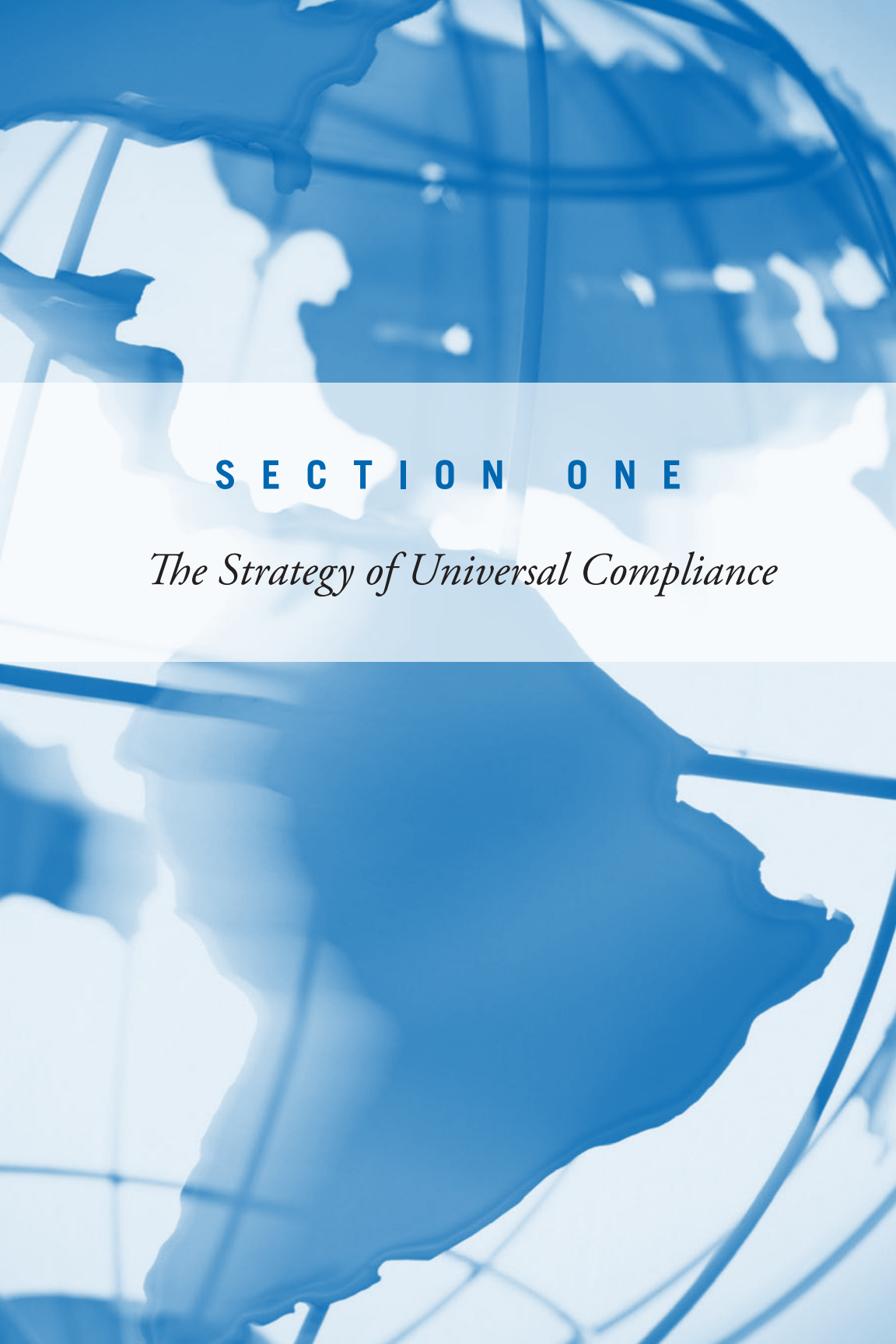


SECTION ONE

The Strategy of Universal Compliance

CHAPTER ONE: WHY A NEW STRATEGY?

We raced from threat to threat to threat….There was not a system in place to say, "You've got to go back and do this and this and this." …The moral of the story is, if you'd taken those measures systemically over the course of time…you might have had a better chance of succeeding.

—Director of Central Intelligence George Tenet
Before the National Commission on Terrorist
Attacks upon the United States, March 24, 2004

Perhaps the most ambitious attempt ever made to extend the civilizing reach of the rule of law has been the international effort to constrain the acquisition and use of nuclear weapons, the greatest physical force created by humankind. The United States, the Soviet Union, and other states laid the foundation for this mission in the 1960s with the negotiation of the Nuclear Non-Proliferation Treaty (NPT). In the decades since, states have evolved rules and institutions to govern nuclear exports, safeguard and account for nuclear materials, and control and even reduce the number of nuclear weapons.

The rules are not self-enforcing, as painful experience in Iraq, North Korea, Libya, Iran, and elsewhere has shown. Moreover, states and international agencies must struggle to mobilize the power needed to enforce and adapt the rules as conditions change. Doing so involves difficult trade-offs as states seek benefits commensurate with the options they forgo and the costs they bear.

In 1995, in perhaps the single greatest strengthening of the regime since its founding, the signatories to the Non-Proliferation Treaty agreed to transform its original twenty-five-year term into an open-ended commitment. In doing so, they committed themselves to a stringent bargain. One hundred seventy-three states reaffirmed their renunciation of nuclear weapons in return for an explicitly reaffirmed commitment by the United States, China, France, Russia, and the United Kingdom to eventually eliminate their nuclear arsenals. All states did so with the understanding that while the treaty was demonstrably imperfect, it nonetheless made them all safer—individually and collectively.

At the time, there was good reason for optimism. The Cold War was over. The number of states possessing nuclear weapons had declined, and the number of weapons was falling. But soon, the picture turned much darker. Almost overnight, it seemed that the elaborate nonproliferation system built around the NPT was in danger of failing.

In May 1998, India announced that it had exploded five nuclear devices. Two weeks later, Pakistan boasted of five nuclear explosions of its own. Neither country had signed the Non-Proliferation Treaty. Pakistan had received vital nuclear weapon design and production assistance from China and from private actors based in NPT member states in the West. Suddenly, the prospect loomed of a nuclear war in South Asia that could kill millions and irradiate a quarter of the globe. Neither the NPT nor the broader nonproliferation regime had stopped two major countries from crossing the nuclear threshold.

The events of September 11, 2001, forced a recognition that shadowy movements, not under the control of any state, were able to commit sophisticated attacks of mass terror. If such groups were

to come into possession of nuclear weapons, they would presumably be willing to use them. After September 11, what had been an important problem—the transfer and proliferation of nuclear technology—suddenly became an urgent one.

Then, in 2003, news emerged that a network of scientists, engineers, and middlemen from Pakistan, Dubai, the United Kingdom, Germany, Malaysia, South Africa, Sri Lanka, Switzerland, and Turkey had for years been selling nuclear bomb designs and equipment necessary to produce nuclear weapons. Buyers included North Korea, Iran, Libya, and perhaps others. Existing laws and export control enforcement practices had proved manifestly inadequate to block these transfers of equipment and know-how.

The regime whose weaknesses were so exposed by these events had been designed for a world in which threats came from states. It was not built to deal with terrorist groups bent on mass destruction or nuclear black marketers with murky connections to governments. Many of the activities of the clandestine Pakistani network headed by A. Q. Khan violated no existing laws. The fact that the network was based in Pakistan also highlights the challenge of persuading the states that have not joined the NPT—India, Pakistan, and Israel—to nevertheless accept rigorous nonproliferation obligations. These three countries broke no covenant in acquiring nuclear weapons, but in varying degrees their status beyond its boundaries undermines the entire NPT-based regime.

Among the existing rules, today's greatest threat stems from the wide availability they allow to highly enriched uranium (HEU) and plutonium, the fissile materials that are the fuel of nuclear weapons.[1] These materials have become more accessible to terrorists because of the collapse of the Soviet Union and poor security

at nuclear stockpiles in the former Soviet republics and in dozens of other countries. There is also danger that new nations could acquire nuclear weapons by exploiting the NPT's failure to define specifically what constitutes the "peaceful" application of nuclear capabilities to which non–nuclear-weapon states commit themselves. As the treaty has been interpreted, countries can acquire technologies that bring them to the very brink of nuclear weapon capability without explicitly violating the agreement and can then leave the treaty without penalty.

There are also newer concerns. Fifteen years after the end of the Cold War, the majority of countries feel that the five original nuclear weapon states (the United States, Russia, the United Kingdom, France, and China) do not intend to fulfill their end of the NPT bargain—the pledge to eliminate nuclear weapons. That growing conviction erodes the willingness among members of this majority to live up to their side of the bargain—much less to agree to strengthen the regime. Moreover, those same five original members of the so-called nuclear club, who are also the veto-wielding members of the United Nations Security Council, are divided on how to respond to today's challenges, and thus raise widespread doubts about the capacity for action of the only international body with the legal writ to enforce nonproliferation commitments.

For all these reasons, there are rising doubts about the sustainability of the nonproliferation regime. Nations with ample technological ability to develop nuclear weapons may be reconsidering their political decisions not to do so. Recently, some Brazilian and Japanese political leaders, for example, have openly suggested that their countries should reweigh their nuclear weapon options. South Korea recently had to admit that its engineers had produced

HEU and weapon-grade plutonium outside of International Atomic Energy Agency (IAEA) safeguards, contrary to NPT requirements. The discovery rekindled a debate in South Korea about why it is restricted from possessing a complete set of fuel cycle capabilities when its neighbors are not.

All of these developments cast a heavy shadow over international security. They show that in spite of major successes the threat from nuclear proliferation remains all too real, and that the prospect of nuclear war did not disappear with the end of the Cold War. Together with what has occurred in Iraq, Iran, and North Korea, they underline how much more needs to be done to reduce the possibility of nuclear catastrophe to an acceptable level. All nations—including the three unwilling to sign the Non-Proliferation Treaty—need to be covered. Access to weapons fuel and the means of producing it needs to be far more tightly limited everywhere. Nonproliferation rules must be extended to individuals and corporations.

Some of the failures to contain proliferation result from these and other flaws in the regime itself. Many others stem from the unwillingness of leaders around the world to enforce commitments and resolutions earnestly passed. The United States' share of these failures has involved both Democratic and Republican administrations and Congresses led by both parties.

THE GOOD NEWS

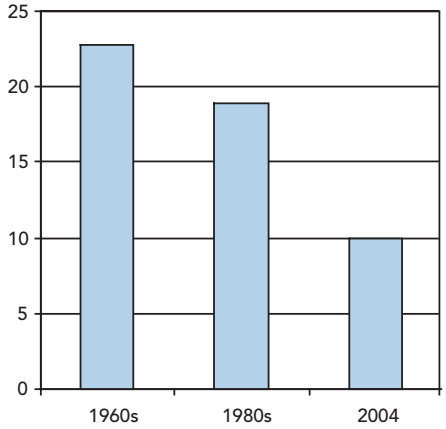
The news is by no means all bleak, however. There are positive trends to build upon. Since the signing of the Non-Proliferation Treaty in 1968, many more countries have given up nuclear weapon programs than have begun them.[2] There are fewer nuclear weapons in the world and fewer nations with nuclear

weapon programs than there were twenty years ago.[3] The United States and Russia continue to work cooperatively to dismantle and secure nuclear weapons and materials left over from the Cold War. Libya is an important success story and a model for other nations to follow as it verifiably dismantles its clandestine nuclear and chemical weapon capabilities. Iraq is a model of a different type, but it, too, no longer poses a nuclear weapon threat to its neighbors. The United States' use of force in Iraq to address this threat, while mismanaged, has heightened international awareness of the dangers posed by proliferation. The results are particularly evident in the European Union (EU), which, forging a new resolve, has intervened to curb programs in Libya and Iran and has adopted a unified nonproliferation strategy that includes requirements for full compliance with nonproliferation norms in all future trade and cooperation agreements. Significantly, the EU now also asserts its willingness to use force against proliferation threats.

International cooperation has grown, with more than one dozen nations having formally joined the U.S.-led Proliferation Security Initiative to interdict illegal transfers of weapons and materials. In April 2004, the UN Security Council agreed on a resolution requiring states to increase security for weapons and materials and to enact stricter export controls and laws to criminalize proliferation activities by individuals and corporations. President George W. Bush, IAEA Director General Mohamed ElBaradei, and other leaders have proposed new plans to restrict the acquisition of nuclear technology for the production of enriched uranium and separated plutonium.

The question remains: Which trend will predominate—the positive or the negative? The world has arrived at a nuclear tipping point.[4] Policy decisions in the next few years will determine whether the global cooperation that has shrunk the arsenals of chemical, biological, and nuclear weapons and missile systems over the past decades will continue, or if a dangerous new wave of proliferation will engulf the world.

Figure 1.1. Countries with Nuclear Weapons or Programs



Notes:
1960s: Twenty-three countries had weapons, were conducting weapons-related research, or were discussing the pursuit of weapons: Argentina, Australia, Brazil, Canada, China, Egypt, France, India, Israel, Italy, Japan, Norway, Romania, South Africa, the Soviet Union, Spain, Sweden, Switzerland, Taiwan, the United Kingdom, the United States, West Germany, and Yugoslavia.

1980s: Nineteen countries had weapons or were conducting weapons-related research: Argentina, Brazil, Canada, China, France, India, Iran, Iraq, Israel, Libya, North Korea, Pakistan, South Africa, South Korea, the Soviet Union, Taiwan, the United Kingdom, the United States, and Yugoslavia.

2004: In addition to the eight states with nuclear weapons, Iran and North Korea were suspected of having active nuclear weapon programs.

Table 1.1. Countries with Nuclear Weapons or Programs, Past and Present

NPT NUCLEAR WEAPON STATES China France Russia United Kingdom United States	**RECENTLY TERMINATED PROGRAMS** Iraq Libya
NON-NPT NUCLEAR WEAPON STATES India Israel Pakistan	**GAVE UP INHERITED WEAPONS** Belarus Kazakhstan Ukraine
SUSPECTED PROGRAMS Iran North Korea	**PROGRAMS OR CONSIDERATION ENDED AFTER 1970** Argentina[a] Australia[b] Brazil Canada[c] Romania South Africa South Korea Spain[a] Switzerland[b] Taiwan Yugoslavia
INTENTIONS SUSPECTED BUT NO WEAPONS PROGRAM IDENTIFIED Algeria Saudi Arabia Syria	**PROGRAMS OR CONSIDERATION ENDED BEFORE 1970** Egypt Italy[b] Japan[b] Norway[b] Sweden West Germany[d]

Note: Thirty-five countries in total.

a Country had an active nuclear program, but intent to produce weapons is unconfirmed.

b A program for nuclear weapons was debated, but active nuclear programs were civilian in nature.

c Canada had between 250 and 450 U.S.-supplied nuclear weapons deployed on Canadian delivery systems until the early 1980s. In 1978, Prime Minister Pierre Trudeau declared that Canada was "the first nuclear-armed country to have chosen to divest itself of nuclear weapons." See Duane Bratt, "Canada's Nuclear Schizophrenia," *Bulletin of the Atomic Scientists,* March/April 2002, 58, no. 2, pp. 44–50.

d Though West Germany never went beyond consideration of an indigenous nuclear weapon program, Bonn did possess U.S.-supplied nuclear weapons. These weapons required the explicit approval of the American president before they could be used.

U.S. POLICY TODAY

The Bush administration arrived in office determined to combat nuclear, chemical, and biological weapons proliferation in fundamentally new ways. In two key documents, *The National Security Strategy of the United States of America* (September 2002) and *National Strategy to Combat Weapons of Mass Destruction* (December 2002), the administration stated its view that the threat from weapons of mass destruction emanated from a small number of outlaw states and from the nexus of these states, nuclear weapons and materials, and terrorists.[5]

This assessment did not, at first, appear dramatically different from those of previous administrations, which also acknowledged growing dangers. However, previous presidents had treated the weapons themselves as the problem. As long as they existed, there was a great danger that they would be used. "We must abolish the weapons of war," President John F. Kennedy had said, "before they abolish us." Thus, Presidents Kennedy, Lyndon B. Johnson, and Richard M. Nixon negotiated and implemented the Non-Proliferation Treaty as a means of stopping the spread of and eliminating nuclear weapons.[6] President Nixon negotiated the Biological Weapons Convention, which banned biological weapons; President Ronald Reagan negotiated the Intermediate-Range Nuclear Forces (INF) Treaty, which banned U.S. and Russian intermediate-range missiles. President George H. W. Bush negotiated the Chemical Weapons Convention, which banned chemical weapons; President Bill Clinton negotiated the Comprehensive Test Ban Treaty (CTBT). Each of these agreements codified a new global norm and provided the international legal framework for ending existing weapons programs and preventing the initiation of new ones.

By contrast, the Bush administration has spurned treaties that demand painstaking verification, and instead has shifted the focus from eliminating weapons to eliminating regimes. Whereas President Clinton spoke in 1998 of "the unusual and extraordinary threat to the national security…of the United States posed by *the proliferation of nuclear, biological, and chemical weapons* and the means of delivering such weapons," President Bush, in his January 2003 State of the Union address, framed the issue very differently: "The gravest danger facing America and the world is *outlaw regimes that seek and possess nuclear, chemical, and biological weapons*" [emphasis added]. In effect, the Bush administration changed the focus from "what" to "who."

Following this targeted approach, the administration highlighted the necessity of regime change to remove threats posed by irredeemable governments seeking these weapons, particularly the "axis of evil" states of Iraq, North Korea, and Iran. The Iraq War focused media and public attention on the tactic of preventive war to accomplish regime change, but regime change itself was the strategic innovation.

The Bush administration also highlighted "new methods of deterrence" to make clear that the United States "reserves the right to respond with overwhelming force—including through resort to all of our options—to the use of WMD [weapons of mass destruction] against the United States, our forces abroad, and friends and allies."[7] In the belief that an antimissile program would not only protect against an attack but would in itself deter enemies from seeking nuclear weapons, the administration doubled the budget for a national antimissile system. It also has begun research on new, more usable types of nuclear weapons for counterproliferation missions.

The Bush administration was right to draw international attention to the need for serious enforcement. For many years, too much attention had been paid to obtaining signatures on treaties, and not enough to achieving compliance with them. The absence of a collective political will to stop bad actors, by force if necessary, undermined deterrence. The United States itself had routinely made proliferation concerns secondary to other strategic and economic issues in relations with key states such as Pakistan, Israel, and Iraq. Too many dangerous activities were—and are—not encompassed by existing agreements and were therefore tolerated. In contrast, the Bush administration's resolve helped motivate others to strengthen nonmilitary, and military, means of enforcement. The strong belief that some actors cannot be reformed helped sharpen international threat assessments and made governments in proliferant states think harder about changing their behavior, lest they be removed.

However, the new strategy, like the one it replaced, has proven insufficient. While stopping the spread of nuclear weapons requires more international resolve than previous administrations could muster, it also demands more international teamwork than the Bush administration recognizes. Nuclear weapons and fissile materials are problems wherever they are, not just in a handful of "evil" states. The threat cannot be eliminated by removing whichever foreign governments the United States finds most threatening at any given time. History has shown again and again that today's ally can become tomorrow's "rogue" state. Moreover, terrorists will seek nuclear weapons and materials wherever they can be found, irrespective of a state's geopolitical orientation.

On February 11, 2004, the president proposed initiatives that, if implemented, would improve international capacity to stem the spread of nuclear weapons. These initiatives include making all

exports from the forty-member Nuclear Suppliers Group conditional on recipients' adopting new, tougher inspections by the IAEA and banning all enrichment and reprocessing technology exports to states that do not already have such plants in operation; expanding the Nunn-Lugar Cooperative Threat Reduction Program, which finances the elimination of nuclear, chemical, and biological weapons in the former Soviet Union; and enhancing the IAEA's capability to detect cheating and respond to treaty violations.

Unfortunately, however, the administration has not put sufficient money or political effort behind these proposals. Its proposed budget for fiscal year (FY) 2005 cut rather than increased funding for the Nunn-Lugar program and failed to provide any increase in the U.S. contribution to the IAEA—an agency whose budget has stayed flat for years even as its responsibilities have greatly increased.[8]

The United States cannot defeat the nuclear threat alone, or even with small coalitions of the willing. It needs sustained cooperation from dozens of diverse nations—including China, Russia, France, the United Kingdom, and leading states that have forsworn nuclear weapons, such as Argentina, Brazil, Germany, Japan, South Africa, and Sweden—in order to broaden, toughen, and stringently enforce nonproliferation rules. In exchange, many states, especially those that have given up nuclear weapons, will want to know that burdensome new rules and costly enforcement will ultimately enhance their security. Put differently, the nuclear weapon states must show that tougher nonproliferation rules not only benefit the powerful but constrain them as well. Nonproliferation is a set of bargains whose fairness must be self-evident if the majority of countries is to support their enforcement.

Success will depend on the United States' ability to marshal legitimate authority that motivates others to follow. As Francis Fukuyama notes, "Legitimacy is important not simply because we want to feel good about ourselves, but because it's useful. Other people will follow the American lead if they believe it is legitimate; if they do not, they will resist, complain, obstruct, or actively oppose what we do. In this respect, it matters not what we believe to be legitimate, but rather what other people believe is legitimate."[9]

Recent events, most dramatically the war in Iraq, have undermined that legitimacy. Many feel that the United States has not followed Thomas Jefferson's admonition to have a "decent respect to the opinions of mankind," preferring the unilateral exercise of power to the often-cumbersome operation of rule-based international institutions. With societies bristling at U.S. government rhetoric and action, elected leaders in key countries such as Brazil, Germany, France, India, South Africa, South Korea, and Turkey, and elsewhere, distance themselves from U.S. initiatives. This challenged legitimacy is one reason why few states have welcomed President Bush's February 11, 2004, nonproliferation initiatives and have resisted the U.S. push to isolate Iran.

Even when others share U.S. views of the nuclear threat, they may balk at following U.S. policies because they do not see Washington acting on *their* priorities, be those the Comprehensive Test Ban Treaty, the International Criminal Court, actions to minimize climate change, or other measures affecting global security. The United States naturally and wisely will use its power to induce others to accept and follow nonproliferation rules it values, but success also depends on its willingness to give greater weight to the views and interests of others. In Robert Kagan's

words, "The United States can neither appear to be acting only in its self-interest, nor can it in fact act as if its own national interest were all that mattered."[10]

The new proliferation challenges make it clear beyond denial that "racing from threat to threat" does not suffice. The present nonproliferation regime needs fixing. Nor can the United States prevent and resolve proliferation crises without greater international support. This is a time that demands systemic change: a new strategy to defeat old and new threats before they become catastrophes.

A GLOBAL NUCLEAR THREAT ASSESSMENT

Nuclear threats lie along four axes, though development along one axis often influences developments along the others. The four categories of threat are nuclear terrorism, new nuclear weapon states and regional conflict, existing nuclear arsenals, and regime collapse. The greatest concerns are outlined here.

Nuclear Terrorism: The Most Serious

While states can be deterred from using nuclear weapons by fear of retaliation, terrorists, who have neither land, people, nor national futures to protect, may not be deterrable. Terrorist acquisition of nuclear weapons therefore poses the greatest single nuclear threat. The gravest danger arises from terrorists' access to state stockpiles of nuclear weapons and fissile materials, because acquiring a supply of nuclear material (as opposed to making the weapon itself) remains the most difficult

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A GLOBAL NUCLEAR THREAT ASSESSMENT (continued)

challenge for a terrorist group. So-called outlaw states are not the most likely source. Their stockpiles are small and exceedingly precious, and hence well guarded. (Nor are these states likely to give away what they see as the crown jewels in their security crowns.) Rather, the most likely sources of nuclear weapons and materials for terrorists are storage areas in the former states of the Soviet Union and in Pakistan, and fissile material kept at dozens of civilian sites around the world.

Russia and other former Soviet states possess thousands of nuclear weapons and hundreds of tons of inadequately secured nuclear material. Terrorist organizations and radical fundamentalist groups operate within Pakistan's borders. National instability or a radical change in government could lead to the collapse of state control over nuclear weapons and materials and to the migration of nuclear scientists to the service of other nations or groups.

There is also a substantial risk of terrorist theft from the nuclear stockpiles in more than forty countries around the world. Many of these caches of materials consist of HEU that could be directly used in nuclear weapons, or further enriched to weapons grade. There are also significant stockpiles of plutonium that can be used in a weapon, though with more difficulty. (See chapter 4 for a more complete treatment of this issue.)

New Nuclear Nations and Regional Conflicts

The danger posed by the acquisition of nuclear weapons by Iran or North Korea is not that either country would likely use these

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A GLOBAL NUCLEAR THREAT ASSESSMENT (continued)

weapons to attack the United States, the nations of Europe, or other countries. States are and will continue to be deterred from such attacks by the certainty of swift and massive retaliation. The greater danger is the reactions of other states in the region. A nuclear reaction chain could ripple through a region and across the globe, triggering weapon decisions in several, perhaps many, other states. With these rapid developments and the collapse of existing norms could come increased regional tensions, possibly leading to regional wars and to nuclear catastrophe.[a]

New nuclear weapon states might also constrain the United States and others, weakening their ability to intervene to avoid conflict in dangerous regions, as well as, of course, emboldening Tehran, Pyongyang, or other new possessors.

Existing regional nuclear tensions already pose serious risks. The decades-long conflict between India and Pakistan has made South Asia for many years the region most likely to witness the first use of nuclear weapons since World War II. There is an active missile race underway between the two nations, even as India and China continue their rivalry. In Northeast Asia, North Korea's nuclear capabilities remain shrouded in uncertainty but presumably continue to advance. Miscalculation or misunderstanding could bring nuclear war to the Korean peninsula. Tensions between China, Taiwan, and the United States also hold the potential for nuclear crisis.

In the Middle East, Iran's quest for nuclear weapons, together with Israel's nuclear arsenal and the chemical weapons of other Middle Eastern states, adds grave volatility to an already conflict-

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A GLOBAL NUCLEAR THREAT ASSESSMENT (continued)

prone region. If Iran were to acquire nuclear weapons, Egypt, Saudi Arabia, or others might initiate or revive nuclear weapon programs. It is possible that the Middle East could go from a region with one nuclear weapon state, to one with two, three, or five such states within a decade—with existing political and territorial disputes still unresolved.[b] This is a recipe for disaster.

The Risk from Existing Arsenals

There are grave dangers inherent in the maintenance of thousands of nuclear weapons by the United States and Russia and the hundreds of weapons held by China, France, the United Kingdom, Israel, India, and Pakistan. While each state regards its nuclear weapons as safe, secure, and essential to its security, each views others' arsenals with suspicion.

Though the Cold War has been over for more than a dozen years, Washington and Moscow maintain thousands of warheads on hair-trigger alert, ready to launch within fifteen minutes. This greatly increases the risk of an unauthorized launch. Because there is no time buffer built into each state's decision-making process, this extreme level of readiness also enhances the possibility that either side's president could prematurely order a nuclear strike based on flawed intelligence.[c]

Recent advocacy by some in the United States of new battlefield uses for nuclear weapons could lead to new nuclear tests. The five NPT nuclear weapon states have not tested since the signing of the Comprehensive Test Ban Treaty in 1996, and no state has tested since India and Pakistan did in May 1998. New U.S. tests

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A GLOBAL NUCLEAR THREAT ASSESSMENT (continued)

would trigger tests by other nations, collapsing the CTBT, which is widely regarded as a pillar of the nonproliferation regime.

To the extent that the leaders of a given state are contemplating acceding to U.S. or international nonproliferation demands, these leaders may feel a strong need for equity so that they can show their publics that giving up nuclear aspirations is fair and in their interest. It is difficult, if not impossible, to demonstrate either when immensely powerful nuclear weapon states reassert the importance of nuclear weapons to their own security.

The Risk of Regime Collapse

If U.S. and Russian nuclear arsenals remain at Cold War levels, many nations will conclude that the weapon states' promise to reduce and eventually eliminate these arsenals has been broken. Non-nuclear states may therefore feel released from their pledge not to acquire nuclear arms.

The Non-Proliferation Treaty is already severely threatened by the development in several states of facilities for the enrichment of uranium and the reprocessing of plutonium. Although each state asserts that these are for civilian use only, supplies of these materials potentially put each of these countries "a screwdriver's turn" away from weapons capability. This greatly erodes the confidence that states can have in a neighbor's non-nuclear pledge.

Additionally, there appears to be growing acceptance of the nuclear status of Pakistan and India, with each country accruing prestige and increased attention from leading nuclear weapon states, including the United States. Some now argue that a nuclear

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A GLOBAL NUCLEAR THREAT ASSESSMENT (continued)

Iran or North Korea could also be absorbed into the international system without serious consequence.

If the number of states with nuclear weapons increases, the original nuclear weapon states fail to comply with their disarmament obligations, and states such as India gain status for having nuclear weapons, it is possible that Japan, Brazil, and other major non-nuclear nations will reconsider their nuclear choices. Most nations would continue to eschew nuclear weapons, if only for technological and economic reasons, but others would decide that nuclear weapons were necessary to improving their security or status. There is a real possibility, under these conditions, of a systemwide collapse.

Notes

a This is the danger President Kennedy warned of in 1963. "I ask you to stop and think for a moment what it would mean to have nuclear weapons in so many hands, in the hands of countries large and small, stable and unstable, responsible and irresponsible, scattered throughout the world," he said. "There would be no rest for anyone then, no stability, no real security, and no chance of effective disarmament. There would only be the increased chance of accidental war, and an increased necessity for the great powers to involve themselves in what otherwise would be local conflicts." John F. Kennedy, "Radio and Television Address to the American People on the Nuclear Test Ban Treaty," July 26, 1963, available at www.jfklibrary.org/jfk_test_ban_speech.html (accessed December 10, 2004).

b Several countries in the Middle East are capable of pursuing nuclear weapon programs or otherwise acquiring nuclear weapons, including Saudi Arabia, Egypt, and Turkey. Saudi Arabia might seek to purchase nuclear weapons from Pakistan, or invite Pakistan to station nuclear weapons on its territory. Other countries have at least the basic facilities and capabilities to mount a nuclear weapon program, albeit not without significant political and economic consequences. Egypt

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and Turkey could probably acquire enough nuclear material to produce a nuclear weapon within a decade of launching such an effort.

c Former U.S. Senator Sam Nunn argues, "The more time the United States and Russia build into our process for ordering a nuclear strike the more time is available to gather data, to exchange information, to gain perspective, to discover an error, to avoid an accidental or unauthorized launch." Speech to the Carnegie International Non-Proliferation Conference, June 21, 2004, available at www.ProliferationNews.org.

CHAPTER TWO: CORE CONCEPTS AND KEY ACTIONS

What Universal Compliance Means

The new strategic aim of nonproliferation policy should be to achieve *universal compliance* with the norms and rules of a *toughened* nuclear nonproliferation regime.

Compliance means more than signatures on treaties, or declarations of good intent—it means actual performance. *Universal* means that all actors must comply with the norms and rules that apply to them. This includes states that have not joined the NPT, as well as those that have. It also includes nonstate actors—corporations and individuals. The burden of compliance extends not only to states obtaining nuclear weapon capabilities through dual-use fuel cycle programs or those abetting proliferation through technology transfers; it applies equally to nuclear weapon states that are failing to honor their own nonproliferation pledges.

Emphasis on compliance engenders controversy, especially when coming from Americans. Many European and developing-country commentators on the draft of the present document argued that "compliance" evokes images of the United States acting as a "rogue cop," knocking down the walls and violating the sovereignty of other states without authorization of legitimating institutions, particularly the UN Security Council. Reacting to the Iraq experience, many commentators seemed to fear the exertion of U.S. power more than the failure of the nonproliferation regime due to lack of enforcement.

This sentiment is sobering, and should neither be ignored nor indulged. The proliferation of nuclear weapons poses such grave threats to international peace and security that rules and enforcement must be strengthened. National sovereignty remains vitally important, but as actors within state boundaries acquire the capability to threaten large numbers of their neighbors or even distant populations, the international community's obligation to prevent such threats necessarily expands. As destructive technologies evolve and the reach of nonstate actors grows, the balance between national sovereignty and international security imperatives must evolve, too. Understandably, developing countries that have only recently wrested sovereignty from colonial masters are especially reluctant to accept the notion that certain global standards must be enforceable across sovereign borders. The challenge is to reassure states that the rules and their enforcement are judicious, fair, and balanced, not a new form of colonialism. The United States, as the power that others increasingly seek to constrain, must take especial care to persuade others that it acts fairly and judiciously, and that enforcement of the rules applies to it, also. International institutions serve this legitimating function, which is one reason to support and strengthen them.

The UN Security Council is the critical international body—the one with the clearest authority to order law enforcement action. The United States will have to work harder to build the necessary will and capacity among Security Council member states, and should accept that this in turn will require greater accommodation of others' priorities and concerns. Complicating this challenge, the Permanent Five (P-5) members of the Security Council may as a group face a legitimacy deficit when it comes to enforcing nuclear nonproliferation. Not only do these five

states possess nuclear arsenals and evince little genuine interest in fulfilling their commitments to dismantle them, their own track records betray varying degrees of imperfect adherence to nonproliferation norms and rules. The P-5 are seen as the chief enforcers *and* the most advantaged beneficiaries of the nuclear nonproliferation regime. *To sustain—much less strengthen—the regime, this "advantaged" minority must ensure that the majority sees it as beneficial and fair. The only way to achieve this is to enforce compliance universally, not selectively, including the obligations the nuclear states have taken on themselves.*

Most notably, these obligations were spelled out as "thirteen steps" and explicitly accepted by the nuclear weapon states at the 2000 NPT Review Conference (see "The Thirteen Steps," page 151.) While commitments may be renegotiated for changed circumstances, there is no way to dance around or disown them as having been made by a prior administration—as American and French officials have suggested. If governments made commitments such as these binding only on their own administrations and not on their successors, no international undertaking would have a shred of meaning.

Universal compliance therefore seeks to achieve a *balance of obligations.* Its component policies correct the impression that nuclear weapon states are getting much more out of the nonproliferation regime than are others. The name of the strategy is both a reminder of the goal and a guide to ensure that each tactical step helps build a system to which all states commit and contribute.

Finally, universal compliance extends the principle of *defense in depth* that has shaped the nonproliferation regime for decades. Thus, the NPT commitment not to acquire nuclear weapons has been reinforced over the years with regional nuclear-free zones,

export controls, test bans, military action, and a variety of other technological and legal measures. Redundancy—overlapping measures and fallback options—is a key to success. Defense in depth is further strengthened by employing all of the state's tools—diplomatic and technical, financial and political, coercive and attractive. For example, the EU has conditioned its future trade agreements on compliance with nonproliferation norms: a valuable model for others. Finally, defense in depth requires extending the regime's compass beyond states to individuals and the corporate sector. A number of business sectors—banking, finance, certain manufacturers, as well as the nuclear industry itself—have key roles to play. Multiple lines of defense offer the best protection against breakouts from proliferation restraints, and enable the regime to survive the failure of any one instrument.

The Six Obligations

Six obligations form the core of the universal compliance strategy. Each requires many subsidiary policy changes, resources, and institutional reforms. Some of the necessary steps depend on new national or international laws or voluntary standards, while others require only the will to live up to existing commitments. Of the nearly one hundred recommendations in the present volume, twenty are highlighted here as the top priorities. They are a combination of the steps with high impact that are achievable in the near term and those that will take longer but would be truly transformative.

OBLIGATION ONE: Make Nonproliferation Irreversible. The nonproliferation regime must be adapted to changed conditions by making its fundamental bargains meaningfully enforceable and irreversible. International rules managing the production and distribution of nuclear weapon-usable materials need to be revised and the terms by which states can withdraw from the NPT need to be clarified and tightened.

Because facilities to enrich uranium and separate plutonium have inherent weapons potential that cannot be prevented by international safeguards, **the acquisition of enrichment and reprocessing plants by additional states should be precluded. In return,** the United States and other states that currently possess such facilities must **provide internationally guaranteed, economically attractive supplies of the fuel and services** necessary to meet nuclear energy demands. This bargain would greatly augment the reliability and permanence of states' commitments to forgo nuclear weapons (see p. 91).

Obtaining global acceptance of this new norm will be unlikely, however, so long as existing facilities continue to add to the global oversupply of HEU and plutonium. **States should therefore agree to end the production of HEU and to adopt a temporary "pause" in the separation of plutonium** (see p. 97).

Countries must also be discouraged from building up the capability to produce nuclear weapons through international cooperation made possible by treaty membership, and then, having achieved that aim, leaving the treaty without penalty. The **UN Security Council** should pass a new **resolution making a state that withdraws from the NPT** nonetheless **responsible for violations** committed while it was still a party to the treaty. The

Security Council should also **bar states that withdraw from the treaty**—whether in violation of its terms or not—**from legally using nuclear assets** acquired internationally before their withdrawal. All states should agree to **suspend nuclear cooperation with countries that the IAEA cannot certify** are in full compliance with their nuclear nonproliferation obligations* (see pp. 55–56).

OBLIGATION TWO: Devalue the Political and Military Currency of Nuclear Weapons. All states must diminish the role of nuclear weapons in security policies and international politics. The nuclear weapon states must do more to make their nonproliferation commitments irreversible, especially through the steady verified dismantlement of nuclear arsenals.

To comply with commitments made in 1968 and explicitly reaffirmed in 1995 and 2000, the United States, Russia, China, France, and the United Kingdom must **disavow the development of any new types of nuclear weapons, reaffirm the current moratorium on nuclear weapon testing, and ratify the Comprehensive Test Ban Treaty.**[11] To reduce the risk of inadvertent nuclear war or a renewed arms race, the United States and Russia should **lengthen the time decision makers would**

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* The world does not have a representative institution for establishing a global rule on nuclear technology. The suppliers' cartel approach in the form suggested by President Bush in his speech of February 11, 2004, meets intense resistance. IAEA Director General ElBaradei has established an Experts Group to explore ways to multinationalize uranium enrichment and plutonium reprocessing facilities, but neither this group nor the IAEA can establish binding rules. The Experts Group or an outgrowth of it could, however, make a recommendation to the UN Security Council. NPT parties meeting in a review conference could agree on new rules, though a way would have to be found to include India, Israel, and Pakistan in the process.

have before deciding to launch nuclear weapons, and should **make nuclear weapon reductions, such as those required under the Strategic Arms Reduction Treaty of 2002 (Treaty of Moscow), irreversible and verifiable** (see pp. 134–149). As described more fully under obligation 6 and in "Implementing the Three-State Solution," page 45, India, Pakistan, and Israel should accept similar obligations.

The core bargain of the NPT, and of global nonproliferation politics, can neither be ignored nor wished away. It underpins the international security system and shapes the expectations of citizens and leaders around the world. On the other hand, it remains unclear whether thousands of nuclear weapons and uncounted thousands of tons of fissile materials can be verifiably decommissioned and secured in ways that would make the world safer and more stable. Only the United Kingdom has begun to analyze the steps that would be necessary to achieve mutual and verifiable nuclear disarmament.[12] The United States and all other states with nuclear weapons should go further and **produce a detailed road map of the technical and institutional steps they would have to take to verifiably eliminate their nuclear arsenals.** By defining the level of transparency and accounting accuracy necessary to verify elimination of all nuclear weapons, this process would begin to illuminate whether total disarmament is actually feasible, and if it is not, what alternative actions would fulfill the nuclear weapon states' obligations under the NPT (see p. 154).

OBLIGATION THREE: Secure All Nuclear Materials. All states must maintain robust standards for securing, monitoring, and accounting for all fissile materials in any form. Such mechanisms are necessary both to prevent nuclear terrorism and to create the potential for secure nuclear disarmament.

Acquiring nuclear materials—whether by making, buying, or stealing them—is the single most difficult step for terrorists, as it is for states seeking nuclear weapons. Therefore, the security of nuclear stockpiles—wherever they are—is as vital an element of defense as any weapons system. The United States should therefore encourage formation of a high-level **"Contact Group to Prevent Nuclear Terrorism" to establish a new global standard for protecting weapons, materials, and facilities.** All members would be pressed to uphold these standards and arrange for assistance to those that need technical or financial help to achieve them. In addition, **the United States, Russia, and their partners should vigorously identify, secure, and remove nuclear materials from all vulnerable sites within four years**—an accelerated "Global Cleanout" (see pp. 87–89).

OBLIGATION FOUR: Stop Illegal Transfers. States must establish enforceable prohibitions against efforts by individuals, corporations, and states to assist others in secretly acquiring the technology, material, and know-how needed to develop nuclear weapons.

Nonproliferation norms and rules must be universal—applying equally to nonstate actors and to all states. The Security Council took a vital step in this direction by passing Resolution 1540 in April 2004. **All states should now establish and enforce national legislation to secure nuclear materials, strengthen export controls, and criminalize illicit trade, as this resolution requires.** Because Resolution 1540's obligations are framed under Chapter VII of the UN Charter, they are obligatory and warrant all necessary means to ensure compliance (see pp. 116–118).

To help enforce the laws adopted under the resolution, nations need to strengthen international mechanisms to guide exchanges

of sensitive equipment, material, and know-how. **The IAEA's Additional Protocol should be mandatory for all states, and the members of the Nuclear Suppliers Group should make it a condition of supply to all their transfers** (see p. 120). All states should work to provide international inspection regimes with a strong mandate and sufficient budgets and resources, and should strive to build the will to punish noncompliance. Members of the **Nuclear Suppliers Group should expand their voluntary data sharing with the IAEA and make it obligatory for transfer of all controlled items** (see pp. 119–120). Undeclared exchanges would then be illegal on their face, while declared exchanges would be conducted under existing export control and customs regulations. **Going further, corporations should back up these policies with voluntary actions to block trade, loan, and investment activity with those illegally seeking nuclear capabilities** (see p. 57). **The Proliferation Security Initiative should be grounded in international law and widened** to cover international waterways and airspace, as do international agreements on piracy, hijacking, and slavery (see p. 124).

OBLIGATION FIVE: Commit to Conflict Resolution. States that possess nuclear weapons must use their leadership to resolve regional conflicts that compel or excuse some states' pursuit of security by means of nuclear, biological, or chemical weapons.

Because the use of nuclear weapons could result in staggering casualties and global disorder, states that possess these weapons—including India, Pakistan, Israel, and possibly North Korea—have a special obligation to ensure that they are not used and do not spread. **The major powers must concentrate their diplomatic influence on diffusing the conflicts that underlie these**

and possibly other nations' determination to possess nuclear weapons. These conflicts are triggers of potential nuclear use (see p. 132).

Separate sections of this report detail the urgent steps required to address nuclear threats in the Middle East, South Asia, and Northeast Asia. However, it must be emphasized that preventing the use of nuclear weapons and reversing proliferation in these regions is not just a nonproliferation challenge. Arms control experts, nonproliferation inspectors, and nuclear scientists cannot solve these problems; national leaders must devote their energies and resources to resolving key regional security dilemmas and supporting the political reforms necessary to remove the perceived need for nuclear weapons. Averting a nuclear and missile arms race between India and Pakistan, for example, requires progress in normalizing these two states' overall relationship, particularly concerning Kashmir. Achieving a zone free of weapons of mass destruction in the Middle East will require normalization of relations between Israel and other regional states and entities, which in turn will require a cessation of terrorism and a just settlement of the Israeli-Palestinian conflict (see pp. 159–190).

OBLIGATION SIX: Solve the Three-State Problem. The unrealistic demand that India, Israel, and Pakistan (which never signed the NPT, and hence did not violate it in acquiring nuclear weapons) give up their weapons and join the NPT as non-nuclear states should be put aside. Instead, a policy should be pursued that focuses on persuading these three states to accept the same nonproliferation obligations accepted by the weapon state signatories. The three states should not be rewarded with trade in nuclear power reactors, but should receive cooperation to strengthen nuclear material security and reactor safety.

The universal compliance strategy offers a constructive way out of the dilemma posed by the anomalous nonproliferation status of India, Pakistan, and Israel—the so-called three-state problem. India and Pakistan have demonstrated their possession of nuclear weapons. They are now pressing for the removal of technology embargoes applied to them as sanction for crossing the nuclear threshold. Israel does not confirm or deny its nuclear status, but its widely recognized possession of nuclear weapons causes turmoil within the nonproliferation regime. Yet each of these states has committed itself to preventing further proliferation. As a result, for many years supporters of nonproliferation have been suspended between the unrealistic hope that these countries will reverse their nuclear status and the unappetizing prospect of accepting them as new full-fledged nuclear weapon states in order to bring them into the nonproliferation regime. The result has been little movement in either direction.

Under the universal compliance strategy, the United States and others would end this state of suspension by **dropping the demand that India, Israel, and Pakistan give up their nuclear weapons absent durable peace in their respective regions and progress toward global disarmament.** Diplomacy would focus instead on **persuading the three states to accept all of the nonproliferation obligations** accepted by the five original nuclear weapon states, which they are not now committed to do.[13] The three states would agree, for example, to follow the highest global standards for preventing proliferation exports and securing nuclear weapons and materials, to reduce the role of nuclear weapons in their national security policies, and to eschew nuclear testing. If they failed to comply, they would be subject to the same sorts of sanctions and political pressures that others—including

China and Russia—have faced over their past transgressions of nonproliferation rules.

The goal of persuading India, Israel, and Pakistan to abandon nuclear weapons would not be dropped; rather these three states would be expected to eliminate their nuclear arsenals as and when the United States, China, France, Russia, and the United Kingdom eliminate theirs. This formulation recognizes the reality that Pakistan will not give up its weapons if India does not do the same, that India will not disarm if China does not, and that China will not if the United States and Russia do not. The challenges of nonproliferation and nuclear disarmament are linked; the energy devoted to pressing India, Israel, and Pakistan to disarm as a subgroup will not yield results absent major progress by the established nuclear weapon states in creating the conditions for eliminating their own nuclear arsenals (see below and pp. 159–169).

The present strategy document has been written by an American-based organization, so many recommendations highlight steps the United States should take. Yet many policy recommendations here emphasize Security Council actions, and still more highlight the specific steps that the other nuclear weapon states—Russia, China, the United Kingdom, and France—should take. The universal compliance strategy acknowledges, for example, that the imbalance of power between Russia and the United States drives Russian policy makers to increase reliance on nuclear weapons. Working with the United States and other partners, Russia should devise ways to reverse this trend. Another step critical to international success is for China to overcome its reluctance to use the Security Council as an enforcer of international nonproliferation rules, even at the risk of setting a

precedent that could limit Beijing's freedom of action in other spheres. The members of the EU also have a greater-than-average responsibility to back up their rhetorically admirable nonproliferation strategy with deeds, especially a willingness to use force when diplomacy fails.

All countries with manufacturers or distributors of technology useful in producing nuclear weapons must contribute energetically to measures recommended here to block transfers of technology, material, and know-how for nuclear weapons. As important members of the international community, India, Israel, and Pakistan are not absolved of responsibility to protect against proliferation, and this strategy document suggests many ways in which these three countries can do more. In short, the policies recommended here are *international,* reflecting both the security interests and the responsibilities of a large number of states whose vigilance will determine whether or not the world experiences the horror of nuclear conflagration.

IMPLEMENTING THE THREE-STATE SOLUTION

Dealing with the reality that India, Israel, and Pakistan possess nuclear weapons does not mean rewarding these three states with new nuclear reactors, as India and, more recently, Pakistan have sought. The United States and others would continue to observe the Nuclear Suppliers Group agreement of 1992 barring reactor sales to recipients operating nuclear facilities that are not under international safeguards.[a] This restriction on nuclear

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commerce is not a punishment, but a necessary means of upholding the incentives that reward other states for complying with their obligation not to acquire nuclear weapons.

While India, Pakistan, and Israel will not find it easy to embrace the universal compliance strategy, it enables the three states to contribute constructively to international security without accepting obligations greater or less than those borne by the original nuclear weapon states. In return for explicitly shouldering the obligations of responsible international citizenship, India, Pakistan, and Israel would gain relief from unproductive, ritualistic hectoring or possible coercion to eliminate their nuclear arsenals before others do. And by providing these three states the opportunity to become members of the regime rather than outsiders, the arrangement offers them the chance to become leaders of the international effort and to help steer its future course.

In discussions of the draft of this strategy, some experts in India, Israel, and Pakistan argued that their states should receive additional formal benefits in return for the nonproliferation commitments they would make. Indians, particularly, argued that UN Security Council Resolution 1172, which was passed in June 1998 following the Indian and Pakistani nuclear tests, should be withdrawn. This resolution condemned the South Asian nuclear tests and, among other things, urged "India and Pakistan, and all other States that have not yet done so," to sign the NPT. Some commentators in Egypt, Germany, and other states without nuclear weapons pointedly argued against

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any formal slackening of pressure on India, Israel, and Pakistan to sign the NPT as non–nuclear-weapon states.

On balance, the most realistically constructive option may be to fashion a new, superseding Security Council resolution that would formally welcome explicit commitments by the three states to forgo nuclear explosive tests, to implement and enforce comprehensive national laws barring sensitive exports, to adopt state-of-the art technologies and practices to secure all nuclear materials, to participate constructively in Conference on Disarmament negotiations to ban production of fissile material for nuclear weapons or other nuclear explosive purposes, to refrain from increasing the declared and undeclared role of nuclear weapons in their national security policies, and to commit to the peaceful resolution of conflicts. Each of these policies is called for in Security Council Resolution 1172; a new resolution's binding of the three states to these obligations would be a significant enough gain for international security to warrant agreement that it supersedes Resolution 1172, whose more ambitious aim is highly unlikely to be achieved.[b]

India may want additional benefits, but this desire flows from an anachronistic belief that the world somehow owes something to states with nuclear weapons. Today, obligations flow the other way. States possessing nuclear weapons should be judged by their contribution to the global interest in preventing the spread and use of these devices. The way for India to gain a larger international role is to demonstrate its commitment to strengthen international norms and rules preventing the spread

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and possible use of nuclear weapons, for example, by adhering fully to all Nuclear Suppliers Group guidelines, as Israel does. India would bolster its case for international leadership by providing global public goods in this manner, rather than withholding them in order to negotiate what many others would see as a weakening of nonproliferation rules. For its part, Pakistan should recognize that its egregious failure to prevent the immense harm done by the commercial nuclear network of A. Q. Khan creates a debt to the international community that can only be repaid by unconditioned compliance with the strongest nonproliferation practices (including full cooperation in eradicating that network).

Global citizenship should help impel India, Israel, and Pakistan to adopt the most stringent nonproliferation policies and practices, including participation in a contact group to establish state-of-the-art security over nuclear materials as discussed in chapter 4. A similar recognition of interdependence should motivate the rest of the world to drop barriers to assisting India, Israel, and Pakistan to ensure safe operation of their nuclear facilities. As the three adopt the nonproliferation policies advocated here and put all of their civilian nuclear facilities under safeguards, the Nuclear Suppliers Group should remove restrictions on transferring equipment that these states need in order to bring safeguarded nuclear plants up to the highest safety standards. This should include "trigger list" technology if necessary. The U.S. Congress and nonproliferation agencies have opposed taking this step. This resistance has extended to the

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Nuclear Suppliers Group, with the result that safety cooperation with these nonparties to the NPT has largely been limited to lectures on best practices.

All care must be taken to ensure that transferred equipment does not augment these counties' military capabilities. But, the "principle" of withholding cooperation in nuclear safety to punish a state for not forswearing nuclear weapons is morally hollow and practically dangerous. As Chernobyl showed, unsafe operation of nuclear facilities can threaten long-term human and environmental health on a massive scale. There is obviously a global interest in preventing nuclear accidents. Nor will withholding safety cooperation motivate a state to reverse its nuclear policies. All it does is make innocent people more vulnerable to nuclear calamity than they need to be. At the same time, the three states must accept that some old nuclear facilities cannot be made sufficiently safe even with international assistance. The same imperative to protect long-term human and environmental health requires that these reactors be shut down.

Notes

a Were these states to dismantle uranium enrichment and plutonium reprocessing facilities, and place all nuclear reactors under international safeguards, international cooperation in supplying power reactors and fuel cycle services would make sense from a global security standpoint.

b India, Israel, and Pakistan are not the only states practically unlikely to fulfill all of the objectives recommended in Resolution 1172, which include a call for "the five nuclear-weapon States to fulfill their commitments relating to nuclear disarmament under Article VI" of the NPT.