as spares, some will be stored, and some will be destroyed. Russia, too, may choose its own means of reducing its warheads.

This new treaty is only one part of a new strategic framework that will redefine U.S.-Russian relations in the years to come. Like its predecessors, it both defines and benefits from the prevailing attitude of its time. Like its predecessors, it will enhance stability and reduce the threat of nuclear war, and is responsive to the Parties' obligation under the Nuclear Non-Proliferation Treaty ultimately to agree on nuclear disarmament. Unlike its predecessors, it is an arrangement between friends to foster predictability and openness at the beginning of a new era of warmer relations.

BALLISTIC MISSILE DEFENSE

By David Martin
Deputy for Strategic Relations
U.S. Missile Defense Agency

The United States plans to work closely with its allies, as well as allied militaries and industries to develop an integrated, global system "to detect, track, intercept, and destroy threat ballistic missiles of all ranges in all phases of flight," says David Martin, Deputy for Strategic Relations at the U.S. Missile Defense Agency. The fundamental goal of the planned system, he says, "is to defend the forces and territories of the United States, its allies, and friends as soon as practicable."

While the end of the Cold War signaled a reduction in the likelihood of global conflict, the threat from foreign missiles has grown steadily as sophisticated missile technology becomes available on a broader scale. At least 25 countries now possess — or are acquiring — nuclear, biological, and chemical (NBC) weapons. Since 1980, ballistic missiles have been used in six regional conflicts. The proliferation of weapons of mass destruction and the ballistic and cruise missiles that could deliver them pose a direct and immediate threat to the security of U.S. military forces and assets in overseas theaters of operation, our allies and friends, as well as our own country. In response to this changing geopolitical environment, the Department of Defense has restructured its approach to building ballistic missile defense.

ROBUST DEFENSE-IN-DEPTH

In general, ballistic missiles share a common, fundamental element — they follow a ballistic trajectory that includes three phases. These phases are the boost phase, the mid-course phase, and the terminal phase. Traditionally, missile defenses — like the former U.S. Safeguard system, the Russian Moscow ABM (Anti-Ballistic Missile) system, and today's Patriot system — have operated in the terminal phase. The terminal phase of a ballistic missile's flight is normally less than one minute long, depending on the threat range. Therefore, defensive systems must be very close to the missile's target in order to defend against the attack, and only a small area can be defended. Countermeasures are less of a challenge in this phase. Defensive systems designed for the terminal phase are most effective in protecting smaller target areas such as fixed installations, posts, and airfields, or troop concentrations and staging areas.

The mid-course phase — where intercepts take place in space (not inside the earth's atmosphere) — allows the largest opportunity to intercept an incoming missile. At this point the missile has stopped thrusting, so it follows a more predictable path. Since the interceptor has longer to engage, fewer interceptor sites are needed to defend larger areas. Unfortunately, a longer period in space provides an attacker the opportunity to deploy countermeasures against a defensive system. However, the defensive system also has more time to observe and discriminate countermeasures from the warhead.

The boost phase is the portion of a missile's flight in which it is thrusting up through the atmosphere seeking the velocity needed to reach its target. This phase usually lasts between one to five minutes, depending on the range of the missile. Intercepting a missile in its boost phase is the ideal solution for a ballistic missile defense. If the missile is carrying a chemical, biological, or nuclear weapon, any remaining debris will fall short of the target, sometimes even on the country that launched the missile.

But boost-phase defense introduces significant challenges. First, the boost phase is relatively short. This means that sensors will have to detect a launch and relay accurate information about the missile very quickly. Second, an interceptor missile would have to be very close and/or extremely fast to intercept the accelerating missile. An effective boost-phase defense high-energy laser system could reduce or eliminate several of the complications associated with employing boost-phase interceptor missiles.

THE U.S. APPROACH TO BALLISTIC MISSILE DEFENSE (BMD)

The fundamental goal of the planned BMD system is to defend the forces and territories of the United States, its allies, and friends as soon as practicable. The planned architecture will be composed of a single, fully integrated, BMD system that will be capable of engaging all classes of ballistic missile threats, from short-range tactical missiles to missiles with intercontinental ranges. The program will increase system robustness by incrementally deploying layered defenses that use complementary interceptors, sensors, and battle management and command-and-control (BMC2) systems to provide multiple engagement opportunities against threatening targets in boost, mid-course, and terminal phases of flight. This approach is structured to adjust more easily to both uncertainties in the evolution of the threat as well as changing engineering, schedule, and cost uncertainties inherent in building missile defense systems. The Department of Defense will pursue promising technologies and approaches to BMD to hasten the fielding date of an effective, reliable, and affordable system. These promising technologies and approaches include kinetic (hit-to-kill) and directed-energy systems with various land-, sea-, and air-based options. But we also want to make systems available to our military commanders that are mature and adequately tested in operationally realistic situations.

The Terminal Defense Segment (TDS) provides defensive capabilities that engage and destroy threatening ballistic missiles in the terminal phase of their trajectory. The primary elements in the TDS are the Theater High Altitude Area Defense (THAAD) system, PAC-3 (Patriot Advanced Capability-3), the Medium Extended Air Defense System (MEADS), and a sea-based terminal defense capability. PAC-3, the Missile Defense Agency's (MDA) most mature developmental product line, takes advantage of a significant Patriot legacy of force structure, against short- and medium-range ballistic missile threats as well as cruise missiles, anti-radiation missiles, and advanced aircraft. PAC-3, a "hit-to-kill" interceptor, has achieved a better than 90 percent success rate in its developmental test phase. Operational tests are still being analyzed and a production decision is expected in the near future. We anticipate that allies who have Patriot in their forces will also field the new round.

The Sea-Based Terminal program, which is intended to build on a strong AEGIS (advanced shipboard anti-air warfare area defense) Weapon System and Standard Missile infrastructure, remains a critical requirement despite cancellation of the Navy Area Program (Standard Missile-2 Block IV A). The program will provide missile defense for forward-deployed wartime expeditionary assets. Experiments are planned that are aimed at expanding the mission envelope of today's Standard Missile-2, Block IV, and the new Standard Missile-3 to determine the suitability of this combination of interceptors in providing this capability.

Finally, the tri-national (United States-Germany-Italy) MEADS will offer a significant improvement in tactical mobility and strategic deployability over comparable missile systems, and robust, 360-degree protection for maneuvering forces and other critical forward-deployed assets against short- and medium-range ballistic missiles, cruise missiles and other air-breathing threats throughout all phases of tactical operations. MEADS initially will replace aging air defense systems (like Improved Hawk) but, in the longer term, will begin to replace Patriot as the latter reaches the end of its operational life.

The mission of the THAAD System is to defend against short-to-intermediate range ballistic missiles at long ranges and high altitudes. THAAD's capability will protect U.S. and allied armed forces, broadly dispersed assets, and population centers

against missile attacks. The Arrow Weapon System (AWS) (a U.S.-supported Israeli development program) provides Israel today with a capability to defend against short- and medium-range ballistic missiles.

The Mid-course Defense Segment (MDS) develops increasingly robust capabilities for countering ballistic missiles, particularly longer-range threats, in the mid-course stage of flight. The MDS could provide some early defense capability, if needed, based on past developmental successes. The primary elements of the MDS are the Ground-Based Midcourse Defense (GMD) and the Sea-Based Midcourse Defense (SMD), which are the successors to the National Missile Defense and Navy Theater Wide programs. The SMD, when accompanied by GMD, could provide a complete and flexible mid-course layer. Sea-based elements also offer the opportunity to engage missiles in early ascent, thereby reducing the overall BMD System's susceptibility to countermeasures. The GMD has now achieved four (of six) successful hit-to-kill intercepts against strategic-range targets at the Pacific-based Ronald Reagan Missile Site. We have also demonstrated two successful hit-to-kill intercepts from AEGIS cruisers.

The Boost Defense Segment (BDS) provides defense capabilities that engage and destroy threat ballistic missiles in the boost phase of their trajectory. The boost phase of the ballistic missile trajectory is defined as the part of a missile's flight lasting from the moment of launch through the completion of propulsion systems burn, when the missile enters the ballistic flight period of the mid-course phase. Typically the entire boost phase occurs at altitudes of less than 200 kilometers and within the first 60-to-300 seconds of flight. To engage ballistic missiles in this phase, quick reaction times, high confidence decision-making, and very high acceleration/high burnout velocity capabilities are needed. The potential alternatives in the Boost Phase Defense Segment (BDS) are directed-energy systems, notably the Airborne Laser (ABL) and a sea-based interceptor. The ABL is the more advanced of these options; a demonstration aircraft is being reconfigured today, and the various laser and optical subsystems are already developed. A first lethal demonstration flight test of the ABL with a target booster is currently planned for late 2004.

CONCLUSION

The integrated global BMD System will incorporate incremental capabilities to detect, track, intercept, and destroy threat ballistic missiles of all ranges in all phases of flight using kinetic- and directed-energy kill capabilities and various deployment approaches. MDA plans to develop and field these capabilities working closely with allies, their industries, and their militaries. Accordingly, MDA has implemented a flexible international acquisition strategy to provide a timely, capable system that paces the evolving threat. Thus the approach protects against uncertainty and ensures that the United States will have some ability to defend itself, its deployed forces, allies, and friends from a ballistic missile attack should the need arise.

THE TRANSFORMATION OF U.S.-RUSSIAN RELATIONS

By Matthew A. Cordova
Deputy Director, Office of Political-Military and Regional Affairs,
Bureau of European and Eurasian Affairs, U.S. Department of State

The path to a dramatically new relationship between the United States and Russia was not laid by chance — it evolved by design, beginning early in 2001, says Matthew A. Cordova, Deputy Director of the Office of Political-Military and Regional Affairs in the State Department's Bureau of European and Eurasian Affairs. Engagement by President Bush and the U.S. national security team with its Russian counterpart laid the groundwork for Russian President Putin's historic decision to stand with the West in the aftermath of September 2001, he says, and since then, positive trends in the new U.S.-Russia relationship have accelerated.

If 1989 is the bookend to the end of the Cold War, then perhaps 2001 can be regarded as the bookend to the post-Cold War transition period. Just over a decade after the fall of the Berlin Wall, U.S.-Russian relations continued to be viewed primarily through the prism of the strategic nuclear balance. This reinforced the adversarial bilateral relationship of the past based on suspicion and distrust and inhibited cooperation in a number of areas of mutual interest. Very early on, Presidents George Bush and Vladimir Putin agreed that the U.S.-Russian relationship should be broad-based and focused increasingly on issues such as trade and investment. The tragedy of September 11 highlighted counterterrorism efforts as a natural area for bilateral cooperation. The significant progress we have made was recorded in the Joint Declaration signed during the May 2002 summit in Moscow. Reaching that point involved early and sustained bilateral engagement at all levels.

Few if any could have anticipated the profound changes that would occur in 2001, but the groundwork for a deeper and more tangible cooperative relationship with Russia was by design, not by chance. Both presidents and their foreign and defense policy advisers began to engage one another in 2001 to develop an agenda and roadmap to deepen cooperation and move beyond the constraints of our past relationship. Bush led this effort, which was directed and shaped by meetings with Putin in Ljubljana, Shanghai, Washington/Crawford, Moscow and at the G8 (Group of Eight)summit in Kananaskis, Canada. The leaders continue to communicate regularly by telephone and correspondence. Secretary of State Colin Powell and Secretary of Defense Donald Rumsfeld meet, converse, and correspond regularly with their counterparts to advance the United States' new strategic framework for relations with Russia.

On May 1, 2001, Bush outlined his vision of a strategic framework for the "post-Cold War" era at the National Defense University. The president emphasized that, while the United States and Russia would continue to have areas of disagreement, we are not and must not be strategic adversaries. In that regard, Bush stated that he sought to transform the nature of the bilateral relationship from one based on a nuclear balance of terror to one based on common responsibilities and interests. During their June 2001 meeting in Slovenia, Bush and Putin initiated a conversation about building a strategic framework that is "post-Cold War" in substance, not just rhetoric, and one that would endure beyond their presidencies.

The United States and Russia have been working very closely on a wide array of political issues and common challenges. Aside from our countries'

cooperation to transform Afghanistan into a stable and viable nation at peace with itself and its neighbors, we have been engaged in other regions. We are also working together to resolve regional conflicts in Abkhazia, Nagorno-Karabakh, Transnistria, the Middle East, and most recently in South Asia. Russia has been a strong supporter of the Middle East peace process and of U.S. efforts to achieve a negotiated settlement to the conflict. The United States and Russia are also cooperating effectively on transnational issues other than but related to terrorism, such as narcotics trafficking and organized crime. Drug trafficking is a threat to both nations and provides significant financial support for international terrorist organizations.

In the economic realm, we continue to encourage and support Russia's complete transition to a market economy. This is a priority for both countries. We seek to expand our bilateral economic ties and to integrate Russia further into the global economy as a member with both full rights and responsibilities. We thus fully support Russian accession to the World Trade Organization (WTO), which will reinforce Moscow's broader economic reform efforts and help to prepare Russia for a larger role in the global economy. The presidents have agreed to explore new possibilities for energy cooperation, where U.S. and Russian interests converge on several major questions.

Success in our bilateral economic and trade relations also demands that we move ahead. The Department of Commerce's recent decision to designate Russia as a market economy under the provisions of U.S. trade laws is an important step forward in that regard. We are working with Congress to end the Jackson-Vanik amendment's application to Russia, thus enabling them to gain permanent Normal Trade Relations with the United States.

The terrorist attacks of 2001 accelerated U.S.-Russian engagement and cooperation in a number of areas already under way and created opportunities for new areas of dialogue and potential cooperation. One of the most remarkable developments during the months since the attacks has been our extraordinary cooperation with Russia in a region that was formerly part of the Soviet Union — Central Asia.

On October 19, 2001, we conducted the first-ever U.S.-Russian consultations on Central Asia. We were both pleasantly surprised and gratified by the convergence of interests in this region. We both desire long-term stability and prosperity in Central Asia, where we both have important interests. And we have pledged transparency and collaboration in our efforts and activities. The United States will support economic and political development and respect for human rights in the region while we broaden our humanitarian cooperation and cooperation on counterterrorism and narcotics. There need be no tension between our support for the Central Asian states and our desire for broader and deeper cooperation with Russia.

In fact, Bush and Putin are leading our countries to a new level of cooperation in Central Asia. Putin has shown noteworthy leadership in the way he has actively coordinated with Central Asian leaders to encourage their cooperation with the United States in the battle against terrorism. This supports what we have long said: that Central Asia is not a zero-sum game. We have offered support to efforts by Russia, Kazakhstan, and Azerbaijan to foster a new Caspian Sea maritime boundary arrangement, as long as these efforts do not hinder the future transport of energy resources. Our shared interests with Russia — indeed, with the other regional powers of China and Iran — are greater in many cases than our areas of competition.

The degree of cooperation with Russia on our efforts in Central Asia — a region in which Russia has significant historic, cultural, political, and economic interests — is unprecedented. Russia has shared intelligence, provided search-and-rescue (SAR) assistance, supported international humanitarian relief efforts, and did not obstruct the Central Asian states' decision to accept U.S. military presence on their national territories. Russia has provided two military liaison officers to CENTCOM (the U.S. Central Command) in Florida. The U.S.-Russia Working Group on Afghanistan has also been an invaluable mechanism. Its mandate has been expanded to include other geographic areas and new and related threats. To this end, the two presidents agreed at their recent summit in Moscow to broaden the group's mandate and rename it the Working

Group on Counterterrorism. This kind of cooperation will help to combat a number of 21st century global challenges, including international terrorism and the proliferation of weapons of mass destruction (WMD) and their means of delivery.

Our allies have been among the strongest supporters of expanding our new relationship with Russia. In the global war on terror, Russia and NATO are working as partners to counter regional instability and the multitude of evolving threats. During the NATO-Russia Rome Summit, we inaugurated the NATO-Russia Council, which will permit NATO member states and Russia to work as equal partners in areas of common interest. The NATO-Russia Council (NRC) gives us the opportunity to move forward together on common challenges, and to begin building ties that can be expanded far into the future.

We will start with areas where our ability to help one another as equal partners is unmistakable: areas such as counterterrorism, preventing the spread of WMD, emergency planning, and maritime search and rescue. NATO and Russia will also seek to improve coordination in places where they are already working together, such as the Balkans. NATO, Russia, and our other partners can take great pride in the greater peace and stability we have brought to that region. NATO and Russia are also looking ahead to other areas where we can expand our cooperation, such as missile defense, civil-emergency response and airspace control — these, too, can strengthen the security of the United States, Russia, and all of Europe. Our NATO allies and Russia have already begun work on a number of NRC agenda items approved during the Rome Summit. We believe that initial successes in the NRC will lay a basis for expanding cooperation between the Alliance and Russia.

A discussion of the new and evolving relationship would not be complete without addressing the historic changes regarding strategic offensive force reductions, missile defense, the 1972 Anti-Ballistic Missile (ABM) Treaty, and the ongoing strategic dialogue. That strategic nuclear forces no longer dominate the bilateral relationship is evidence of the broadening ties and full agenda ahead for both countries. During the Moscow Summit in May, the United States and Russia established a Consultative Group for Strategic Security, to be chaired by foreign and defense ministers. This group will be the principal mechanism in which we discuss strategic, nonproliferation, and security issues and consult on a broad range of international security issues.

The manner in which we agreed to disagree on the ABM Treaty reflects the intense dialogue we had with Russia over a period of months, a dialogue in which we told the Russians where we were headed. We were candid about the seriousness and priority we accorded effective missile defenses to enhance our national security. This is why we engaged Russia to determine if there was a way that we could move jointly beyond the ABM Treaty, in light of the threat to both of our countries from ballistic missiles and WMD.

In the end, we agreed to disagree. Following intensive consultations, including between Secretary Powell and Foreign Minister Igor Ivanov and between the two presidents, we notified Russia on December 13, 2001, of the U.S. intention to withdraw from the ABM Treaty on June 13, 2002. The world did not end; an arms race did not break out. No crisis occurred in U.S.-Russian relations.

The limited missile defense that we intend to deploy will not pose a threat to Russian strategic forces. The Joint Declaration on the New Strategic Relationship between the United States and Russia, signed in Moscow on May 24, specified steps to foster confidence, transparency, and cooperation in missile defense. Such measures will include information exchange on missile defense programs and tests, reciprocal site visits to observe tests, and implementing a joint center for exchanging early warning data. Our governments will also study some possible areas for missile defense cooperation, including joint exercises and joint development.

The recently concluded Treaty of Moscow is a landmark achievement, significantly reducing strategic forces beyond the levels of the first Strategic Arms Reduction Treaty. Many critics insisted that strategic reductions would be impossible in the

absence of the ABM Treaty. In fact, in responding to the U.S. withdrawal notice on December 13, 2001, President Putin announced Russia's intention to reduce its strategic forces to no more than 2,200 warheads — responding in kind to President Bush's Washington-Crawford Summit announcement of U.S. reductions in operationally deployed strategic warheads to a level between 1,700 and 2,200 over the next decade. The Russian attitude since December 13 has been to look to the future, not dwell on the past. Both governments have submitted the treaty for ratification to their respective legislative bodies and are working to secure ratification this fall.

We are also engaging Russia to seek broad international support for a strategy of "proactive nonproliferation." International terrorism and proliferation concerns are closely linked. The United States and Russia plan to work closely together to ensure the security of WMD and missile technologies, information, expertise, and material. Both countries remain determined to support all countries in improving and enforcing export controls, interdicting illegal transfers, prosecuting violators, and strengthening border security and defense to support territorial integrity and prevent proliferation.

It is no surprise that the states that sponsor terrorism are also the most active proliferators. It is critically important that we find a creative solution to end the problem of Russian entities' sensitive assistance to Iran's WMD and missile programs. We also must work with our Russian partners, and others, to combat the gray arms problem (illicit arms transfers, set up by arms brokers with falsified end-users, intended for state sponsors of terror and terrorists) and the proliferation of advanced conventional weapons to states such as Iran and Iraq that threaten U.S. forces and those of our friends and allies. This has taken on greater urgency since coalition combat operations began at the end of 2001. President Bush has made clear repeatedly that the United States is committed to strong, effective threat reduction and nonproliferation cooperation with Russia and the Eurasian states. Work will continue with our G8 partners to find creative ways to assist Russia in funding lasting and effective critical threat reduction activities.

Looking to the future, the way we have handled the global war on terrorism, NATO-Russia relations, the ABM Treaty, strategic nuclear reductions, and threat reduction reflects the way we will be working together with Russia. Building on the progress we have already made will require determination, energy, goodwill, and creativity on both sides as we seek to resolve some of the tough issues on our agenda. We will continue to press on issues where we disagree, including human rights and a political settlement in Chechnya, media freedom questions, the Russia-Iran proliferation problem, and our concerns about chemical and biological weapons issues. Indeed the presidents have set a tone in which we can talk candidly about difficult problems as well as areas where our interests converge.

The administration harbors no illusions about the amount of work that remains to be done to implement fully the Joint Declaration and move this relationship forward; it will take years. Russia's transformation to democracy and a market-based economy will continue to face challenges and our interests will not always converge. Congress remains an important partner, and there are a number of issues where we need its support, including ending Jackson-Vanik's application to Russia and waiving Cooperative Threat Reduction certification requirements so those important programs can continue. We will be working closely with the Senate regarding ratification of the Treaty of Moscow.

In view of the 21st century challenges ahead, the United States has embarked on the road to a vastly changed and improved relationship with Russia. The new strategic framework we are developing with Russia provides a strong base to continue the transformation of our critical bilateral relations, manage our differences, and create opportunities for both countries, in tandem with our allies and friends..

THE U.S.-RUSSIAN FRONT AGAINST TERRORISM AND WEAPONS PROLIFERATION

By U.S. Senator Richard Lugar

The Nunn-Lugar Cooperative Threat Reduction program has demonstrated that "extraordinary international relationships are possible to improve controls over weapons of mass destruction," says U.S. Senator Richard Lugar (Republican-Indiana). He says programs similar to this U.S.-Russian effort are needed to address proliferation threats around the world.

Over the last decade the United States and the Russian Federation have accomplished something never before done in history. Former enemies, who squared off against each other for almost 50 years, laid aside a host of major disagreements and forged a new cooperative relationship aimed at controlling and dismantling weapons of mass destruction.

This logical course was never a foregone conclusion. Many in both countries failed to realize the magnitude of the threat and were unable to grasp the opportunities presented by the end of hostilities. While the world rejoiced with the end of the Cold War and leaders in Washington and Moscow grappled with the new geostrategic landscape, the weapons of the Cold War continued to threaten peace and stability.

One of the tremendous ironies of the post-Cold War world is that our countries may face a greater threat today than we did at the height of the Cold War. Whereas previous strategic calculations assumed more or less rational actors, experiences with Saddam Hussein, Osama bin Laden, and others make an assumption of rationality less plausible today.

The possibility of armed conflict between the United States and Russia continues to dwindle, but that does not mean our countries have little to fear. The attacks of September 11 in New York and Washington could have taken place in Moscow or St. Petersburg and could have employed weapons of mass destruction instead of commercial airliners.

We have agreed, through the Nunn-Lugar Cooperative Threat Reduction program and the treaty signed by Presidents George Bush and Vladimir Putin in May, to liquidate the Cold War's nuclear legacy. We must preserve the momentum to finish the weapons dismantlement started a decade ago, as well as focus diplomatic energies on today's dangers: Osama bin Laden or other terrorists in possession of nuclear, biological, or chemical weapons.

The Nunn-Lugar model can help build the foundation for an effective coalition that combats terrorism and secures weapons and materials of mass destruction around the world. Russia and the United States are the key players in establishing such a coalition. This cooperation can be grounded successfully in mutual self-interest.

EXPANDING COOPERATION IN RUSSIA

First, there are a number of areas in which we should expand our cooperative dismantlement and nonproliferation efforts with Russia.

Non-Missile Submarine Dismantlement: In visiting the shipyards of Severodvinsk and Murmansk on several occasions, I have been startled by the enormity of the task that lies before us in the area of submarine dismantlement. Nunn-Lugar is

limited to dismantling strategic missile submarines. Current U.S. law mistakenly does not permit the Pentagon to dismantle general-purpose submarines.

There are important nonproliferation and security benefits to the timely dismantlement of conventional submarines. Many carry cruise missiles which could prove valuable to rogue nation missile programs. Others are powered by nuclear fuel enriched to very high levels which could pose serious proliferation risks if unsecured.

Debt-for-Nonproliferation Swaps: When President Putin visited the United States he spoke of the increasing debt burden facing Russia. An improving Russian economy and rising oil prices may have alleviated the debt burden in the short term, but the potential for the re-emergence of debt problems is real.

Senator Joseph Biden and I have proposed a law to allow "debt for nonproliferation swaps" between Russia and the United States. Such swaps would relieve some Russian financial pressures and address American security concerns.

Former Scientist Employment and WMD (Weapons of Mass Destruction) Facility Opportunities: The United States implements a number of programs to employ former weapons scientists in peaceful scientific endeavors. Tens of thousands of Russian weapons scientists have been employed by these programs. Considerable success has been realized, but with a renewed commitment of resources and leadership, the United States can make dramatic progress in ensuring that scientists forego the temptation of being lured back into weapons work. We must give these scientists an opportunity to succeed. If desperation and bankruptcy become the norm, many will believe they have little choice but to leave Russia and renew their weapons careers.

American, European, and G8 corporations have much to gain by cooperating with government efforts. I have urged American companies to explore the possibility of investing in Russian laboratories. These facilities would be an excellent investment in hardware and production technology, as well as access to the finest minds in Russia. Considerable thought and planning should be given to overcoming Western corporate hesitancy, sometimes caused by an inhospitable Russian investment environment.

Tactical Nuclear Weapons: We must also begin to consider moving beyond strategic systems into the tactical weapons arena. In many ways the threat posed by the proliferation of tactical nuclear systems is more serious than that posed by strategic weapons. Tactical warheads are more portable, usually deployed closer to potential flashpoints, and many are not secured at the same level as strategic systems.

We must establish transparency in this area so that both sides can have confidence concerning the quantity, status, storage, and security of the other nation's weapons. It would be a great shame if our impressive record of success in the strategic arena was undercut by the vulnerability of tactical weapons.

Fissile Material Security: After eight years of close cooperation and considerable effort, only 40 percent of the facilities housing nuclear materials in Russia have received security improvements through U.S. assistance. Unfortunately, only half of these facilities have received complete security systems.

There are a number of steps that can be taken to speed this important effort. First, Russia should continue to consolidate materials in fewer locations. Such consolidation will save money and time. But, if facilities housing nuclear weapons materials are vulnerable, we cannot wait until a convenient budgetary situation arrives to complete our work. We must commit ourselves to installing necessary security as quickly as possible.

EXTENDING BEYOND RUSSIA

On September 11th, in a dramatic telephone call to President Bush, President Putin was the first foreign leader to join a global coalition against terrorism. The phone call and the cooperation that has followed the Afghan campaign constitute the best reflection yet of a new phase of relations. The two leaders must now build a coalition focused against terrorists using weapons of mass destruction. The goal of this

coalition would be to creatively and aggressively safeguard nuclear, chemical, or biological weapons and their component materials and technology so that they do not fall into the wrong hands.

The problem we face is not just terrorism. It is the nexus between terrorists and weapons of mass destruction. There is little doubt in my mind that Osama bin Laden and his operatives would have used weapons of mass destruction if they had possessed them. The horrible death and destruction of the September 11th tragedy was minimal compared to what could have been inflicted by a weapon of mass destruction. A simple and clear definition of victory in the war on terror is bringing into account all nations that house terrorists, as well as those countries that possess materials and weapons of mass destruction.

The United States and Russia, along with other members of the coalition, should seek to root out each cell in a comprehensive manner for years to come and maintain a public record of success that the world can observe and measure. Our common goal must be to shrink the list, nation by nation, of those that house terrorist cells, voluntarily or involuntarily.

We must further demand that all states possessing materials and/or weapons of mass destruction secure them from proliferation. If that country's funds are insufficient, then they should be supplemented with international funds.

Our campaign should not end until all nations on both lists comply with these standards. Today, we lack even minimal international confidence about many weapons programs around the world. Unfortunately, outside the former Soviet Union, Nunn-Lugar-style cooperative threat reduction programs aimed at these threats do not exist. They must now be created on a global scale. Nunn-Lugar has demonstrated that extraordinary international relationships are possible to improve controls over weapons of mass destruction. Programs similar to Nunn-Lugar should be established in each country that wishes to work with the United States, Russia, and our allies.

I have offered legislation to permit the Secretary of Defense to use Nunn-Lugar expertise and resources to address proliferation threats around the world. The precise replication of the Nunn-Lugar program will not be possible everywhere, but the experience of Nunn-Lugar in Russia has demonstrated that the threat of weapons of mass destruction can lead to extraordinary outcomes based on mutual interest.

This type of cooperation could be just the beginning. Nations cooperating on securing instruments of mass destruction might also pledge to work cooperatively on measures to retrieve weapons or materials that are in danger of falling into the wrong hands, and to come to the aid of any victim of nuclear, chemical, or biological terrorism.

By proposing that the next phase of the war on terrorism focus on weapons of mass destruction, and by forming a coalition to combat it, Presidents Bush and Putin would be addressing arguably the most important problem in international security today. Such a coalition could provide both presidents with a focus for the qualitatively new post-Cold War relationship they have propounded, but to which they have yet to give major content. It would be a fitting replacement for the old-style bilateral arms control regimes whose era is drawing to an end.

The United States and Russia can forge the most far-reaching and effective alliance for peace the world has ever witnessed. The last 10 years have shown that nothing is impossible. The next 10 years must show how Russia and the United States subdued terrorism and led our countries and all who joined with us to security and an enriched quality of life.

TRANSFORMING THE U.S.-RUSSIAN RELATIONSHIP: PUTTING POWER POLITICS IN ITS PLACE

By Baker Spring
F.M. Kirby Research Fellow in National Security Policy
The Heritage Foundation

The newly transformed U.S.-Russian relationship will not only allow both sides to reduce sharply the number of deployed strategic offensive nuclear weapons; it also will allow Russians "opportunities that they could not have dreamed of as citizens of the Soviet Union," says Baker Spring, the F.M. Kirby Research Fellow in National Security Policy at the Heritage Foundation.

When U.S. President George Bush and Russian President Vladimir Putin signed a joint declaration[1] on the establishment of a new strategic framework for U.S.-Russian relations in Moscow on May 24, 2002, the two nations were put on a direct path to a transformed relationship. This transformed relationship promises to serve the interests of both countries for years to come.

The reason for this is simple: The joint declaration serves to restore the role of power politics in U.S.-Russian relations to its proper place. During the Cold War, power politics came to dominate, if not define in its entirety, the relationship between the United States and the Soviet Union. This relationship imposed heavy burdens on the citizens of both nations, but particularly on the citizens of the Soviet Union. The transformed relationship between the United States and Russia is allowing both sides to shed these burdens and pursue new opportunities.

Some commentators have argued that the transformed relationship is merely a reflection of the relative strength of the United States over Russia, and is something the United States dictated to the Russian government at the expense of the Russian people.[2] While the United States is clearly the stronger of the two nations at this time, and power politics will always play a significant role in their relationship, this analysis fails to account for the fact that power politics is no longer dominant. In short, the critics are mistaken because they are judging the new relationship by an outdated, Cold War measure.

Where these critics have been most led astray by their analysis is in the implication that the transformed U.S.-Russian relationship will prove harmful to the Russian citizenry. Nothing could be further from the truth. Having shed the burdens imposed on them by a Soviet government that focused single-mindedly on enhancing the power of the state, the Russian people now have opportunities that they could not have dreamed of as citizens of the Soviet Union. As a result, it is appropriate to take stock of where the Soviet Union was during the Cold War and reflect on both U.S. and Russian contributions to a transformed relationship, and how this relationship will benefit the Russian people in particular.

THE SOVIET UNION AND THE DOMINANCE OF POWER POLITICS

The Soviet Union was founded as a nation that glorified the accumulation of power, particularly state power. The Communist ideology that legitimized the regime as a result drove the state to view power not as a means for achieving higher values such as liberty and prosperity, but as an end in itself. It also drove the state to ask for ever-higher sacrifices from the Soviet people in service to the goal of expanding its own power and prestige.

At the international level, the same purpose drove the Soviet regime to gauge its prestige by its ability to intimidate and coerce other states. The Soviet people paid a horrific price for the ambitions of the Soviet state. Individual liberty was denied. The economy became overly militarized, and the standard of living fell. Spiritual outlets were closed off.

As the Soviet Union eventually discovered, the pursuit of power at the expense of other values is unsustainable and doomed to failure. Its superpower capability ultimately proved hollow. The reason for this is that the regime's demands on its population ultimately led to societal exhaustion. The state took from the people and offered little in return, other than the proclamation of its superpower status.

The United States, by contrast, sought power and asked for sacrifices from its people, but usually in the defense of individual liberty, while also offering the prospect of greater prosperity. Government and power served the people, as opposed to the practice in the Soviet Union, where people served the government in order to feed the state's insatiable appetite for greater power.

The difference between the two countries, as superpower rivals, was telling. The accumulation of power by the United States, where power served to improve the lot of the American people, proved more sustainable.

The Soviet Union's confrontation with the United States during the Cold War only increased the pressure on Soviet society and accelerated the rate of exhaustion. Ultimately, the question facing the Soviet people was whether the competition with the United States for power was worth the sacrifice. By the end of 1991, the people of the Soviet Union answered the question in the negative, and the Cold War was over. Since 1991, the people of Russia have been faced with the question of whether to embark on an attempt to achieve power equal to that of the Soviet Union against the United States — yet again at their own expense.

On May 24, 2002, Presidents Bush and Putin signed the declaration for a new strategic framework, in part to answer this question. Implied in that declaration is that the governments of Russia and the United States are putting their people first, and the accumulation of power for its own sake last.

RUSSIAN AND U.S. CONTRIBUTIONS TO THE NEW STRATEGIC FRAMEWORK

There are a number of specific ways Russia and the United States, both separately and together, have contributed to the creation of the new strategic framework. At the outset, however, it is critical to recognize the two overarching contributions of these two governments.

The Russian government's general contribution to the strategic framework is its recognition that it need not calculate its self-worth on the basis of whether it has more power than the United States. Rather, it now appears willing to judge its success primarily by its ability to improve the quality of the lives of its people. As the joint declaration states, "We [the United States and Russia] recognize that the security, prosperity, and future hopes of our peoples rest on a benign security environment, the advancement of political and economic freedoms, and international cooperation." Unlike the Soviet Union, the Russian government seems to have its priorities right. Perhaps paradoxically, the new priorities actually improve the likelihood that Russia will be able to renew and strengthen itself over time.

The overarching U.S. contribution to the strategic framework is similar to those that it has made in other contexts: an attitude of magnanimity toward previous adversaries. The United States demonstrated that it could resist the temptation to use its position of strength to subjugate or exploit other people when it sought the reconstitution of Germany and Japan as independent states after World War II. Its behavior contrasts sharply with the Soviet Union's treatment of Eastern Europeans during the same era. The United States, contrary to what some critics think, is not using the new strategic framework to exploit the Russian people. The United States is not fearful of a powerful Russia; rather, it seeks to avoid a threatening Russia.

THE NEW STRATEGIC FRAMEWORK AND IMPROVING THE PROSPECTS FOR THE RUSSIAN PEOPLE

It is appropriate to spend time reviewing the details of how the new strategic framework will improve the prospects for the Russian people. The positive elements of the new strategic framework for the Russian people include:

- **Improved prospects for peace on Russia's western front.** Regarding regional affairs, the new strategic framework brings Russia into closer contact with the NATO-led security structure in Europe. This post-Cold War structure helps to lessen the possibility of insecurity and military conflict in Europe. As a result, the people of Russia do not face a serious threat of military conflict arising from countries to their west. Regional cooperation with the United States extends to other areas of the world as well.

- **A more effective fight against organized crime.** Organized crime has been a serious problem for Russia, and the new strategic framework has fostered U.S.-Russian cooperation in this critical area. Last January, the U.S.-Russian Treaty on Mutual Assistance in Criminal Matters entered into force. The treaty is designed to help lessen the vulnerability of the Russian people to international organized criminal enterprises.

- **Improved economic prospects.** Expansion of economic opportunities is at the heart of the effort to improve the lives of Russia's people. The new strategic framework envisions integrating Russia into the world economy by endorsing Russia's accession to the World Trade Organization. President Bush has made a firm commitment to convincing Congress to graduate Russia from the strictures of the Jackson-Vanik Amendment, a Cold War measure designed to elicit free emigration from the Soviet Union. Finally, the United States is prepared to work with Russia in the area of energy exploration and development.

- **Assistance in combating international terrorism.** The United States took a serious blow from international terrorists on September 11, 2001. It is not alone, however, in facing the terrorist threat. Russia and the United States have been cooperating closely to confront the terrorist threat since the September 11 attack. This cooperation should lessen the possibility that the Russian people in the future will suffer the kind of attack faced by the American people.

- **Greater strategic stability and a reduced defense burden.** No longer pursuing a relationship with the United States based on power politics has allowed Russia to sign a treaty with the United States to reduce operationally deployed strategic nuclear warheads to between 1,700 and 2,200 on each side. This will help to reduce the defense burden imposed on the Russian economy. Transparency measures should also limit to the vanishing point the likelihood of a strategic confrontation. Cooperation in missile defense is also part of the strategic framework, which should allow both states to address the missile proliferation threat.

CONCLUSION

The Russian people should not be, to quote Masha Lipman, "passive and reluctant" supporters of a cooperative policy toward the United States.[3] They should be rejoicing. They will be the recipients of the tangible benefits of a relationship between the United States and Russia that is no longer guided by desperate attempts to achieve a position of dominance. With it, the Russian people will no longer be asked by their government to make sacrifices in the name of a political contest with the United States. They should therefore recognize the opportunity that is being presented to them by the new U.S.-Russian relationship.

1. The White House, "Text of Joint Declaration," May 24, 2002, as made available at http://www.whitehouse.gov./news/releases/2002/05/print/20020524-2.html.
2. Masha Lipman, "In Russia, A Grudging Consensus," The Washington Post, May 27, 2002, p. A23.
3. Ibid.

The opinions expressed in this article are those of the author and do not necessarily reflect the views or policies of the U.S. Government.

THE NEW U.S.-RUSSIAN STRATEGIC FRAMEWORK: A PRELIMINARY ASSESSMENT

By Michael O'Hanlon
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The new U.S.-Russian strategic framework "has been surprisingly successful to date," but "much still has to be done" to address the nuclear safety and nuclear nonproliferation agenda, says Michael O'Hanlon, Senior Fellow in Foreign Policy Studies at the Brookings Institution.

In 2002, the Bush and Putin administrations concluded an important strategic nuclear arms reduction accord even as the United States prepared to withdraw formally from the 1972 Anti-Ballistic Missile (ABM) Treaty. Taking these two important decisions, along with other nuclear-related policies of both countries, as the definition of the new U.S.-Russian strategic framework, how well can we say it is working so far, and how promising is its future?

This is a complex question with a number of aspects. On the whole, my assessment is that so far as it goes, the new framework has been surprisingly successful to date. The combined effects of ending the ABM Treaty and agreeing to cut deployed long-range nuclear forces in each country to about 2,000 warheads by 2012 should be stabilizing on balance, while also respecting the spirit of the 1968 Nuclear Non-Proliferation Treaty's calls for gradual nuclear disarmament. For many of us who worried greatly about the effects of the ABM Treaty withdrawal decision in particular, these developments have been greatly reassuring. President Vladimir Putin may deserve the lion's share of the credit for this situation, given his willingness to negotiate further offensive arms reductions even as he accepted the demise of the ABM Treaty due to a U.S. decision. But President George W. Bush also deserves credit for a firm approach to negotiations and for his successful efforts to build trust with the Russian president. For Russia in particular, the new strategic framework should help it save money within its defense budget by reducing offensive forces. For Washington, it will facilitate building missile defenses, which if deployed at modest levels can provide useful protection for the United States and its allies — and perhaps Russia as well.

However, in a broader sense, the new strategic framework must be judged only an interim or partial success. For one thing, Russians besides Mr. Putin are less happy with it; should their political influence increase within Russia in the coming years, a counter-reaction could result. This concern is not itself reason to change the offensive and defensive elements of the new framework, or to judge them a failure, but it is real nonetheless. Vigilance will be needed.

A greater worry concerns the remaining nuclear agenda that the new accord does not address. Superpower nuclear forces remain on high alert, ready for rapid launch. They also continue to contain tens of thousands of nuclear weapons that, if not properly secured, could lead to the unthinkable result of a nuclear device in the hands of al-Qaida terrorists. The new strategic offensive and defensive framework developed by Bush and Putin will not be a direct cause of such an outcome. But to the extent the leaders of the two countries mistakenly consider their nuclear-related work now to be done, there could be enormously dangerous consequences.

TRADITIONAL ISSUES: STRATEGIC OFFENSES AND MISSILE DEFENSES

As noted above, the Bush-Putin approach to traditional arms control issues seems successful, at least in a narrow sense. Substantial reductions in deployed warheads were negotiated. The United States insisted on the right to keep a reserve of warheads, and to exceed the ceiling of 1,700 to 2,200 strategic warheads not only prior to 2012, but after the treaty ceases to bind the two parties as well. In that sense, the accord has relatively few teeth. But importantly, it gives Russia cover to make nuclear reductions that are necessary, given its economic situation. Russia will probably now do so. Moreover, the chances that the United States will actually add more warheads to its nuclear forces in the coming years are extremely remote, given the limited utility of nuclear weapons and the Pentagon's desire to use strategic weapons launchers for conventional purposes. Given the improvement in the superpower relationship, and the new international security agenda that features much greater worries about terrorism than superpower nuclear war, an old-fashioned treaty with severely binding provisions seems unneeded — at least within the strategic offensive sphere.

The scale of reductions of the new accord is unremarkable, given that it is essentially identical to what was contemplated by Boris Yeltsin and Bill Clinton in a broad START (Strategic Arms Reduction Treaty) III framework in 1997. But since those presidents were never able to move below START I constraints, due to the opposition of their respective legislatures and other factors, Bush and Putin have nonetheless taken an important step in devising an accord that is likely to take real effect in the near future.

As for the ABM Treaty, its demise was worrisome chiefly because of its possible effects on Russia and thus on the broader superpower nuclear relationship. Moscow might have viewed the decision as a renewed U.S. pursuit of strategic nuclear advantage, despite Washington's claims that it sought no such edge and wanted defenses only for the rogue-state problem. Since Russia chose not to react strongly to the withdrawal decision and not to allow a deterioration in that relationship, the loss of the ABM Treaty per se seems not to pose a major problem. In my judgment, it would have been preferable if Washington had proposed a modification to the treaty allowing limited defenses, rather than insisting on withdrawal or abrogation. But in light of Moscow's mild reaction, Mr. Bush's approach appears to have been nearly as good in effect, and considerably simpler in implementation, than such a renegotiation.

Problems could still emerge. The ABM Treaty withdrawal decision could still lead to problems in the U.S.-China relationship. The concept of unlimited ballistic missile defense could also lead to waste in the U.S. defense budget. Somewhere down the road, once defenses are actually deployed, there could even be problems in the U.S.-Russia relationship as a result, particularly if Mr. Putin is no longer in power and a more traditional leader is in the Kremlin. But these concerns can probably be allayed by a defense that is limited in actual size once deployed.

THE BROADER NUCLEAR AND STRATEGIC AGENDA

But it would be too narrow to assess the new strategic framework based on old standards. Just as this new framework was much easier to create than previous superpower accords, given the diminished importance of the strategic nuclear balance, it is insufficient as a guide to 21st century nuclear policy. We should applaud Bush and Putin, but not too long — for much still has to be done. Particularly in the age of terrorism, any effective nuclear framework must vigorously address the nuclear safety and nuclear nonproliferation agenda. These broad concerns imply that attention must be given to the hair-trigger status of nuclear forces. Even more, they require sustained attention to protecting and securing nuclear materials.

As for U.S. and Russian nuclear alert levels, they remain too high. Each side assures its citizens that nuclear forces are safe from accidental or unauthorized launch, and emphasizes that sufficient safeguards have been preserved in the post-Cold War

era. The latter point may be true, but only by the standards of the Cold War, when we accepted a substantial degree of nuclear danger within the bilateral nuclear relationship. In this era, there is no plausible need to do so. Given the excellent survivability of American submarines and reasonably good survivability of silo-based Russian missiles, each side can remain confident of its second-strike deterrent capabilities even if its forces would require hours or days to be prepared for launch. There are a number of ways to reduce alert levels; they should be seriously pursued, partly through unilateral measures and partly through mutual U.S.-Russian agreement, whether formal or informal.

As important as the alert issue is, however, the much more pressing issue is to protect the vast array of excess Russian nuclear warheads and materials strewn throughout that country. Deployed strategic warheads are not the primary problem; poorly guarded and widely dispersed tactical warheads, as well as excess plutonium and highly-enriched uranium, are the main concern. This is especially true given Russia's difficult economic conditions and the frayed state of its security forces. Under such circumstances, the chances of dangerous materials being stolen or sold to terrorist organizations are uncomfortably high.

What to do under these circumstances? Nuclear experts including Matt Bunn at Harvard University and the Baker-Cutler Commission in Washington have outlined steps that might be taken, building on the Nunn-Lugar Cooperative Threat Reduction efforts of the last decade but going much further. Tactical warheads and fissile materials need to be brought to fewer sites, put under better physical and human controls, exactly inventoried and accounted for, and gradually destroyed. The scientific infrastructure that created these capabilities needs to be sustainably converted, with individuals reemployed in other occupations. Beyond Russia, the world's nuclear reactors need to be put under more comprehensive and rigorous safeguards. The sum total of these requirements may necessitate spending between $1 billion ($1,000 million) and $2 billion ($2,000 million) more a year, in addition to the existing effort involving roughly $1 billion ($1,000 million) annually in U.S. funds. European and Japanese aid might be joined with increased U.S. assistance. Greater Russian contributions might be induced, for example, with debt-for-nonproliferation "swaps." Under such agreements, Russia would be forgiven a share of its international debts if it agreed to increase spending on nuclear safety and security.

In addition, Russia's nuclear cooperation with Iran is a major concern. It may not be realistic to stop it entirely. But the United States can make progress by adopting a somewhat more nuanced approach. First, it can stop opposing most conventional arms sales by Russia to Iran; these are generally not nearly as dangerous as nuclear-related transfers, and some even have a self-defense rationale for the regime in Tehran. Second, Washington can push Moscow to insist on much tighter safeguards for its Iranian program.

CONCLUSION

The new strategic arms accord between Russia and the United States, though lacking the teeth of previous agreements, seems likely to provide a framework in which both sides will reduce their deployed offensive forces, save money, comply with their international nonproliferation requirements, and continue to defuse the legacy of their nuclear confrontation. The fact that it was reached despite the nearly simultaneous demise of the ABM Treaty is testament to the wisdom and flexibility of President Putin as well as to the negotiating efforts of the Bush administration.

However, the Bush administration's attention to nonproliferation issues has been variable and insufficient to date. After coming into office threatening to cut, rather than expand the Nunn-Lugar and related programs, Secretary of Defense Donald Rumsfeld was finally convinced to sustain ongoing activities. Admittedly, they are not always completely effective, and the programs involve some waste, but the stakes are too high and the issue too urgent to expect or await a more perfect program.

Sustaining the programs at their previous levels does not suffice, however. Now the danger is that Mr. Bush and Mr. Putin will wish to claim the nuclear problem largely solved, pointing to their new framework on traditional offensive and defensive issues, just as Presidents Richard Nixon and Leonid Brezhnev or George H.W. Bush and Mikhail Gorbachev expected the SALT (Strategic Arms Limitation Treaty) and START efforts to solidify their places in the history books.

However, that type of old-fashioned negotiation success will not suffice. If anything, it was the easy and the less important part of the equation. The Bush administration, in particular, needs to view the accomplishments of the May 2002 Moscow summit as no more than the first page in the new U.S.-Russian nuclear framework, and get back to work soon.

The opinions expressed in this article are those of the author and do not necessarily reflect the views or policies of the U.S. Government.

THE EVOLVING THREAT FROM WEAPONS OF MASS DESTRUCTION IN THE MIDDLE EAST

By Anthony H. Cordesman
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"The sub-regional tensions in North Africa, the Gulf, and South Asia, along with the tensions associated with the Arab-Israeli conflict, interact in ways that may well force all of the major powers in the Middle East to continue their efforts to acquire chemical, biological, radiological, and nuclear weapons and delivery systems," says Anthony H. Cordesman, who holds the Arleigh A. Burke Chair for Strategy at the Center for Strategic and International Studies.

In spite of international arms control efforts, and various discussions of weapons of mass destruction-free zones in the Middle East, the major powers in the region clearly see chemical, biological, radiological, and nuclear (CBRN) weapons as key instruments of power. The same is true of long-range delivery systems, such as missiles. At this point in time, Yemen seems to be the only country to have voluntarily given up such weapons, and did so only because the deterioration of its small stock of chemical weapons and its inability to obtain continuing foreign support for its FROG and Scud B missiles left few other options.

THE CURRENT STATE OF PROLIFERATION: A COUNTRY-BY-COUNTRY SUMMARY

The current state of proliferation in the Middle East, involving countries from North Africa to Central Asia, may be summarized as follows:

Algeria
Some development of chemical and biological weapons technology. Has considered a nuclear weapons program. Has examined options to obtain long-range missiles.

Libya
Has major production facilities for chemical weapons, but only limited actual production. Stockpiles are probably still smaller than 200 metric tons. Has sought to obtain biological weapons technology with limited success. Has attempted a nuclear weapons program, but continuing efforts have had little success. Has significant stocks of FROGs and Scud B's, and has attempted to buy or produce longer-range missiles. It fired a missile at the Italian island of Lampadusa.

Egypt
Has preserved some chemical warfare capability. Seems to have developed biological weapons, but has not produced, stockpiled, or weaponized them. Its nuclear weapons program is a failure and has long been dormant. Has Scud missiles and is seeking to create extended-range Scud missiles similar to North Korean designs. Has sought to develop longer-range missiles in the past.

Israel
Has developed chemical and biological weapons and the ability to weaponize them, but does not seem to have produced them. Has never publicly announced its possession of nuclear weapons and relies on an "undeclared" deterrent. Israel has an extensive nuclear stockpile, probably including boosted (fission devices with enhanced yields) and fusion weapons, and some low-yield "theater nuclear weapons." Has satellite capability for long-range nuclear targeting. Can deliver nuclear weapons with long-range ballistic missiles that can hit any target in the Middle East, and with refuelable, long-range, strike aircraft. Probably developing cruise missiles for submarine and possible surface delivery of nuclear weapons.

An Enduring History of Regional Proliferation

Proliferation is not a new problem in the Middle East. Nations like Egypt and Israel first began to pursue nuclear weapons during the early 1960s. Egypt used chemical weapons when it intervened in the civil war in Yemen in the 1960s, and both Israel and its opponents were heavily equipped for chemical warfare during the October War in 1973. In spite of various denials, U.S. intelligence experts are convinced that the Shah of Iran initiated Iran's nuclear weapons program during the 1970s, and few doubt that Iraq was actively seeking nuclear weapons at the time Israeli jets struck its Osirak reactor in 1981.

The most dramatic use of weapons of mass destruction in the Middle East took place during the Iran-Iraq War of 1980-1988. Iraq first used mustard gas and then more sophisticated nerve agents. It not only steadily intensified its chemical attacks on Iranian troop concentrations, but sometimes attacked Kurdish towns and civilians. The worst of these attacks took place on Kurdish civilians in Halabjah, but there seem to have been a number of other, more limited uses of such weapons. Iran was much slower than Iraq in its acquisition and use of chemical weapons, but U.S. intelligence experts believe that Iran has either used its own weapons in limited numbers or used captured weapons.

Missile proliferation, too, is a long-standing problem in the region. The former Soviet Union began to sell short-range FROG rockets to its allies in the Middle East in the late 1960s, and those sales were soon followed by sales of early types of cruise missiles, like the SAMLET, and medium-range ballistic missiles, like the Scud. Israel responded by obtaining missile technology from France, and is believed to have had its first Jericho missiles in production by the early 1970s. Syria fired Scud missiles at Israel during the October War of 1973. By the mid-1970s, Israel had deployed its first long-range, nuclear-armed missiles.

Iran and Iraq both made extensive use of Scud missiles against each other's capitals in the so-called "war of the cities" during the Iran-Iraq War. At that time, Iraq developed and used its own longer-range version of the Scud. Iraq later used Scuds against both Israel and Saudi Arabia during the Gulf War in 1991, and deployed chemical and biological warheads for its missiles, as well as chemical and biological bombs for contingency use. While attempting to further advance their missile program, senior Egyptian officials were caught smuggling missile technology from the United States and Canada.

Syria
Has mustard gas and several varieties of nerve agents. These are stockpiled in bombs and missile warheads and possibly in artillery weapons. Has an extensive biological research program. Should be on the edge of weaponizing biological agents, and may already have some weapons. Has an extensive stock of Scud B's and longer-range North Korean missiles. No evidence of a nuclear weapons program.

Iran
Has produced and stockpiled mustard gas and nerve agents and has bombs, missile warheads, and artillery warheads. Has undertaken a significant biological weapons development effort, but the status of weaponization and deployment of biological agents is unclear. Is in the process of developing nuclear weapons, and should have reached the point where it can manufacture every aspect of fission weapons, except fissionable material. Has large numbers of Scud B's and longer-range North Korean missiles, and is working on a longer-range IRBM (intermediate-range ballistic missile) called the Shahab 3.

Iraq
Had the capability to make extended-range Scud missiles and, at the time of the Persian Gulf War, had

large stocks of them. In addition, Iraq had similar capabilities in terms of advanced chemical and "wet" biological agents. Had advanced nuclear weapons program and all necessary elements except fissile material. Had extensive Calutron and centrifuge programs (systems for enriching uranium to weapons-grade levels) to acquire such material. The Gulf War and eight years of aggressive inspections and weapons destruction by UNSCOM (the U.N. Special Commission) greatly reduced Iraqi capabilities. However, Iraq has retained a major covert CBRN weapons and missiles program. Additionally, it retains some Scud missiles and chemical and biological weapons, and continues to develop the technology for nuclear weapons.

Saudi Arabia
Saudi Arabia does not have weapons of mass destruction. It did, however, buy long-range CSS-2 ballistic missiles from China. Very senior Saudi officials have held conversations with officials involved in the Pakistani nuclear program, and possibly with similar officials in other countries.

Pakistan
While Pakistan is not part of the Middle East, Iran uses Pakistan's nuclear and missile arms race with India as one of its rationales for developing its own long-range missiles; Iranian officials privately refer to tensions with Pakistan as a possible reason for Iranian proliferation.

GIVING THE THREAT POSED BY IRAN AND IRAQ PRIORITY

In looking at this list of activities, there are several points that need to be raised from the issue of both U.S. policy and the overall threat that continued CBRN proliferation poses to the region. President Bush is almost certainly right in singling out Iran and Iraq as the two most dangerous proliferators in the Middle East. Iraq is firmly committed to its proliferation and missile programs, has chemical and biological weapons, as well as some hidden missile stocks, and almost certainly continues to seek nuclear weapons. It is entirely possible that Iraq has advanced to the point where it has dry, storable biological weapons that are as lethal as fission nuclear weapons, and that it has mastered the ability to configure bombs and warheads in ways that can disseminate these weapons efficiently.

Iran now has significant stocks of various chemical weapons, has developed and may have deployed biological weapons, has large numbers of Scud missiles, and is testing much longer-range missiles that can strike at virtually any target in the Middle East. In spite of denials, Iran almost certainly is developing nuclear weapons. While Iraq has long been far more aggressive than Iran in pursuing further development of its weapons of mass destruction, Iran's divided regime leaves military power and CBRN weapons in the hands of its hard-liners and extremists.

Both nations pose threats to their neighbors and to the United States, as well as to the entire region, which is home to two-thirds of all the world's proven oil reserves. These threats, in turn, more than justify U.S. efforts to maintain military sanctions on Iran and to block the transfer of technology and weapons components to Iran and Iraq. They also reinforce the need for strong U.S. military contingency capabilities in the Gulf region, and the effort to develop improved theater missile defenses that can be used to defend U.S. forces, allied nations, and the region's energy export facilities that are so critical to the global economy.

Additionally, the threats presented by continued widespread proliferation help explain why President Bush warned the world, in his speech at West Point in early June 2002, that the United States might conduct preemptive attacks against the sources of such threats. The predominance of such threats also helps to explain why the new U.S. military strategy that grew out of the Nuclear Posture Review (NPR), released on December 31, 2001, emphasizes both nuclear and conventional options to deter and defend against such threats. The NPR also discusses the need for the United States to extend the coverage of its deterrent to protect its allies; gives improved defense the same priority as offense; and makes the improved intelligence and command-and-control

capabilities needed to detect and target CBRN weapons and delivery systems the third part of the new U.S. triad.

THE BROADER ISSUES IN REGIONAL PROLIFERATION

The problem of proliferation in the Middle East does, however, involve a number of issues other than the threats posed by Iran and Iraq. First, it is clear from the al-Qaida documents captured in Afghanistan that terrorist groups are seriously attempting to acquire CBRN weapons. Similarly, the broad political and economic impact of the anthrax attacks in the United States — following the attacks of September 11, 2001 — show how disruptive even the most limited attacks with CBRN weapons can be. They also show that covert or anonymous attacks can succeed, offering the specter that future attacks might involve far more lethal agents.

The motives for proliferation are also complex, and it is dangerous to assume that Iran and Iraq should be the only focus of concern, or that either state would stop proliferating if its leadership changed. The sub-regional tensions in North Africa, the Gulf, and South Asia, along with the tensions associated with the Arab-Israeli conflict, interact in ways that may well force all of the major powers in the Middle East to continue their efforts to acquire CBRN weapons and delivery systems, regardless of the nature of the ruling regime.

THE FOLLOWING MIX OF MOTIVES IS INVOLVED:

- The search for status and prestige, and the fact that CBRN weapons and missiles have a major "glitter factor" in a region that has often rushed to buy the latest weapons, regardless of the ability to absorb them effectively and to provide proper training and maintenance.

- The need to deter other states, coupled with the uncertainty of what needs to be deterred in a region where most proliferators lie about their CBRN and missile efforts and rely on undeclared forces.

- The need to enhance warfighting capabilities and use CBRN weapons as an "equalizer" to deter or defeat enemies with superior conventional forces.

- The lesson of the Iran-Iraq War and Gulf War that missiles and weapons of mass destruction do give nations practical status and power and can be used against both military and civilian targets.

- The need to deter or stop the use of CBRNs by U.S. and other outside power projection forces.

- The momentum of ongoing arms races with neighbors: Algeria-Libya-Morocco, Egypt-Israel-Syria, and Iran-Iraq-Southern Gulf.

- The inability of states to rely on arms control and national restraint, and to predict the future enemy.

- The fact that there is no way to know or predict the scale of the efforts being undertaken by other major regional actors, along with the difficulty in determining their capabilities in given types of weapons, and in characterizing the risk which these weapons present.

- The impact of the broader trends in the "greater Middle East," including the growing overlap of arms races mentioned previously, plus the impact of North Korean proliferation and the India-Pakistan arms race.

- CBRN weapons and missiles are powerful tools for intimidation, even if they are never used in war.

- Proliferation is an alternative to far more expensive investments in conventional forces.

- The desire to create existential threats that are seen as so great by given enemies that they will not risk any lower levels of military action.

- Reaction to the absence of meaningful arms control regimes.

- The desire to create the capability for devastating covert or asymmetric attacks by states, their proxies, or terrorist groups.

- The perceived ability to exploit an enemy's lack of effective civil and critical facility defense and anti-tactical ballistic missile defense capabilities.

One other grim reality shapes the process of proliferation in the region. Advances in biotechnology — coupled with the broad dissemination in the region of biotechnology and research facilities, food processing capability, and pharmaceutical production — already make it impossible to apply arms control and export control regimes in ways that can prevent the production of biological weapons, some of which could be equivalent in lethality to small nuclear weapons. The region will inevitably acquire the ability to produce even more lethal genetically engineered weapons over the next 5-10 years, and the scale of effort involved will be small enough that terrorist groups will be able to produce such weapons.

There are no current prospects that arms control and export control regimes can halt the ability of regional states to slowly acquire nuclear weapons and long-range ballistic missiles. It is all too clear, however, that even if such controls could be developed, regional states would simply pursue biological weapons and less obvious methods of delivery. As a result, dealing with CBRN threats is likely to be a permanent aspect of the security problems of the Middle East.

The opinions expressed in this article are those of the author and do not necessarily reflect the views or policies of the U.S. Government.

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