

# U.S. NONPROLIFERATION POLICY AFTER IRAQ

---

---

HEARING  
BEFORE THE  
COMMITTEE ON  
INTERNATIONAL RELATIONS  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED EIGHTH CONGRESS  
FIRST SESSION

—————  
JUNE 4, 2003  
—————

**Serial No. 108-38**  
—————

Printed for the use of the Committee on International Relations



Available via the World Wide Web: [http://www.house.gov/international\\_relations](http://www.house.gov/international_relations)

—————  
U.S. GOVERNMENT PRINTING OFFICE

87-494PDF

WASHINGTON : 2003

---

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Internet: [bookstore.gpo.gov](http://bookstore.gpo.gov) Phone: toll free (866) 512-1800; DC area (202) 512-1800  
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

COMMITTEE ON INTERNATIONAL RELATIONS

HENRY J. HYDE, Illinois, *Chairman*

JAMES A. LEACH, Iowa  
DOUG BEREUTER, Nebraska  
CHRISTOPHER H. SMITH, New Jersey,  
*Vice Chairman*  
DAN BURTON, Indiana  
ELTON GALLEGLY, California  
ILEANA ROS-LEHTINEN, Florida  
CASS BALENGER, North Carolina  
DANA ROHRABACHER, California  
EDWARD R. ROYCE, California  
PETER T. KING, New York  
STEVE CHABOT, Ohio  
AMO HOUGHTON, New York  
JOHN M. McHUGH, New York  
THOMAS G. TANCREDO, Colorado  
RON PAUL, Texas  
NICK SMITH, Michigan  
JOSEPH R. PITTS, Pennsylvania  
JEFF FLAKE, Arizona  
JO ANN DAVIS, Virginia  
MARK GREEN, Wisconsin  
JERRY WELLER, Illinois  
MIKE PENCE, Indiana  
THADDEUS G. McCOTTER, Michigan  
WILLIAM J. JANKLOW, South Dakota  
KATHERINE HARRIS, Florida

TOM LANTOS, California  
HOWARD L. BERMAN, California  
GARY L. ACKERMAN, New York  
ENI F.H. FALEOMAVAEGA, American  
Samoa  
DONALD M. PAYNE, New Jersey  
ROBERT MENENDEZ, New Jersey  
SHERROD BROWN, Ohio  
BRAD SHERMAN, California  
ROBERT WEXLER, Florida  
ELIOT L. ENGEL, New York  
WILLIAM D. DELAHUNT, Massachusetts  
GREGORY W. MEEKS, New York  
BARBARA LEE, California  
JOSEPH CROWLEY, New York  
JOSEPH M. HOEFFEL, Pennsylvania  
EARL BLUMENAUER, Oregon  
SHELLEY BERKLEY, Nevada  
GRACE F. NAPOLITANO, California  
ADAM B. SCHIFF, California  
DIANE E. WATSON, California  
ADAM SMITH, Washington  
BETTY MCCOLLUM, Minnesota  
CHRIS BELL, Texas

THOMAS E. MOONEY, SR., *Staff Director/General Counsel*

ROBERT R. KING, *Democratic Staff Director*

DOUG SEAY, *Professional Staff Member*

LIBERTY DUNN, *Staff Associate*

# CONTENTS

	Page
WITNESSES	
Henry D. Sokolski, Executive Director, The Nonproliferation Policy Education Center .....	4
Fred C. Iklé, Ph.D., Distinguished Scholar, The Center for Strategic and International Studies .....	19
George Perkovich, Vice President for Studies, Carnegie Endowment for International Peace .....	22
Alan Zelicoff, Ph.D., Senior Scientist, Center for National Security and Arms Control, Sandia National Laboratories .....	32
The Honorable John R. Bolton, Under Secretary for Arms Control and International Security, U.S. Department of State .....	45
LETTERS, STATEMENTS, ETC., SUBMITTED FOR THE HEARING	
Henry D. Sokolski: Prepared statement and additional materials submitted for the record .....	6
Fred C. Iklé, Ph.D.: Prepared statement .....	21
George Perkovich: Prepared statement .....	24
Alan Zelicoff, Ph.D.: Prepared statement .....	34
The Honorable John R. Bolton: Prepared statement .....	49
APPENDIX	
The Honorable Nick Smith, a Representative in Congress from the State of Michigan: Prepared statement .....	83
The Honorable Diane E. Watson, a Representative in Congress from the State of California: Prepared statement .....	83
Questions for the Record Submitted to the Honorable John R. Bolton by the Honorable Betty McCollum, a Representative in Congress from the State of Minnesota, and Mr. Bolton's Responses .....	84



## U.S. NONPROLIFERATION POLICY AFTER IRAQ

---

WEDNESDAY, JUNE 4, 2003

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON INTERNATIONAL RELATIONS,  
*Washington, DC.*

The Committee met, pursuant to call, at 10:34 a.m. in Room 2172, Rayburn House Office Building, Hon. Henry Hyde (Chairman of the Committee) presiding.

Mr. BEREUTER. [Presiding.] The Committee will come to order.

The subject of today's hearing, U.S. nonproliferation policy after Iraq, is one of transcendent importance. It demands our attention. The prospect of rogue states or terrorists in possession of weapons of mass destruction (WMD) is a terrifying one. There can be no acceptable margin of error in our effort to protect ourselves from this mortal threat, for the measure of our inadequacy will be unprecedented devastation.

I will not attempt to list the many problems and tasks we face as even a lengthy treatment would not begin to exhaust the subject. However, let me offer a few important questions.

How could we combat the fact that many of these weapons are extraordinarily easy to make and to transport? How does one persuade or compel a country to cease its activities, especially if it already possesses the means to proceed on its own? How can one prevent the further spread of the knowledge and technical capacity to produce WMD when this information seems to be so readily available? Must the United States take up this challenge alone? Can we do it alone?

I am hopeful that this hearing will shed some light on these important issues. The unbounded nature of the threat evokes Churchill's words on his assumption of office at Britain's darkest moment. He said,

"You asked what is our aim? I can answer in one word. It is victory, victory at all cost, victory in spite of all terrorists. Victory however long and hard the road may be for without victory there is no survival."

For us, however, there can be no final victory. We must divest ourselves of all illusions. We cannot uninvent these weapons nor erase the knowledge that makes the impossible. Therefore, we must accept the fact that the WMD threat will probably be us forever. Our vigilance and our commitment must also therefore be enduring.

Today we are fortunate in having the opportunity to hear from an impressive array of witnesses with relevant expertise. As per the Committee's standard practice, I would ask the panelists to limit their opening statements to 6 minutes if they can. Their written statements will also be a part of the record of the hearing. I believe it would be more efficient if the panelists were allowed to give their opening statements in succession, after which the Members can pose questions to any or all of the witnesses. We can then begin a more productive discussion.

Although questions may be directed to individual panelists, I would encourage each of the witnesses to add any comments that they believe to be appropriate to the person asked to respond.

We will hear from Under Secretary Bolton following the initial panel, and I will introduce these panelists here shortly, but first of all, I would like to turn to the Ranking Minority Member, the distinguished gentleman from California, Mr. Lantos, for such opening statement as he may have.

Mr. LANTOS. Thank you very much, Mr. Chairman.

We meet today on the heels of our spectacular victory in the war against Iraq. The impact of this victory will be felt for generations. Among other important effects, it represents a major event in the prevention of the proliferation of weapons of mass destruction, whatever WMD may or may not be found.

By destroying Saddam's vicious regime, we sent a clear signal that would be proliferators that we are prepared to use force whenever necessary.

There is absolutely no doubt that the Iraqi dictator was hell bent on developing chemical, biological and nuclear arms. But regardless of the evidence we find, and we have already found some, no one should question the real threat Saddam posed to our national security and to the civilized world.

As the historic record clearly show, Saddam had the intention and the capability to wield weapons of mass destruction, and he used them against Iran and he used them against his own people. And as far as the U.N. inspection process is concerned, he lied repeatedly and never accounted for known stocks of WMD.

Had we not acted, sooner or later he would have deployed them. On those grounds alone our actions are not only justified, they were mandatory.

The proliferation of weapons of mass destruction and the means of delivering them are indeed a clear and present danger to our national security. Rogue states, including many state sponsors of terrorism, are swapping technology and materials to produce nuclear, chemical and biological weapons.

North Korea is the world's premier proliferator, exporting missiles to fellow rogue states, such as Iran, which is now under the cusp of joining the nuclear club.

Globalization has accelerated this trend as sophisticated dual-use research, technology and manufacturing knowledge leaks to rogue states, assisting them in developing weapons of mass destructions and the means of delivering them. Foreign supply dual-use equipment was critical to Saddam Hussein's nuclear, chemical and biological programs prior to the 1991 Gulf War, and I have no doubt

that dual-use equipment bought on the international black market was critical to Saddam's subsequent WMD rearmament efforts.

In countering this growing threat, Mr. Chairman, I am afraid we are woefully unprepared. Although we have the military means of disarming potential proliferating states, as our victory in Iraq clearly shows, we cannot rely on armed force alone. A stronger international legal framework for preventing and punishing proliferation is urgently needed.

Our current legal framework is riddled with gaps and lacks enforcement mechanism. Its shortcomings became abundantly and embarrassingly clear last December during an absurd incident involving a North Korean shipment of scud missile parts to Yemen.

As you will recall, at the Administration's urging our Spanish allies courageously stormed the North Korean vessel on the high seas, and seized its deadly cargo, only to release it and the scuds to Yemen a day later, again at our request. Why one must ask. The North Koreans, according to the White House, were doing nothing illegal.

This is an outrage, Mr. Chairman, but one this Committee has begun to address.

In the wake of that December debacle, I introduced the Missile Threats Reduction Act, which you co-sponsored, and I agreed to include it in the State Department authorization bill approved by this Committee last month. Our legislation declares, it declares it to be the policy of the United States to seek multilateral authority to stop the trade in destabilizing offensive ballistic missiles. Our legislation urges the President to seek a U.N. Security Council resolution prohibiting any missile trade with North Korea in particular, and authorizing the interdiction of North Korean vessels carrying such cargo. These measures would go a long way toward filling the gap.

The United States currently imposes stringent export controls, but few other nations have control systems of similar scope.

To this day, some of our so-called allies even refuse to see that Iran is becoming a nuclear threat, and they continue to export dual-use equipment to Iran, aiding and abetting the ayatollahs' WMD and missile programs.

I am pleased to learn that the Administration shares our concerns, and has followed our lead in calling for change. Earlier this week the President announced a new proliferation security initiative which apparently seeks the same multilateral authority to stop proliferation of all types of weapons of mass destruction as we propose for the illicit missile trade.

The Administration has yet to share the details of this initiative with Congress, and I hope that Under Secretary Bolton will do so today.

I invite the Administration to work with us in ensuring the State Department authorization bill due to be debated on the House Floor later this month reflects our shared nonproliferation priorities.

Mr. Chairman, we achieved a major victory for the cause of non-proliferation in defeating the Iraqi regime of Saddam Hussein. Let us now secure this victory by strengthening the international legal

framework for confronting the continuing weapons proliferation threats.

Thank you very much.

Mr. BEREUTER. Thank you very much, Mr. Lantos, for your statement and for your initiative, which I was pleased to join you in.

All Members' opening statements will be made a part of the record.

I would like to proceed to our witnesses so we do have adequate time for questions before Secretary Bolton joins us. I am going to introduce the panelists successively just before their testimony.

So, first, I would like to welcome Henry D. Sokolski, the Executive Director of The Nonproliferation Policy Education Center, a nonprofit organization founded in 1994 to promote the better understanding of strategic weapons proliferation issues for academics, policymakers and media.

Mr. Sokolski previously served as Deputy for Nonproliferation Policy in the Office of Secretary of Defense from 1989 to 1993. Prior to this employment, he worked in the Secretary's office of net assessments on proliferation issues, and he has served as a military aide or special assistant to U.S. Senators.

Mr. Sokolski, you are free to proceed as you wish.

**STATEMENT OF HENRY D. SOKOLSKI, EXECUTIVE DIRECTOR,  
THE NONPROLIFERATION POLICY EDUCATION CENTER**

Mr. SOKOLSKI. Mr. Chairman.

Mr. BEREUTER. As the time keeper, I said 6 minutes, not 5, so adjust the clock please.

Mr. SOKOLSKI. Mr. Chairman, I want to thank you and your Committee for inviting me here to testify. My general message today is this: Against the world's Irans and North Koreas, we will not only have to develop country-specific strategies—such as cutting off North Korean military's access to illicit flows of hard currency and building regional security arrangements to hedge against Tehran going nuclear—but we will also need to establish new, enforceable country-neutral rules and policies.

Which rules need pushing? Those required to fill the most disturbing loopholes in our current nonproliferation efforts. President Bush highlighted some of these gaps in his proposal last week to work with other nations to interdict weapons of mass destruction.

North Korea recently threatened to export its nuclear arms. Yet, because Pyongyang withdrew from the Nuclear Nonproliferation Treaty, or the NPT, it is now free to export its nuclear capabilities legally.

If North Korea or Pakistan redeployed some of their nuclear weapons to another NPT member's soil claiming these weapons were still under their control, the NPT member recipient, let's say a Libya or a Saudi Arabia, could actually take delivery, just as Germany did from the United States during the Cold War, without—I repeat—without violating any rule.

Then there is the problem of Iran. My center recently released a study—I hope to place some items into the record with the consent of the Committee—that determined that in less than 3 years Tehran will have all the peaceful nuclear material it needs to breakout with scores of nuclear arms in a matter of weeks.

Iran acquired most of this nuclear capability covertly, and, yet, was able to do so, for the most part, without violating the NPT. Now other nations, like Syria and Egypt, see Iran as a possible model for legally acquiring a nuclear weapons option of their own. Any nation, including China, Russia, India, Pakistan, Israel, North Korea, Iraq or Iran, can export many items critical to make weapons of mass destruction again without violating any international law.

Trying to close these loopholes country by country, I fear, will be a prescription for failure. We know determined proliferators will cheat or refuse to cooperate, after all. That is why an enforceable common international usage against trafficking in weapons of mass destructions needs to be created like that already in effect against piracy and slave trading.

Any nation's attempt to redeploy chemical, nuclear, or biological warheads outside of their borders or to ship the key means to make them should be deprived of the protection of international law. In short, they should be declared outlaws. This would allow any nation, and particularly the United States and its allies, to search or seize the illicit freight of violators with or without their consent, wherever they might be, including, and I emphasize, including the high seas.

How? The key ingredients needed to make strategic weapons are already internationally recognized. The International Atomic Energy Agency, or IAEA, lists all special nuclear materials. The Australia Group catalogs key chemical and biological weapons-related items. The Nuclear Suppliers Group identifies critical dual-use nuclear gear and prohibits the export of enrichment and reprocessing plants, and the Missile Technology Control Regime does much the same for cruise and ballistic missiles.

Meanwhile, U.S. law—and this is something most people do not know—currently requires American businesses to preannounce most of these exports publicly. Several friendly nations have similar laws. These practices should help in creating the international common usage that is required.

As the President suggested in its Krakow speech May 31, the best way to get started is to work with like-minded nations. What should be considered?

First, no nation should be allowed any longer in peacetime to redeploy nuclear, chemical or biological weapons outside of their borders. Any move violating this rule should be subject to interdiction.

Second, all nations ought, at a minimum, to give prior public notification of their export of the nuclear, chemical or biological weapons-related items noted above. Any transfer that is not preannounced or that is improperly posted, again, should be subject to interdiction.

Finally, if there is support for strong action, and I hope there is, exports made outside of the procedures of the IAEA, Australia Group, Nuclear Suppliers Group and, perhaps, the MTCR might be banned and targeted for interdiction.

Assuming agreement is reached on one or more of these rules, the U.S. or a like-minded nation should submit them to the U.N. Security Council for adoption. It should be made clear, however, that if any nation learns of an export that violates the proposed

rules before the U.N. chooses to put the proposal to a vote, that nation should try to block the export or at least pass on the information to nations that can act.

What other new rules or policies would be helpful? At least three.

First, the United States and its friends should announce that states that withdraw from the NPT have no right to the atomic technology they have accumulated since they acquired it under the false pretence of it being dedicated to peaceful purposes. This is immediately relevant to the North Korean and Iran cases, and in the long run to any of their possible imitators.

Second, the U.S. should restrain its own nuclear transfers. We can hardly complain about Iran's power reactors, if we continue, as we are, supporting construction of nearly identical U.S. machines for Pyongyang, an NPT violator. Nor should Congress fund the Energy Department's request this year to share uneconomical breeder reactor and fuel recycling technology—all useful to master weapons plutonium production—with states that only recently renounced their own nuclear weapons themselves.

Finally, the U.S. should reconsider the wisdom of disposing of nearly 68 tons—that is 17,000 crude bombs worth—of U.S. and Russian weapons-grade plutonium by fabricating it into what is called mixed oxide fuel for use in civilian reactors.

If we begin building the multi-billion dollar fuel plants needed here and in Russia to implement this plan, and there is money in this budget now to do that, U.S. efforts to discourage commercialization of nuclear weapons usable fuels will be undermined. Global transport, fabrication, and use of hundreds of tons—that is tens of thousands of crude weapons worth of already separated civilian plutonium, which is almost impossible to keep track of to guard against theft—will likely follow.

Recent legislative efforts to allow weapons-grade uranium to fuel research reactor applications raise similar policy questions and should be blocked.

These are the most important points I would like to raise. I will be happy to discuss what else we should be doing to check proliferation in places like Iran and North Korea during the question and answer period.

Thank you very much.

[The prepared statement and additional materials submitted for the record by Mr. Sokolski follow:]

PREPARED STATEMENT OF HENRY D. SOKOLSKI, EXECUTIVE DIRECTOR, THE  
NONPROLIFERATION POLICY EDUCATION CENTER

U.S. NONPROLIFERATION AFTER IRAQ: TOWARD MORE ENFORCEABLE RULES

Mr. Chairman I want to thank you and your committee for inviting me to testify. My general message is this: Against the world's Irans and North Koreas, we will not only have to develop country-specific strategies—such as cutting off the North Korean military's access to illicit flows of hard currency and building regional security arrangements to hedge against Tehran going nuclear—but new, enforceable country-neutral rules and policies.

Which rules need pushing? Those required to fill the most disturbing loopholes in our current nonproliferation efforts. President Bush highlighted some of these gaps in his proposal last week to work with other nations to interdict weapons of mass destruction. North Korea recently threatened to export its nuclear arms. Yet, because Pyongyang withdrew from the Nuclear Nonproliferation Treaty (NPT), it is now free to export its nuclear capabilities legally. If North Korea or Pakistan rede-

ployed some of their nuclear weapons to another NPT member's soil claiming these weapons were still under their control, the NPT recipient—a Libya or a Saudi Arabia—could actually take delivery (just as Germany did from the U.S.), without violating any rules.

Then, there is the problem of Iran. My center recently released a study that determined that in less than three years Tehran will have all the peaceful nuclear material it needs to breakout with scores of nuclear arms in a matter of weeks. Iran acquired most of its nuclear capabilities covertly, and, yet, was able to do so, for the most part, without violating the NPT. Now, other nations, like Syria and Egypt, see Iran as a possible model for legally acquiring a nuclear option of their own. Any nation, including Russia, China, India, Pakistan, Israel, North Korea, Iraq or Iran, can export many items critical to make weapons of mass destruction without violating any international law.

Trying to close these loopholes country by country is a prescription for failure. We know determined proliferators will cheat or refuse to cooperate. That's why an enforceable common international usage against trafficking in weapons of mass destruction needs to be created like that already in effect against piracy and slave trading. Any nation's attempt to redeploy chemical, nuclear or biological warheads outside their borders or to ship the key means to make them should be deprived the protection of international law. This would allow us to search or seize the illicit freight of violators with or without their consent, wherever they might be, including the high seas.

How? The key ingredients needed to make strategic weapons are already internationally recognized. The International Atomic Energy Agency (IAEA) lists all special nuclear materials. The Australia Group catalogs key chemical and biological weapons related items. The Nuclear Suppliers Group identifies critical dual-use nuclear gear and prohibits the export of enrichment and reprocessing plants and the Missile Technology Control Regime (MTCR) does the same for cruise and ballistic missiles. Meanwhile, U.S. law currently requires American businesses to preannounce most of these exports publicly. Several friendly nations have similar laws. These practices should help in creating the international common usage that's required.

As the President suggested in his Krakow speech May 31st, the best way to get started is to work with like-minded nations. What should be considered? First, no nation should be allowed any longer in peacetime to redeploy nuclear, chemical or biological weapons outside their borders. Any move violating this rule should be subject to interdiction. Second, all nations ought, at a minimum, to give prior public notification of their export of the nuclear, chemical or biological weapons-related items noted above. Any transfer that is not preannounced or that is improperly posted, again, should be subject to interdiction. Finally, if there is support for strong action, exports made outside the procedures of the IAEA, Australia Group, Nuclear Suppliers Group and (perhaps) the MTCR might be banned and targeted for interdiction.

Assuming agreement is reached on one or more of these rules, the U.S. or a like-minded nation should submit them to U.N. Security Council for adoption. It should be made clear, however, that if any nation learns of an export that violates the proposed rules before the UN puts the proposal to a vote, it should try to block the export or pass the information it has on to a nation that can.

What other new rules or policies would be helpful? At least three. First, the U.S. and its friends should announce that states that withdraw from the NPT have no right to the atomic technology they have accumulated since they acquired it under the false pretense of it being dedicated to peaceful purposes. This is immediately relevant to North Korea and Iran and, in the longer term, to possible imitators.

Second, the U.S. should restrain its own nuclear transfers. We can hardly complain about Iran's power reactors, if we continue to support construction of nearly identical U.S. machines for Pyongyang, an NPT violator. Nor should Congress fund the Energy Department's request to share uneconomical breeder reactor and fuel recycling technology—all useful to master weapons plutonium production—with states that only recently renounced their own nuclear weapons programs.

Finally, the U.S. should reconsider the wisdom of disposing of nearly 68 tons (17,000 bombs worth) of US and Russian weapons-grade plutonium by fabricating it into mixed oxide fuel for use in civilian power reactors. If we begin building the multi-billion dollar fuel plants needed here and in Russia to implement this plan, U.S. efforts to discourage commercialization of nuclear weapons usable fuels will be undermined. Global transport, fabrication, and use of *hundreds* of tons of already separated civilian plutonium—almost impossible to keep track of to guard against theft—will likely follow. Recent legislative efforts to allow weapons grade uranium

to fuel research reactor applications raise similar policy questions and should also be blocked.

These are the most important points. I will be happy to discuss what else we should be doing to check proliferation in places like Iran and North Korea during the question and answer period.

---

IRAN: BREAKING OUT WITHOUT QUITE BREAKING THE RULES?

A NONPROLIFERATION POLICY EDUCATION CENTER ANALYSIS

Most analyses of Iran's nuclear program are riveted on Iran's covert efforts and the question of when Iran might get its first bomb. While interesting, this question tends to downplay a much more important point and that is that Iran can come within weeks of acquiring a large arsenal of weapons without breaking the rules of the NPT or IAEA at about the same time or even sooner than when it might get its first covert bomb. In fact, Iran's could get a large arsenal of nuclear weapons—50 to 75 bombs by the end of 2005 or the start of 2006—by operating its LWR at Busheir for 12 to 15 months. It could then chemically separate the plutonium (approximately 300 kgs of 85 percent <sup>239</sup> isotopic content plutonium, i.e., near weapons-grade) from the spent fuel and, then, convert it into metal. Under the Nuclear Nonproliferation Treaty (NPT), all of this is legal. This and the chemical separation of the plutonium from the spent fuel might take a total of 12–16 additional weeks. It also is legal for Iran to make as many implosion devices (sans fissile cores) as it might want and have them on the ready to receive metal plutonium cores. At this point, some time as early as the end of 2005 or the start of 2006, Iran then could break out of the NPT and have a large arsenal of weapons in a matter of days or weeks.

In contrast, if Iran uses its centrifuges to enrich natural uranium to weapons grade, Iran can only make 2 to 6 bombs a year by the middle or end of 2006. Why, then, would Iran bother with building slower bomb material-making centrifuges? First, Iran might be thinking that a bomb's a bomb, and that the more ways it has to make them, the merrier. Second, it also is easier to evade IAEA inspection accounting with the centrifuges than with the LWRs. Third, Tehran may be interested in making plutonium bombs and power and wants to protect its investment by making sure that when and if it kicks out the IAEA inspectors, it will still be able to supply its LWR with fresh fuel to produce more power and bombs.

Finally, fresh LWR fuel, if it is used as fresh feed for the enrichment plant, could (see below) dramatically increase the speed or number of bombs that otherwise could be produced. Of course, Iran may choose to develop covert nuclear capabilities (e.g., a heavy water reactor program) in addition. These covert programs could produce uranium and plutonium bombs more slowly without access to lightly enrich uranium reactor fuel. But the key point is that Iran will soon have the ability to breakout not with one, but a large arsenal's worth of bombs with its declared programs and do so without breaking either the NPT or IAEA rules.

ROUGH ESTIMATES ON IRAN'S PLANNED CENTRIFUGE ENRICHMENT ACTIVITIES

*Kilograms, pounds, and long tons*

1 kg = 2.2 lbs

1000 kg = 2,200 lbs = a long ton

*Number of kgs of Highly Enriched Uranium (HEU) required to make a nominal 20 kiloton-yield weapon*

5 kilograms if there is no wastage and you have a high technology weapons design  
20 kilograms if you have large amount of wastage and a very low-technology weapons design

*Rough Number of Separative Work Units (SWUs) required for a variety of nuclear tasks*

Approximate number of SWUs needed to make 1 kg of HEU = 200

Approximate number of SWUs needed to make a 20-kg HEU bomb = 4,000 SWUs

*Estimated SWU performance of Iranian designed (aka. North Korean and possibly Pakistani modified aluminum) centrifuges*

Reported number of Pakistani centrifuges required to make 100 kgs. HEU/year = 3,000

Number of SWUs needed to produce 100 kgs. of HEU = 20,000 (i.e., 200 swus × 100 kgs of HEU)

SWUs/year/number of Pakistani-type centrifuges = 6.7 SWUs  
 Adjusted SWU performance accounting for Iranian aluminum vice steel centrifuge design = 2–4 SWUs  
*Estimated SWU/Iranian-designed centrifuge requirements to maintain the fueling of a two one-gigawatt Light Water Reactor (i.e., Iran's projected enrichment requirements)*  
 Approximate annual fuel reload requirement for a 1-gigawatt LWR = 20,000 kgs of 3.5 % low enrichment uranium  
 Approximate SWUs needed to meet this requirement = 80,000 SWUs  
 SWUs needed to meet this annual requirement for two one-gigawatt LWRs = 160,000 SWUs  
 Approximate number of Pakistani-type centrifuges needed to meet this requirement = ~ 50,000  
*Centrifuge and related bomb making capacity of planned Iranian centrifuge facilities*  
 Floor space for at least 50,000 centrifuges needed to enrich fuel for two reactors.  
 Possible kgs of HEU/yr from 24,000 Pakistani-type centrifuges = 160,000 SWU/200 SWU per kg HEU = 800 kgs or 40 bombs' worth (assuming 20 kgs per bomb).  
*Enrichment requirements for making a large number of bombs starting with low enrichment uranium as feed for the HEU line*

To give an idea of how much better one can do starting with LEU as feed consider the following: To make 20 kg of HEU (90%) starting with natural uranium takes about  $20 \times 200 = 4,000$  SWU. But starting with 3.5% LEU it can take only a little over 700 SWU if you “skim the cream”—reject the tails at an assay of 2%. In other words, in terms of separative work, the 3.5% material is already most of the way to 90%. The 700 SWUs entail using about 200 Iranian-type centrifuges. This small cascade of machines would take a feed of a little over a ton of the LEU. In this way, by diverting the LEU from two LWR reload of 20 tons—for a total of 40 tons—you could produce nearly 40 bomb quantities of HEU with an input of a little over  $40 \times 700$  SWU, or about 30,000 SWU, which is a lot less than the 160,000 that it takes starting with natural uranium.

---

#### GETTING SANE NONPROLIFERATION

BY HENRY D. SOKOLSKI, EXECUTIVE DIRECTOR, THE NONPROLIFERATION POLICY EDUCATION CENTER

MAY 11–13, 2003—ARLINGTON, VIRGINIA

With America's departure from the Anti-Ballistic Missile Treaty late in 2002, Bush officials have claimed that America has begun to lead the world away from security policies based on mutual assured destruction (MAD). The Administration's decision to deploy a national missile defense system in Alaska certainly is a clear refutation of MAD opposition to such protection. What's less clear, however, is how America's rejection of MAD might impact U.S. nuclear weapons policies beyond missile defense. In specific, it still is unclear how America's plans to stem the spread of nuclear weapons or to use nuclear weapons might be effected by its repudiation of MAD.

#### *MAD and The Nuclear Nonproliferation Treaty*

To an extent not generally appreciated, U.S. and international nonproliferation policies have had a fairly tight relation to MAD. During the Cold War, the most popular view concerning nuclear weapons reflected the MAD view that having a nuclear force capable of killing large numbers of civilians afforded nations basic security against attack. There also was a MAD fear that any attempt by nations to go beyond the finite force levels needed to attack undefended cities would lead to war-prone arms races.

These views certainly were common during the mid 1960s and were quite prevalent among those negotiating the Nuclear Nonproliferation Treaty (NPT). Thus, by the late 1960s, most of those crafting the NPT argued that the real proliferation danger emanated not so much the spread of nuclear weapons to more nations so much as from as the Superpowers' own never ending arms race. This rivalry, these diplomats argued, was even more likely to result in world-wide destruction than

smaller states' "independent manufacture" of nuclear weapons.<sup>1</sup> They agreed that all nations had a *right* to acquire nuclear weapons to defend themselves (not only against possible nuclear neighbors, but as a hedge against the Superpowers if they refused to curb their own nuclear arming). But if "because of higher considerations of the interests of mankind" non-weapons states decided not to exercise this right, they were equally convinced that these states deserved to be compensated.<sup>2</sup>

Under the NPT, this compensation consisted of 1. non-weapons states having an "inalienable right" to acquire all forms nuclear energy technology (Article IV); 2. the demand that the Superpowers engage in good faith negotiations on "effective measures relating to the cessation of the nuclear arms race" (Article VI); and 3. the right of non-weapons states to withdraw from the NPT and develop nuclear weapons "if extraordinary events . . . have jeopardized the[ir] supreme interests (Article X)."

For nearly 30 years, this "grand bargain" was interpreted in a manner that focused greatest attention on the need for the Superpowers to end the arms race—i.e., to stop nuclear innovation through nuclear testing and to reduce the size of their arsenals to levels (a few hundred weapons) no larger than that needed to absorb an attack and yet be able to target other countries' undefended cities. Thus, the NPT's preamble calls for "the cessation of the arms race" and of further nuclear weapons production and testing. The treaty's negotiating record, meanwhile, speaks approvingly of restraints on national missile defenses (later to become the ABM Treaty) and on nuclear missile delivery systems (later to become SALT and START). As such, the various NPT review conferences that have been held on almost an annual basis since the NPT came into force have focused on these issues almost exclusively.

Finally, throughout the last three decades, members of the NPT have pushed for ever freer access to civilian nuclear energy technology. The view here has been almost identical to that voiced at the time of the NPT's signing: So long as a state fore swears exercising its right to acquire nuclear weapons, it should be allowed access to all forms of nuclear technology. This includes the ability to stockpile large quantities of nuclear weapons usable plutonium and highly enriched uranium and even to develop nuclear weapons implosion and gun assembly devices (so long as these don't have nuclear weapons material cores).

All that was required of non-weapons states to engage in these activities, besides signing the NPT, was to afford NPT's nuclear watch dog agency or its equivalent in EURATOM occasional access to monitor declared nuclear facilities to assure that no special nuclear materials was unaccounted for. If a nation's amount of special nuclear material (including even large amounts of nuclear weapons usable material) was what it should be, the IAEA would give them a clean bill of health and protect whatever it knew about the amounts of these nuclear weapons usable materials from being sought or shared.<sup>3</sup> Thus, it was understood that members of the NPT could bring themselves develop a nuclear weapons breakout capability under the treaty. As the U.S. State Department's own Policy Planning Staff explained in an internal study in 1968:

After the NPT, many nations can be expected to take advantage of the terms of the treaty to produce quantities of fissionable material. Plutonium separation plants will be built; fast breeder reactors developed. It is possible that experimentation with conventional explosives that might be relevant to detonating a nuclear bomb core may take place. In this way, various nations will attain a well-developed option on a bomb. A number of nations will be able to detonate

<sup>1</sup> See, e.g., "Statement by the Indian Representative (Trivedi) to the First Committee of the General Assembly: Nonproliferation of Nuclear Weapons, October 31, 1966," in U.S. Arms Control and Disarmament Agency, *Documents on Disarmament, 1966* (Washington, DC: U.S. Government Printing Office, 1966), p. 679.

<sup>2</sup> See, e.g., "Statement by the Brazilian Representative [Azeredo d Silverial] to the Eighteen Nation Disarmament Committee: Draft Nonproliferation Treaty, August 31, 1967," in U.S. Arms Control and Disarmament Agency, *Documents on Disarmament, 1967* (Washington, DC: U.S. Government Printing Office, 1968), p. 370.

<sup>3</sup> See, e.g., "Statement by the Dutch Representative (Eschauzier) to the First Committee of the General Assembly: Nonproliferation of Nuclear Weapons [Extract] , May 6, 1968," in U.S. Arms Control and Disarmament Agency, *Documents on Disarmament, 1968* (Washington, DC: U.S. Government Printing Office, 1969), pp. 295–96 and "Statement by ACDA Director Forster to the First Committee of the General Assembly: Nonproliferation of Nuclear Weapons, November 9, 1966," in U.S. Arms Control and Disarmament Agency, *Documents on Disarmament, 1966* (Washington, DC: U.S. Government Printing Office, 1967), p. 271.

a bomb within a year following withdrawal from the treaty; others may even shorten this period.<sup>4</sup>

Under this interpretation of the NPT, adherence to the treaty required only minimal enforcement or monitoring. The key protection against proliferation, after all, was the willingness of nations to forswear exercising their natural right to acquire nuclear weapons in a legally binding treaty. This also meant that the nonproliferation secured by the treaty was potentially quite fragile.

*The NPT After the Cold War*

Despite these shortcomings, the NPT, until recently, was heralded as a clear success. Following the fall of the Berlin Wall in 1989, achievement of the NPT's ultimate goals actually seemed within reach. South Africa and Ukraine renounced their possession of nuclear weapons and joined the NPT. Similarly, Brazil and Argentina gave up their nuclear weapons programs and became NPT members. In 1995, the NPT, which was up for a 25-year review, was extended indefinitely. Also, Russia and the United States began to reduce their deployment of nuclear weapons systems dramatically. By the year 2001, both had agreed to reduce their strategic nuclear weapons deployments to less than 4,400 weapons whereas at the height of the Cold War both had deployed a total of well over 60,000 strategic and tactical nuclear weapons.

Since the mid-1990s, though, the NPT and its MAD-inspired interpretation began to falter. First, whatever limited utility MAD thinking may have had to describe or channel the Cold War competition between the Soviet and US-led alliances, it was only a tolerable view so long as these two blocks actively kept nations under their influence from acquiring nuclear weapons of their own. During the Cold War, to great extent, this worked. The Soviets kept Eastern Europe from going nuclear and the US and NATO curbed the nuclear ambitions of most of Western Europe and much of Middle East and Asia.

With the end of the Cold War competition, though, nations had a greater incentive to go their own way and MAD and finite deterrence arguments only tended to make this impulse stronger. Indeed, if acquisition of a relatively few nuclear weapons targeted against an adversary's undefended cities was a sure guarantee against being attacked by a neighbor or a larger outside power, why wouldn't most nations choose to go nuclear? In 1998, India and Pakistan's nuclear tests seemed to validate this view. Both nations essentially affirmed that they felt more secure with bombs of their own than they did with any military, political or economic support they might get from others.

Second, after the Cold War several NPT members exploited the generous nuclear compensation that a MAD-inspired view of the NPT required. North Korea, who became a member of the NPT in 1985, managed to secure all the nuclear assistance it needed to generate and separate plutonium for bombs and launch a covert uranium enrichment program. Although it only allowed the IAEA to inspect its facilities in 1992, Pyongyang was able to remain a member of the NPT even after it was found in violation of its safeguards agreement in 1993 and, indeed, even *after* it first claimed it had already withdrawn in early 2003.

Iran, meanwhile, acquired virtually the entire fuel cycle—fuel fabrication plants, uranium enrichment facilities, a large light water reactor, a heavy water production facility (and probably a heavy water reactor and chemical separation plant as well) *without* being found in violation of either the NPT or its IAEA safeguards agreement. The concern now is that Tehran in little more than 30 months could come within weeks of having a nuclear arsenal of 50–75 weapons and still be a member of the NPT in good standing.

Third, after the Cold War, enforcement of the NPT was tested and found wanting. In the case of Iraq, it was only after its defeat in Desert Storm that UN voted to restrict its full access to nuclear energy technology. At no time prior to the war was it ever found in violation of its IAEA safeguards obligations. North Korea, meanwhile, was able to evade the NPT requirement that it permit IAEA inspections of its facilities 18 months after signature and did so for nearly an additional 5 years with no repercussions. Then, when the UN, in 1993, did finally find North Korea to be in violation of its safeguards agreement no action was taken.

Rather than sanction North Korea, the US, its allies, and the UN allowed Pyongyang to evade its NPT obligation to allow IAEA inspectors for yet another decade. The reason was a US-formulated a deal to give North Korea two large, modern

<sup>4</sup>See U.S. Department of State, Policy Planning Council, "After NPT, What?" May 25, 1968, NSF, Box 26, LBJL, as cited in Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), p. 299.

light water reactors in exchange for its *eventual* compliance with its IAEA safeguards agreement. Even after Pyongyang made it clear that it had violated this agreement and withdrew from the NPT, no enforcement action was taken against it. The promised reactors are still being built.

North Korean officials recently suggested that they might export the nuclear weapons they had made to other states. As a state that has withdrawn from the NPT, this would be perfectly legal for North Korea to do. It could even export warheads to an NPT non-weapons state member: So long as the warheads remained under North Korean control—as the U.S. currently maintains control of its nuclear weapons in Germany—no provision of the NPT would be violated.

#### *What's MAD that Remains*

Given this worrisome review of the NPT's current implementation, one only can hope that the popularity of MAD-inspired views of the treaty might finally give way to a safer set of policies. This is conceivable but only if the U.S. and its allies are willing to drop their attachment to MAD thinking and MAD-inspired nonproliferation—steps that will require much more than the U.S. merely backing out of the ABM Treaty.

What else would it require?

*First, the U.S. and its allies would have to further reduce their security reliance on forms of nuclear retaliation that still entail the killing of large numbers of people.* US officials are now openly raising doubts about the deterrent value of our nuclear forces against rouge states and terrorist organizations. Yet, they still claim that retention of 1,700–2,200 nuclear weapons is needed to deter “mature” or “advanced” states (e.g., Russia and China). Use of large numbers of these weapons to target Russia's weapons capabilities, however, could kill several million civilians. How well retaining such an “option” accords with moving away from MAD is unclear.

Also, the threatened use of such weapons is presented publicly as a possible means to deal with smaller, badly behaving states (i.e., those that might threaten use of chemical or biological weapons). U.S. officials are particularly interested in being able to surgically disarm hostile states with nuclear bunker buster warheads. Yet, many command bunkers are located in or near these states' largest cities (e.g., Baghdad, Tehran, etc.) as are a fair number of the weapons of mass destruction storage and production facilities that might be targeted. Attacking these targets could easily entail the slaughter of large numbers of people.

It is not clear what can be done about this. Perhaps non-nuclear technologies, such as kinetic ballistic missile warheads could be developed to put hardened bunkers at risk. Perhaps targets could be selected that would keep potential collateral damage to a minimum or that would obviate the need to destroy the bunkers in question. Perhaps not. What is clear, however, is that relying heavily on nuclear targeting that entails heavy casualties will undermine the credibility of U.S. efforts to move away from MAD and to get other nations to do so as well.

*Second, the U.S. and its allies would have to actively contest the notion that all states have a natural right to acquire nuclear weapons.* Certainly, the notion that if a nation's security is threatened it has a right to break out of the NPT needs to be challenged. If it is not, North Korea's recent accumulation of nuclear technology under false “peaceful” pretenses and its withdrawal from the treaty is sure to be only the first of many such frauds. Any credible challenge to similar abrogations, however, would require the U.S. and its allies to take a much firmer line against states outside the NPT's five recognized nuclear weapons. This would require discipline that has yet to be demonstrated.

In fact, the U.S. and its allies have all too frequently done the opposite, excusing Israel's, India's and Pakistan's possession of nuclear weapons as being “understandable”. Recently, the Chairman of the U.S. Nuclear Regulatory Commission visited two of India's nuclear weapons production reactors and extended U.S. nuclear “safety” cooperation to New Delhi. Earlier, the U.S. government did all it could to waive and bend mandatory sanctions laws directed against India's and Pakistan's nuclear tests in 1998.<sup>5</sup> More recently, the U.S. refused to identify Pakistan as a nuclear proliferator despite repeated reports of Pakistani nuclear assistance to North Korea and Iran. As for Israel, the U.S. did far too little to stop their nuclear weapons program and has done nothing publicly to get it to stop production of plutonium at its weapons plant at Dimona.

Such proliferation “realism” is not limited to friendly nuclear weapons states outside of the NPT. Nor is it confined to how the U.S. relates to friendly non-weapon state members to the NPT. The U.S. has protested North Korea's violation of the

<sup>5</sup> See Mark Hibbs, “U.S. Confirms It Has Intelligence Pointing to DAE Planning Arms Tests,” *NuclearFuel*, April 14, 2003.

NPT and is seeking a resolution condemning it. It has protested little or not at all, however, about Pyongyang's actual withdrawal from the treaty. Is the supposition here that the U.S. recognizes North Korea's right to nuclear weapons and its right to keep all the nuclear technology it illicitly gained while a member of the NPT?

Then, there is the argument U.S. officials make that if North Korea does not disarm, Japan might acquire nuclear weapons as well. This is something China should fear, U.S. officials have explained, but is it also something Washington welcomes or expects? Perhaps U.S. could "live" with such a good nation acquiring nuclear weapons so long as Japan acquires them to assure mutual deterrence of North Korea. Is the U.S. ready to make the best of such proliferation? Is it prepared to let other friends—South Korea, Taiwan, Saudi Arabia, Egypt, Turkey—follow in suit?

Again, if the U.S. is truly to move away from MAD, it must eschew even indirectly endorsing the notion that nuclear weapons can assure a nation protection from attack or that, as such, others' acquisition of them is simply the exercise of their right to self-defense. Certainly, if nations perceive that the U.S. is willing to look the other way or to endorse some nuclear proliferation as good, inevitable, or manageable, further proliferation will only be more likely.

*Third, the U.S. and its allies would actually have to enforce the current set of nuclear nonproliferation rules and make them less generous with regard to what is safe and dangerous.* As noted before, the MAD or finite deterrence-inspired notion that states have a right to nuclear weapons and that they should be compensated with free access to all types of nuclear technology for not exercising this right has more than run its course in the case of Iraq, Iran, and North Korea. The NPT, after all, makes it clear in Article IV that nations' inalienable right to develop nuclear energy for peaceful purposes must nonetheless be exercised "in conformity with Articles I and II" which prohibits states from assisting non-weapons states "in any way" to acquire nuclear explosives or control over such weapons.

This Article I and II prohibition, it should be noted, was originally inspired not by the finite deterrence or MAD thinking of the late 1960s, but by the original Irish UN Resolutions of 1958 and 1959, which were the first to call for an international nuclear nonproliferation treaty. In requesting that the UN to establish a committee to study the dangers inherent in the further spread of nuclear weapons, the Irish representative to the UN held no brief for nations having any "right" to acquire atomic explosives, much less for them being compensated with unrestricted access to nuclear technology for "peaceful" purposes. Nor did he argue that the key nuclear threat was the pace of Superpower nuclear weapons innovation or growth.

Instead, Ireland's original call for a nuclear nonproliferation treaty was premised on the fear that the further spread of nuclear weapons to additional states would make nuclear disarmament and reductions less likely and accidental or catalytic wars—ones instigated by smaller powers to draw the superpowers to their defense—more probable. Against, this threat, the Irish representative urged adoption of the most basic restraint: States that had weapons should agree not to share or spread them and states that lacked them should agree not to acquire them. As for the sharing nuclear technology for civilian purposes, the Irish recognized that the further spread of such civilian capabilities would actually make the spread of nuclear weapons more likely and that, therefore, the proliferation of such technology had to be controlled. Finally, the Irish downplayed the idea that the Superpowers had to disarm themselves before any progress could be made to reduce the spread of nuclear weapons to other states.<sup>6</sup>

Clearly, this original Irish Resolution view of the NPT is the one we need to return to if we are to keep the NPT as an agreement that will reduce rather than fan further nuclear proliferation. In the first instance this will require that the U.S. and other nuclear technology exporting states recognize that too much of what they are willing to share is too close to bomb making to be safeguarded against quick diversion to military ends. Certainly, the export of light water reactors to Iran will bring it dangerously close to having a large arsenal of near weapons-grade plutonium only after 15 months of operation. The same is true of North Korea if either of the two light water reactors the U.S., Japan, and South Korea are helping to build are completed. It's even clearer that Russia's, Pakistan's, and China's sharing of fuel fabrication, plutonium separation, and uranium enrichment technology and hardware with Iran and North Korea is simply too close to bomb making ever to allow for any monitoring being able to afford timely warning of a possible military diversion.

<sup>6</sup>For documentation of these points, see Henry Sokolski, *Best of Intentions: America's Campaign Against Strategic Weapons Proliferation* (Westport CT: Praeger Publishers, 2001), pp. 39–56.

Unfortunately, America is still pushing international cooperation on advanced fuel cycles and reactors that includes cooperation on “proliferation resistant” breeder reactors and reprocessing (because of the addition of several steps that could just as easily be subtracted as not). This cooperation is being proposed for Brazil, South Africa, South Korea, and Argentina—states that only recently gave up nuclear weapons programs of their own.

Finally, there is seems to be growing U.S. and allied indifference to further civilian use of weapons usable plutonium. Here the U.S. is proposing to reconsider President Ford’s policy of deferring the commercial use of such nuclear fuels. As an unannounced lead in this effort, Washington is plowing ahead with its efforts to convert 34 tons of weapons grade plutonium into mixed oxide (MOX) civilian fuels over the next 20 years and to help pay Russia to do the same. The U.S. Department of Energy claims that this effort has nothing to do with reversing the Ford policies but, in fact, this project will result in over \$6 billion in MOX fuel fabrication facilities being built both here and in Russia and the movement of over 17,000 nuclear weapons worth of plutonium into civilian commerce.<sup>7</sup>

Such risky civilian efforts, which are consistent with a MAD-inspired reading of the NPT and the need for the freest exchange of nuclear technology for civilian purposes are themselves bad enough. What’s worse is their encouragement of lax enforcement of existing nonproliferation rules. Japan recently announced that it had lost between 59 and 206 kilograms (10 to 51 crude bombs’ worth) of nuclear weapons usable material over the last 15 years of its civilian breeder and MOX operations. Yet, the U.S. made no complaint and the IAEA conducted no serious investigation.<sup>8</sup> In fact, the IAEA still only makes public its discovery of special nuclear materials it believes is unaccounted for. It keeps no public account of the nearly 200 tons (25 to 50 thousand crude weapons worth) of weapons usable civilian plutonium that specific member states have on hand.<sup>9</sup>

Such a cavalier attitude regarding the sharing, accounting, generation, and safe-keeping of civilian nuclear weapons usable materials and related technologies might have made sense in the MAD world of the NPT in 1968 but after the events of September 11 and Al Qaeda’s announced interest in nuclear explosives, it is woefully unwise.

#### *Towards A Saner Set of Policies*

Making the changes noted above will not be easy. However, it would be a mistake not to try. Currently, there are only five declared nuclear states all of whose arsenals (except China’s) that are becoming smaller. India, Pakistan, and Israel also have nuclear weapons as does North Korea. The question is how much worse can it get. The answer is plenty.

If nothing is done to shore up U.S. and allied security relations with the Gulf Coordination Council states and with Iraq, Turkey and Egypt; Iran’s acquisition of even a nuclear weapons breakout capability could prompt one or more of these states to try to acquire a nuclear weapons option of their own. Similarly, if the U.S. fails to hold Pyongyang accountable for its violation of the NPT or lets Pyongyang hold on to one or more nuclear weapons while appearing to reward its violation with a new deal—one that heeds North Korea’s demand for a nonaggression pact and continued construction of the two light water reactors—South Korea and Japan (and later, perhaps Taiwan) will have powerful cause to question Washington’s security commitment to them and their own pledges to stay nonnuclear.

In such a world, Washington’s worries would not be limited to gauging the military capabilities of a growing number of hostile, nuclear or near nuclear-armed nations. In addition, it would have to gauge the reliability of a growing number of nuclear or near-nuclear friends. Washington might still be able to assemble coalitions, but with more nations like France, with nuclear options of their own, it would much, much more iffy. The amount of international intrigue such a world would generate would also easily exceed what our diplomats and leaders could manage or track. Rather than worry about using force for fear of producing another Vietnam, Washington and its very closest allies are more likely to grow weary of working

<sup>7</sup> For a full discussion of this effort, see Daniel Horner, “Full G8 Funding For Construction of Russian MOX Plant Seen By Year’s End,” *NuclearFuel*, April 28, 2003, p. 3.

<sup>8</sup> See Bayan Rahman, “Japan ‘Loses’ 206 kg of Plutonium,” *Financial Times*, January 28, 2003

<sup>9</sup> Each year the IAEA and every second year EURATOM announce the total amounts of plutonium and highly enriched uranium they believe they are safeguarding. Both, however, are barred by rules of confidentiality from specifying what amounts they believe each country they are safeguarding is holding. On this point, see David Albright, Frans Berkhout and William Walker, *Plutonium and Highly Enriched Uranium 1996 World Inventories, Capabilities and Policies* (London: Oxford University Press, 1997), p. 407 and Albert Wohlstetter et al. *Swords From Plowshares* (Chicago: University of Chicago Press, 1977), pp. 65–67.

closely with others and view military options through the rosy lens of their relatively quick victories in Desert Storm, Kosovo, Operation Iraqi Freedom, and Just Cause. This would be a world disturbingly similar to that of 1914 but with one big difference: It would be spring loaded to go nuclear.

To move away from such a future, then, is worth some effort. But what step should be taken first? Clearly, it would be helpful if the U.S. and its allies backed country-neutral rules that would close some of the worst loopholes in the NPT. These gaps principally consist of the NPT's non-application to weapons states outside the treaty, the NPT's lack of any serious enforcement measures, its generous inattention to risky "peaceful" nuclear cooperation, and its allowance of nuclear weapons transfers between states so long as the weapon transferred remains under the control of the exporting nation (e.g., U.S. nuclear weapons deployed in Germany).

To begin to fill these loopholes and to get back to an Irish Resolution view of the NPT generally, one might start by trying to establish an international common usage against any state helping others acquire weapons of mass destruction (nuclear, chemical, or biological weapons) like that that already exists against piracy and the trading in slaves. Piracy and slave trading are currently activities that can only be conducted outside of the protection of international law. Any nation that encounters someone engaged in these activities is free to act against them, to arrest them, seize their cargo, or force their vessels or vehicles to return to their point of origin.

One approach to help establish such a rule against weapons of mass destruction, might be to establish that nations henceforth ought not to deploy chemical, biological, or nuclear weapons to any other nation in peacetime whether they be under their control or not. Beyond this, the U.S. and like-minded nations should propose that nations no longer ship any special nuclear materials (as defined by the IAEA Statute) or any item on Schedule One of the Australia Group's list of biological and chemical weapons items or items on the Nuclear Suppliers' list without giving prior international notification. In fact, shippers' export declarations laws in the U.S. and Australia already require exporters in these states to make prior notification of their export shipments. Other nations should do likewise. These postings could be made on an internationally available website almost immediately.

At the same time, the U.S. or other like-minded nations could propose that the UN Security Council adopt a resolution that would remove the protection of international law from any nation's attempt to re-deploy nuclear, chemical, or biological warheads. This proposed resolution would also make it clear that if they were not properly pre-announced (on the recently established website or some facsimile), any shipments of Schedule One Australia Group or Nuclear Suppliers Group items or of special nuclear materials as defined by the IAEA Statute would also lack such protection.

If the UN Security Council acted quickly to adopt such a measure, all the better. If it failed to act, however, those who discover a violation of the proposed rules might chose to act on their own. In either case, an international common usage against weapons of mass destruction trade could be established that's needed and currently lacking. What might its benefits be? It should cover several cases, all of which are worrisome. Pakistan, for one, could no longer contemplate transferring nuclear warheads legally under its control to a Saudi Arabia (as its generals have privately suggested they might). Nor could Pyongyang act on its threat to transfer its nuclear weapons to another state without risking having the shipment legally blocked or seized. Beyond this, any strategic weapons related assistance a Pakistan (or a North Korea, China, Iran or Russia) might want to give to other states would now have to be announced before it was actually shipped or hazard being interdicted. This, at the very least, in turn, would help prevent a repeat of another Iran—i.e., of another nation covertly acquiring all it needs to breakout quickly with a large arsenal of weapons without quite breaking the rules.

This international common usage also would allow the world's Indias, Israels, and Pakistans, who cannot be made weapons state members to the NPT, a formal way to uphold international nonproliferation norms. In addition, it would allow other nations that have bad proliferation reputations (e.g., China and Russia) to work with the U.S. and others to restore their good names. Finally, by establishing an international rule against warhead transfers and dangerous covert trade, it would afford supporters of nonproliferation a legal basis for acting against violators even if they failed to catch them in the act.

If the U.S. wanted to build additional support for this effort, it might offer to remove its prior deployment of nuclear arms in Western Europe. These weapons are almost certain to be removed with the planned reduction of American forces in Germany. Also, most of these weapons are quite old if not obsolete. Such an offer (to

do what the US will likely do in time anyway), would still have to be implemented carefully so as not to undermine NATO alliance relations. It could not be done suddenly or appear to be the response to anti-nuclear protests. Assuming this could be done, though, such an offer might help persuade Russia and others to support establishing an international usage against WMD proliferation both before and at the time of any UN vote.

In conjunction with the proposed ban on unannounced dangerous trade, a ban on redeploying weapons of mass destruction could set into motion a much more serious review of MAD-inspired nonproliferation policies more generally. What should the IAEA and the worlds' leading nuclear suppliers consider to be safe and dangerous? Should nations like Iran be able to get all they need to breakout with a large arsenal virtually overnight? What truly constitutes timely warning of a diversion of civilian technology to military purposes? Is something more than inspecting to find special materials unaccounted for? Does it make sense to spread nuclear bulk handling facilities—reprocessing, enrichment, fuel fabrication plants—where scores of bombs worth of nuclear weapons material will be present? What of increased civilian commerce in nuclear weapons materials? Is this trade worth the risks or should it be put on hold? What of missile technologies? Should controls be tightened to prevent proliferation or relaxed to promote missile defense cooperation? In either case, how should this be done?

A debate over all these questions and more is likely assuming the U.S. and other chose to get serious about moving away from MAD toward world with fewer nuclear weapons in fewer hands. On the other hand, without such a move, the bold steps Washington have already taken away from MAD's opposition to missile defenses will hardly get it where the U.S. and world should want it to go—toward a safer, saner world whose security is based less on nuclear offenses than on defenses, self-restraint, and, in time, on the kind of peace that can only come with a world full of Canadas.

---

The Honorable Pete Domenici, *Chairman,*  
*Committee on Energy and Natural Resources,*  
*U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: We are writing to ask you to reject a dangerous provision in the House version of the pending energy bill that would relax export controls on nuclear-weapon grade, highly enriched uranium (HEU) by repealing part of the Schumer Amendment to the Energy Policy Act of 1992. Senator Bond of Missouri has inserted similar language in separate legislation approved by the Committee on Environment and Public Works, and is likely to offer this provision as an amendment to the Senate energy bill. We urge you to oppose this amendment.

Senator Bond's amendment and the corresponding House version, sponsored by Rep. Richard Burr, are ostensibly intended to ensure the continued supply of medical radioisotopes to the United States. In fact, they are special-interest provisions aimed mainly at benefiting a single foreign isotope producer, MDS Nordion of Canada, by weakening the modest HEU export license conditions in the current law. We support the use of medical isotopes, but this legislation is not necessary to ensure their supply. The U.S. Nuclear Regulatory Commission has never denied an HEU export license to Nordion under the current law. Thus, the Burr and Bond Amendments would needlessly increase the risk of nuclear terrorism in the name of ensuring the supply of medical isotopes, which is not threatened in the first place.

The Schumer Amendment was intended to phase out HEU exports in order to reduce the risk of this material being stolen by terrorists or diverted by proliferating states for nuclear weapons production. The law bars export of HEU for use as reactor fuel or as targets to produce medical isotopes, except on an interim basis to facilities that are actively pursuing conversion to low-enriched uranium (LEU), a material that unlike HEU cannot be used to make a Hiroshima-type bomb. Because the United States has been the primary world supplier of HEU, the law provides a strong incentive for reactor operators and isotope producers to convert their operations from HEU to LEU. The law does not impose an unreasonable burden on isotope producers and indeed exempts them if conversion would result in "a large percentage increase in the total cost of operating the reactor."

The Burr and Bond Amendments would eliminate this legal restriction on supply of HEU to the main producers of medical isotopes and thereby dramatically reduce their incentives to convert from HEU to LEU. (While the United States as a matter of policy could still choose to limit HEU exports, recent history demonstrates that it was the teeth added by the statutory restrictions of the Schumer Amendment that dramatically reduced HEU exports over the past decade.) The likely result of the

Burr Amendment would be perpetual use of HEU by these isotope producers instead of the phase-out foreseen by current law. Worldwide, such isotope production now annually requires some 50–100 kg of fresh HEU, sufficient for at least one nuclear weapon of a simple design, or several of a more sophisticated design. (Each of the world's major isotope production facilities already requires annually about 20 kg of fresh HEU.) If the Burr amendment is adopted and derails conversion to LEU, the annual amount of HEU needed for isotope production is likely to grow in step with the rising demand for isotopes. Moreover, after the HEU targets are used and processed, the uranium waste remains highly enriched (exceeding 90 percent), and cools quickly, so that within a year the remaining HEU is no longer “self-protecting” against terrorist theft. Thus, substantial amounts of weapon-usable HEU waste accumulate at isotope production sites, presenting yet another vulnerable and attractive target for terrorists.

Contrary to its stated intent, the Burr Amendment would do nothing to ensure the supply of medical isotopes to the United States because that supply is not currently endangered by the Schumer Amendment's restrictions on exports of HEU. The United States now gets most of its medical isotopes from the Canadian supplier Nordion, which still produces such isotopes at its aging NRU reactor and associated processing plant. The Schumer Amendment does not block continued export of HEU for isotope production at this facility prior to its impending shutdown. In addition, Nordion has stockpiled four years' worth of HEU targets specially designed for its new isotope production facility, which is scheduled to commence commercial operation soon. Even in the unexpected circumstance that Nordion's isotope production were to cease, the United States could turn to alternate suppliers in the Netherlands, Belgium, and South Africa that currently enjoy excess production capacity.

We wish to underscore that the existing law does not discriminate against Canada or any other foreign producer. Indeed, in 1986, the U.S. Nuclear Regulatory Commission ordered all domestic, licensed nuclear research reactors to convert from HEU to LEU fuel as soon as suitable low-enriched fuel for their use became available. The NRC recognized that prevention of theft and diversion of HEU from civilian facilities cannot be assured by physical protection and safeguards alone, but rather requires a phase-out of HEU commerce. The Schumer Amendment applied the same standard to foreign operators.

Supporters of the Burr Amendment, such as the American College of Nuclear Physicians, have argued erroneously that the Schumer Amendment “was not drafted with medical uses of HEU in mind.” In fact, the approximately 500-word Schumer Amendment uses the word “target” nine times. Targets, in distinction to “fuel,” are used exclusively for the production of medical isotopes. Thus, it is readily apparent that the current law was drafted explicitly to include the HEU targets that are used in medical isotope production.

We also wish to underscore that conversion of isotope production from HEU to LEU is technically and economically feasible. Australia has produced medical isotopes using LEU for years. According to Argonne National Laboratory, the main consequence of Nordion converting from HEU to LEU would be to increase its waste volume by about ten percent. That is a small price to pay to eliminate the risk that this material could be stolen by terrorists and used to build nuclear weapons.

The main obstacle to Nordion converting its production process from HEU to LEU has been the company's refusal to pursue such conversion in good faith, as required by the Schumer amendment as a condition for interim exports of HEU. In 1990, Atomic Energy Canada, Ltd. (from which Nordion was spun off) pledged to develop an LEU target by 1998 and to “phase out HEU use by 2000.” Nordion and AECL failed to meet this target. During the last few years, to qualify for additional HEU exports, Nordion repeatedly has pledged to cooperate with the United States on conversion. However, Nordion stopped engaging in such cooperation more than a year ago.

The Schumer Amendment will never lead to an interruption in Nordion's ability to produce isotopes unless Nordion aggressively refuses to cooperate with U.S. policies designed to prevent terrorists from acquiring the essential ingredients of nuclear weapons. No company has a perpetual entitlement to U.S. bomb-grade uranium, and any such exports should be reserved for recipients who cooperate with U.S. law intended to prevent nuclear proliferation and nuclear terrorism. Passage of the Burr and Bond Amendments would reward Nordion for its lack of cooperation.

During the past 25 years, an international effort led by the U.S. has succeeded at sharply reducing civilian HEU commerce. In 1978, the U.S. created the Reduced Enrichment for Research and Test Reactors (RERTR) program at Argonne National Laboratory. In 1980, the UN endorsed the conversion of existing reactors in its International Nuclear Fuel Cycle Evaluation (INFCE). In 1986, the U.S. NRC or-

dered the phase-out of HEU at licensed facilities. Also in 1986, the RERTR program began work on converting isotope production. And in 1992, the Schumer amendment was enacted. All of these far-sighted efforts were undertaken well in advance of the concrete manifestation of the terrorist intent to wreak mass destruction that our country experienced on September 11, 2001. For Congress now to undermine this longstanding U.S. effort to prevent nuclear terrorism flies in the face of the Bush Administration's stated determination to protect our country from weapons of mass destruction.

Rather than ensuring the supply of medical isotopes, the main effect of the Burr and Bond amendments would be to perpetuate dangerous commerce in bomb-grade uranium and increase the risk that this material will find its way into terrorist hands. We urge you to reject these amendments. We also urge you to support a sense-of-the-Senate amendment rejecting the Burr language, which most likely will be offered by Senator Charles Schumer.

Thank you for your attention to this important national security matter. We stand ready to provide further information upon request.

Sincerely, (in alphabetical order)

PETER BRADFORD, *Former Commissioner*, U.S. Nuclear Regulatory Commission  
MATTHEW BUNN, *Senior Research Associate*, Kennedy School of Government, Harvard University

TOM COCHRAN, *Director*, Nuclear Program, Natural Resources Defense Council  
CHARLES FERGUSON, *Scientist-in-Residence*, Monterey Institute Center for Non-proliferation Studies (organization shown for identification purposes only)

VICTOR GILINSKY, *Former Commissioner*, U.S. Nuclear Regulatory Commission  
FRED C. IKLÉ, *Undersecretary of Defense* (Policy) in the Reagan Administration, and  
*Director of the US Arms Control Agency* in the Ford Administration

DARYL G. KIMBALL, *Executive Director*, Arms Control Association  
ALAN KUPERMAN, *Assistant Professor of International Relations*, Johns Hopkins University

PAUL LEVENTHAL, *Founding President*, Nuclear Control Institute  
EDWIN LYMAN, *Senior Scientist*, Union of Concerned Scientists  
JESSICA MATHEWS, *President*, Carnegie Endowment for International Peace  
MARVIN MILLER, *Senior Scientist Emeritus*, Center for International Studies, MIT  
IVAN OELRICH, *Federation of American Scientists*  
CHRISTOPHER PAINE, *Natural Resources Defense Council*  
HENRY SOKOLSKI, *Executive Director*, Nonproliferation Policy Education Center  
FRANK VON HIPPEL, *Professor of Public and International Affairs*, Princeton University

Cc: Members of the U.S. Senate  
Secretary of Energy Spencer Abraham  
Assistant Secretary of State John Wolf  
NRC Chairman Nils J. Diaz

Mr. BEREUTER. Thank you, Mr. Sokolski.

As mentioned earlier, all of your written statements will be made a part of the record, and the material to which you made general reference will, without exception, be made a part of the record.

Mr. SOKOLSKI. Thank you.

Mr. BEREUTER. That will be the case.

Our next witness is Dr. Fred Iklé, Distinguished Scholar at The Center for Strategic and International Studies. Dr. Iklé previously served as the Under Secretary of Defense for Policy in 1981 to 1988, and from 1973 to 1977 was a Director of the U.S. Arms Control and Disarmament Agency under Presidents Nixon and Ford.

He is Governor of the Smith Richardson Foundation, served 9 years as Director of the National Endowment for Democracy, and is Chairman of the U.S. Committee on Human Rights in North Korea.

Welcome, Dr. Iklé. You may proceed as you wish.

**STATEMENT OF FRED C. IKLÉ, PH.D., DISTINGUISHED SCHOLAR, THE CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES**

Mr. IKLÉ. Thank you, Congressman Bereuter, and I am honored to be invited to testify here.

To do something useful in this complex area, we must start with the most urgent priorities. Nonproliferation policy is so complex, like the U.S. Tax Code, it is burdened by a long history, hobbled by conflicting interests, and almost impossible to simplify.

I have three points to make regarding priorities.

First, what should be our priority concerning different weapons of mass destruction?

In my view, nuclear weapons are the highest priority. They are more attractive weapons for terrorist organizations as well as for states that want to plan a strategic attack.

Biological weapons are unpredictable as to the area that they will affect and hence less suitable for premeditated attacks. They might be suitable for irrational attacks.

Further, if an aggressor chose a biological weapon that has a wide impact because it is contagious, such as smallpox, it could boomerang against the aggressor, especially since our public health system is better than those of the most likely aggressors.

Also, more defenses are possible against biological attack than against nuclear attack. After a biological attack, the victims can still defend themselves with masks, antidotes, vaccines. By contrast, after a nuclear detonation has been triggered, nothing can stop or reduce its destructive heat, blast, and immediate radiation.

On the next priority question, I want to touch on the emphasis regarding countries. I agree with Congressman Lantos, North Korea should be on the top of our list. It is opening a fundamental breach in the Nonproliferation Treaty. By having signed on to that treaty, it has received much technical assistance in the nuclear area, and now it is exploiting that assistance to defy all the treaty obligations. Such behavior cuts the NPT into shreds.

Yet, as Mr. Sokolski mentioned, KEDO, the U.S. project to donate two nuclear reactors to North Korea, is still continuing. As long as this project continues, North Koreans will receive more technical reports on reactors and more training from us how to operate reactors.

Thus, at the same time that we condemn North Korea for pursuing its nuclear weapons program, we are supporting, and with congressional approval, we are financing this build-up of North Korea's knowledge and engineering skills of nuclear technology.

And keep in mind, if these two reactors are finished, their initial plutonium production could easily be diverted by North Korea to build dozens of bombs. These are not safe reactors that we tutor and support North Korea to build.

So what on earth is going on here?

This is an issue on which this Committee might decide to do something that would close the gaping hole against nuclear proliferation. The Committee may wish to lend support to an amendment to H.R. 6, the Energy Policy Act, that the House has passed,

the amendment sponsored by Congressmen Markey and Cox that has been adopted by the House 247 to 175.

It would, in essence, preclude the completion of these dangerous, dangerous reactors in North Korea by relying on existing congressional powers to control nuclear exports.

The Senate has not yet made a decision on this to put it in the energy bill, but since the problems are clearly central for international relations, I would think this Committee may want to find a way to make sure that the amendment will become part of the bill, or failing that, that it can be included in other legislation.

The third priority, the last one I have time for, concerns technological projects.

Some technologies have a high priority and should be given more support in this area, in particular: Means to detect dangerous nuclear materials or weapons; to reduce the risk of theft from storage areas, research reactors; and above all, to provide tools for timely detection of attempts to smuggle a nuclear bomb into one of our cities. We do not have these tools now.

Several Members of Congress have sought to push development of such detection devices, proposing to increase funding, but the effort did not make it into final legislation. So our current effort remains woefully inadequate in preparing and developing tools to detect bombs that may be smuggled into this country. We are naked to that possible attack.

By contrast, other technology programs that ought to be discouraged and stopped include some that Mr. Sokolski already referred to. One is the use of highly enriched uranium (HEU) (a particularly dangerous bomb-making material because it is easier to fashion into bombs than plutonium and harder to detect) for legitimate peaceful purposes, like producing pharmaceuticals, radioactive pharmaceuticals for medical purposes, where lower enriched uranium safer could be used instead.

And again here a piece of legislation is making its way through the development of the energy bill that, instead of preserving or strengthening the current restrictions, would lift the restrictions to allow HEU export to foreign countries. The highly enriched uranium would be for presumably legitimate purposes, but purposes that do not need highly enriched uranium.

Why make a hole in the dike we have built?

And a similar program that could do great harm that I will skip over now since Mr. Sokolski has explained it also in his written testimony, the complex Mixed Oxide Fuel plutonium program.

Let me just add that Congress is being asked to authorize hundreds of millions of dollars for these plutonium reactors and processing, and the Administration is proceeding to conclude various international agreements, or I should say probably Memorandums of Understanding because agreements would have to be submitted to you, and that may not be desirable on the part of the bureaucrats who are working on this. So these will be understandings of some kind that could commit us with foreign countries to proceed with this mixed oxide fuel, and in the long term I think this could mean the death knell for nuclear nonproliferation because of the spreading of the means to make bombs.

It is a very complex subject. It has received little attention so far to my knowledge in congressional Committees.

In concluding, Mr. Chairman, it is noteworthy that despite the intense efforts against proliferation that President Bush and his Administrations are engaged in—splendid efforts!—Congress could still make major contributions to strengthen that effort. Indeed, it seems some urgent steps only Congress could take.

This is the essence of my testimony. Thank you.

[The prepared statement of Mr. Iklé follows:]

PREPARED STATEMENT OF FRED C. IKLÉ, PH.D., DISTINGUISHED SCHOLAR, THE  
CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES

NEXT STEPS FOR US NONPROLIFERATION POLICY AND WHAT THIS COMMITTEE MIGHT  
CHOOSE TO ADDRESS

Mr. Chairman, I am honored to be invited to testify at this hearing. I hope you won't consider it presumptuous if I advocate some specific actions without much elaboration. We need to attend to the most urgent and important priorities first since nonproliferation policies are so complex. Like the US Tax Code, these policies are burdened by history, hobbled by conflicting interests, and impossible to simplify.

I have three points to offer on the question of priorities.

*First*, what should be the priority among different weapons of mass destruction?

In my view, *nuclear* weapons are of highest priority. For several reasons they are more attractive weapons for any nation or terrorist group that wishes to plan a purposeful campaign.

- To begin with, biological weapons are unpredictable as to the area they will affect and hence less suitable for premeditated attacks.
- Further, if the aggressor chose a biological weapon that has a wide impact because it unleashes a highly contagious disease, the resulting pandemic could easily boomerang against the attacker and his allies. The US public health system is superior to that of potential enemies.
- Finally, more defenses are possible against biological attack than against a nuclear attack. After a biological (or chemical) attack, the victims can still defend themselves with masks, antidotes, vaccines. By contrast, once a nuclear detonation has been triggered, nothing can stop or reduce its destructive heat, blast, and immediate radiation.

*Second*, which countries should receive priority in our nonproliferation policy?

North Korea, I believe, now should be at the top of the list. It is opening a fundamental breach in the Nonproliferation Treaty. By having signed onto the NPT it received technical assistance and now it is exploiting this assistance while openly defying all the treaty obligations. Such behavior cuts the NPT into shreds.

Yet, KEDO, the project to donate and build two nuclear reactors in North Korea, is still continuing. As long as this project continues, North Koreans will receive more and more technical reports on nuclear reactors and even receive training on how to operate our reactors. Thus, at the same time while we are correctly condemning North Korea for pursuing its nuclear weapons programs, we are supporting—and with Congressional approval keep financing—this build-up of North Korea's knowledge and engineering skills in nuclear technology. And keep in mind, when these donated reactors are completed, their initial plutonium production can easily be diverted to build dozens of bombs.

What on earth is going on here?

Mr. Chairman, this is an issue on which your Committee might decide to do something that would close a gaping hole in the dike against nuclear proliferation. This Committee could lend support to an amendment to HR 6 (the Energy Policy Act) that the House has passed. That amendment has been sponsored by Congressmen Markey and Cox and has been adopted by the House 247 to 175. It would, in essence, preclude the completion of these dangerous reactors in North Korea by relying on existing Congressional powers to control nuclear exports. But the Senate still needs to accept this provision in conference. Since the problem is so clearly a central issue for international relations, Mr. Chairman, a way might be found for this Committee to make sure the amendment will become part of the bill. Or failing that, the amendment must be included in other legislation.

*Third*, which technological aspects or projects deserve top priority in our nonproliferation policy?

Technologies that ought to be *given a high priority* are instruments and other means to detect dangerous nuclear materials and nuclear weapons, so as to reduce the risk of theft from storage areas, laboratories, or research reactors, and above all to provide the tools for timely detection of attempts to smuggle nuclear weapons or materials into this country. Several members of Congress have sought to push the development of such detection devices and have proposed increased funding, but their proposals have not been adopted and the current effort remains woefully inadequate.

Other technology programs, by contrast, ought to be *discouraged* or stopped. In particular, further steps must be taken to halt and to reverse the use of highly enriched uranium in research reactors or for other ostensibly peaceful applications.

Similarly, a new program that could do great harm to nonproliferation is the plan to use surplus weapons plutonium from Russia and also from the United States, to fuel power reactors throughout the world. This plutonium is to be converted into so-called mixed oxide fuel (MOX) by means of specially built reactors. The safety of the converted MOX fuel has to be questioned more carefully since the shipments of tons of plutonium could pose serious terrorist risks. Moreover, this worldwide project will encourage other expanding uses of plutonium, for instance breeder reactors. Over ten, twenty years, the world would thus increasingly adopt plutonium uses for energy production in facilities that would be scattered over thousands of locations with far-flung transportation requirements. This could well mean the death knell for non-proliferation.

At this time, Mr. Chairman, Congress is being asked to authorize hundreds of millions of dollars for these uses of MOX type plutonium, and the Administration is proceeding to conclude various international agreements that will create political commitments to build a global plutonium economy. This "death knell project" for nuclear nonproliferation is enormously complex, based on many technical judgments that are highly contentious. Congress, and perhaps your Committee, ought to initiate a careful review before the momentum of committed bureaucracies and special interests becomes irreversible.

Mr. BEREUTER. Thank you very much, Dr. Iklé.

Next we will hear from Dr. George Perkovich, who is the Vice President for Studies at the Carnegie Endowment for International Peace. Prior to serving at the Carnegie Endowment, Dr. Perkovich was Director of the Secure World Program at the W. Alton Jones Foundation from 1990 to 2001, and served as a Speech Writer and Foreign Policy Advisor to Senator Joe Biden. Dr. Perkovich is a member of the Council on Foreign Relations and International Institute for Strategic Studies.

Welcome, Dr. Perkovich. You may proceed as you wish.

**STATEMENT OF GEORGE PERKOVICH, VICE PRESIDENT FOR STUDIES, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE**

Mr. PERKOVICH. Thank you. As the others said, it is an honor to be here before the Committee.

I would also say, to simplify the deliberations, that I agree wholeheartedly with at least 90 percent of what Dr. Iklé and Mr. Sokolski said. I think that was very important testimony and the recommendations they both made were outstanding.

Clearly from the previous testimony and your statement, the WMD nonproliferation regimes need to be strengthened. Existing rules need to be revised. New rules or initiatives need to be undertaken, and enforcement needs to be made sure. This cannot be done unilaterally or preemptively. The leading states in the international community must join with the U.S. if we are to succeed in any of these initiatives.

I would argue that the events in Iraq actually give us an opportunity in many of the areas where reform is necessary. The first and most obvious is in the Persian Gulf. We know that prolifera-

tion occurs in clusters, in regional clusters, and that Iraq was a major stimulus of the WMD programs in the Persian Gulf and the Middle East.

We are now exerting great pressure on Iran. We have gotten the attention of Iranian leaders of all stripes. They fear U.S. power and intention, and signs are emerging that at least some of them are interested in trying to figure out if there is a way to make an accommodation with the U.S.

But Iranians also have major strategic concerns that are not unreasonable, and that the U.S. has not sufficiently addressed. I talk about this in a separate paper that the Committee has and has distributed, but I would say that these concerns would exist if no ayatollah held power in Iran. If the democrats took over, they would have these concerns.

If the antagonists in the Middle East need a road map, the antagonists in the Persian Gulf need a navigational chart. We have improved Iran's and other states' security enormously by removing Saddam Hussein.

We ought to take advantage of that security improvement by then addressing the rest of the strategic environment in the gulf and bringing the parties in the gulf, the smaller gulf states, Iran, ourselves and the U.K., into a regional dialogue to affect what the rules will be going forward.

If the U.S. is not going to militarily occupy and dominate the Persian Gulf forever, there has to be some sort of system and set of rules and institutions in the region to secure it, and to secure our friends.

No such dialogue, no such effort has been proposed to my knowledge, and we are missing an opportunity created by what we just did in Iraq.

Second point, as Drs. Iklé and Sokolski pointed out, the non-proliferation regime needs to have its rules changed. Iran is entitled to acquire uranium enrichment capabilities and plutonium production and separation capabilities under current rules.

Now, there are requirements for how you monitor that and verify it, but fundamentally they and other states are allowed to acquire these weapons' valuable technologies. This needs to be changed. The rule needs to be rewritten.

That will be a huge diplomatic undertaking. Many institutions and interests within the United States itself would appear before you and tell you why we cannot do that, why we should not do it. There are commercial interests that would be at stake.

But if you want to solve the proliferation problem over time, you have to undertake these fundamental reforms, and the U.S. cannot do that alone. That has to be done cooperatively.

Third point, and this is one that Senator Lugar initiated almost 2 years ago now, but should be followed up on. That is to persuade all states that possess nuclear weapons, materials and expertise to implement state-of-the-art security measure to ensure that terrorists cannot get their hands on these materials.

Currently, knowledge of best security practices is not systematically shared. There are not agreements or programs to make state-of-the-art security procedures and technologies available to others, and there are about 13 states that have these materials; I am talk-

ing about items such as vault locks, infiltrator detection systems, security cameras, and other anti-theft technology. You have to take care in not violating the NPT in doing this, but it is possible. Senator Lugar has an initiative to do this, and I would urge the House also to take up this measure as well.

Finally, ultimately, nonproliferation is not unlike the war on terrorism. The President has stated categorically that targeting innocent civilians for murder is always and everywhere wrong. Under Secretary of Defense Douglas Feith has declared similarly that,

“Worldwide moral battles can be fought and won. No decent person anymore supports or excuses slave trading, piracy, or genocide. No decent person should support or excuse terrorism either.”

That is right and you cannot fight a war on terrorism effectively without this categorical norm. But I would argue that civilization ultimately requires the same categorical injunction against weapons of mass destruction. Over the long term these weapons cannot be kept from spreading if they are not made universally anathema. If we are allowed to have some and our friend is allowed to have some, but this other person is not, that is not a tenable position around which to build an international campaign to abolish these weapons, and to stop their trading.

Failing to accept the importance of this global, universal norm against weapons of mass destruction and instead focusing our efforts on just a few select bad guys will undermine not only the cause of nonproliferation over time, and the rule of law, but also our standing in the world and the idea that America embodies to the rest of the world, and upon which our leadership ultimately depends.

And so I stop with that larger point, and not a technical, specific one, but I think it has to be taken on board and has not been by any Administration in recent times.

Thank you.

[The prepared statement of Mr. Perkovich follows:]

PREPARED STATEMENT OF GEORGE PERKOVICH, VICE PRESIDENT FOR STUDIES,  
CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

Mr. Chairman and Members of the committee, it is an honor to testify before you today. By way of introduction, I am vice president for studies at the Carnegie Endowment for International Peace. I have worked on nuclear nonproliferation issues for the past twenty years in various capacities with various foci, beginning first with the Soviet Union in the 1980s and early 1990s, then shifting to India, Pakistan and Iran beginning around 1992. In the process, I wrote a history of India's nuclear weapon program and U.S. efforts to stop it, called *India's Nuclear Bomb* (University of California Press, updated paperback 2001). The book and much of my work on nuclear issues in India, Pakistan, the U.S. and the Soviet Union, draws heavily from interviews and interactions with nuclear weapon designers and other relevant officials. In addition to research, writing, and organizing Track II diplomacy over the years, I have advised and consulted to the Departments of Energy and State, and the intelligence community.

---

Proliferation and the efforts to prevent and/or counter it are complex phenomena. Some of this complexity is represented in the international treaties, institutions, and cartels intended to protect the world from proliferation. The Nuclear Nonproliferation Treaty, the Chemical Weapons Convention, the Biological Weapons Convention, the Nuclear Suppliers Group, the Zangger Committee are key elements of the nonproliferation system. They reflect the varied interests of states and tech-

nology-supplying industries. Thus, they entail bargains and trade-offs among interests. These treaties also represent goals and hopeful intentions. The primary intent is to secure the world against the destabilization and ghastly destructiveness that would ensue if these weapons spread and their use thereby became more likely. The aim ultimately is to eliminate these weapons.

There are fewer “problem cases” of nuclear proliferation today than there were in the 1980s and early 1990s. (This testimony concentrates on nuclear proliferation because it poses the greatest threat to international security, and redressing nuclear proliferation would fundamentally alter the state and regional dynamics that also pose the greatest chemical and biological proliferation challenges). Today, North Korea and Iran are the clearest threats. In the 1980s and early 1990s, Taiwan, South Korea, South Africa, Argentina, Brazil, Iraq, North Korea, Belarus, Kazakhstan, and Ukraine were clear threats.

Despite progress that has been made in blocking and reversing nuclear proliferation, many people have become bearish on further efforts to prevent this proliferation. Some of this bearishness may actually be influenced by positions analysts have taken in the stock market of national security strategies and technologies. That is, if you’re long on ballistic missile defense and removing bad foreign governments, you tend to short nonproliferation and say that proliferation will be rampant and military options offer the only solution. (Others reverse these arguments, playing up nonproliferation prospects and shorting missile defense and military pre-emption). Whether or not the nonproliferation bears are right, the reality is that nuclear weapons proliferation is a grave danger and every single threat of such proliferation must be taken seriously.

President Bush put the problem succinctly in his important June 2002 Commencement Speech at West Point. “We cannot put our faith in the word of tyrants, who solemnly sign non-proliferation treaties, and then systematically break them.” Thus, the U.S. concentrates all its effort on proliferation cheaters.

Focusing on cheaters, and even removing the cheaters we have identified, is absolutely necessary. However, it will not be sufficient to solve the WMD proliferation problem. When Iraq, North Korea and Iran have more representative governments than they have suffered in the past few decades, the nuclear weapon proliferation problem will remain. The proliferation challenge stems not just from the villainy of cheaters or treaty outliers. It stems also from regional politics and insecurities and the great value and salience we place on nuclear weapons, which in turn confers status and political power on those who acquire them. With that premise, this brief testimony tries to frame a policy approach to the cheater problem that also would help strengthen the overall nonproliferation edifice.

#### THE CENTRALITY OF RULE OF LAW

Rule of law is the cornerstone of liberal civilization. Not just in the West, but also increasingly in Asia, civilization means that the freedom of individuals and societies is channeled and regulated by law, not by the arbitrary preferences of powerful men and institutions. The American Founders set a stellar example by making this a Constitutional Republic, not a simple democracy or an autocracy.

From the Magna Carta to the UN Charter, leaders have expanded the scope of civilization through and beyond the nation state and into the international realm. Rule of law has marked their progress. In the 20th century, the United States took the lead in this civilizing expansion of the writ of international laws and institutions. Republicans and Democrats saw treaties and other international agreements as means to expand and protect freedom, security and equity. From a narrow national perspective, the larger writ of law widens the perimeter of the world in which we can move and act with some confidence that rules exist and we will be protected by them because others will follow them, too, or can be made to do so. This makes us freer and more secure to do business, to travel and otherwise partake of the world. It also makes those around us freer and more secure that we will exercise our power not in an arbitrary, autocratic way, but rather predictably in accord with agreed rules. Thus, the rule of law is an American idea that most educated people in the world now expect us to live by as the global hegemon.

As humankind acquired in the technological means to make and use weapons of mass destruction, leaders of civilization rallied their defenses. (The leaders of civilization also by and large were the ones who created these weapons in the first place). Deterrence, improved conventional defenses, alliances, and so forth were important instruments of this defense. But the central civilizing impulse was to negotiate laws that, in the case of chemical and biological agents, would ban these weapons, and in the case of nuclear weapons, ban their spread beyond the five states that possessed them at the end of 1967. American officials from Republican and Democratic

administrations and congresses alike led this civilizing project to extend the benefits of law to the control of weapons of mass destruction. Indeed, what could be a higher calling for the sake of civilization as we know it.

The main points of this seeming detour are that weapons of mass destruction are incompatible with the civilization the United States (and others) have strived to foster; rule of law is an essential end and means of this civilization; our efforts to prevent and roll back proliferation will be more durably successful if they rely on and strengthen law-based policies. In other words, treaties are not the problem. The problem is how to strengthen everyone's determination to enforce them.

The Nuclear Nonproliferation Treaty and the conventions on chemical and biological weapons enjoy clear international legitimacy. This stems from the fact that they were negotiated through widely represented processes and, most importantly, were ratified by individual states party. The strength and legitimacy of these treaties can be seen further in the near universality of their membership. We concentrate on non-adherents to international law, as we should, but perhaps more important are the vast, vast majority of adherents. Of 191 countries in the world, only three—Israel, India and Pakistan—have not joined the Nuclear Nonproliferation Treaty. The current known and suspected violators of this treaty's central injunction against acquiring nuclear weapons are North Korea, Iran, and perhaps Libya. More indicative of the legitimacy and effectiveness of this law-based regime is the number of states that gave up nuclear weapon programs or capabilities in order to come into compliance: Argentina, Brazil, Belarus, Kazakhstan, South Africa, South Korea, Sweden, Taiwan and Ukraine.

The legitimacy and wide adherence to nonproliferation treaties represents a great source of strength that the United States and other forces of civilization should use adeptly to strengthen enforcement of the norms and laws that the vast majority consider vital to civilization. Neglect or denigration of these treaty regimes needlessly dissipates the potential strength they offer us. Indeed, our capacity to rally others to add their strength to ours will grow or weaken in direct proportion to the political capital we invest in international law and regimes generally.

Other states and societies resisted U.S. leadership in the run up to the Iraq war in part because the U.S. seemed in the preceding five years to denigrate international cooperation and treaties that others valued. The list is well known and includes: the International Criminal Court, the Kyoto Protocol on climate change, the ban on antipersonnel land mines, the biodiversity treaty, a verification mechanism for the Biological Weapons Control Treaty, the Comprehensive Test Ban Treaty. Specific arguments could be made against each of these treaties, but the cumulative effect of U.S. positions suggests an aversion to international regimes that could require actions that the U.S. otherwise would prefer not to take. One response by others is to say, "fine, then we will withhold our cooperation when you ask us to do things we would prefer not to." (This resistance can be seen in the difficulty we find in rallying other states to volunteer police and other occupation forces or to contribute to post-war construction efforts).

#### STRENGTHENING THE NONPROLIFERATION REGIMES: THE MIDDLE EAST, THE PERSIAN GULF, RULE REFORM, AND COALITION AGAINST NUCLEAR TERRORISM

The WMD nonproliferation regimes need to be strengthened. Existing rules need to be revised; new rules or initiatives need to be undertaken; enforcement needs to be made surer. To accomplish this vital tightening and strengthening, leading states in the international community must join with the U.S. Fear of U.S. unilateralism or retribution may induce some states to cooperate, but the sustained cooperation needed to enforce nonproliferation rules will be more likely if others perceive that the U.S. is committed to abiding by terms and procedures of cooperation as elaborated through international treaties and institutions, even if at times we would rather do otherwise.

To this end, we should frame the intervention in Iraq as an initiative to begin creating the conditions for a zone free of weapons of mass destruction in the Middle East. This is a principal objective of parties to the Nuclear Nonproliferation Treaty; we could be doing much more to proclaim and demonstrate that the disarmament and removal of the Saddam regime in Iraq will serve the goals and objectives of the NPT, the CWC and the BWC. Indeed these treaty objectives could not be achieved without fundamental change in Iraq's governance. To the best of my knowledge, the U.S. has not made any effort to relate the initiative in Iraq to the objectives of treaties that the rest of the world actually says it cares a great deal about. We have missed an opportunity to say and demonstrate that we care greatly about international nonproliferation treaties and that the removal of the Saddam regime and

its capacity to produce weapons of mass destruction should enhance significantly the prospect of achieving universal adherence to these treaties.

Going further in this vein, we know that proliferation occurs in regional clusters, and that Iraq was a major stimulus of WMD proliferation in the Middle East and Persian Gulf. Iran and Israel's interests in acquiring nuclear and probably chemical weapons stem at least in large part from Iraq. The U.S. is now concentrating intensely on Iran. We have gotten the attention of Iranian leaders of all stripes; they fear U.S. power and intentions. Signs emerge that Iranian leaders would be interested in an accommodation with the U.S. that would include, on their part, at least some of the steps the U.S. has long demanded. But Iranians also have major strategic concerns that are not unreasonable and that the U.S. has not sufficiently addressed. These concerns would obtain if no Ayatollah held any power in Iran. Chief among them is whether the U.S. plans to dominate Persian Gulf political, economic and security affairs for the indefinite future? If the currently mixed Iranian government made "concessions" demanded by the U.S., would Washington pocket them and then still seek to overthrow the government? If that is the case, Iranians ask, then "why make concessions?" Importantly, conservatives and reformers alike ask these questions. Reformers with whom I have spoken do not worry that accommodations between the U.S. and the current government of Iran would undermine the course of true democratic reform in Iran; rather, they say it would help. What worries them is that the U.S. will push its coercive diplomacy too far into Iran and stimulate nationalist stirrings that will hamper the cause of reform. Iranian nationalists of all stripes do not want to be taken advantage of by the U.S. (and Israel, as they see it).

If the antagonists in the Middle East need a road map, the antagonists in the Persian Gulf need a navigational chart. They need to know the intentions of all regional actors, including the U.S., and whether rules can be agreed to limit the threats and capabilities they might array against each other. If the U.S. is not forever to be the military occupier of Iraq and the wider region, some sort of regional security system must be negotiated. This is vital in its own right, but also to global security and nonproliferation. Why has no effort even been discussed publicly to initiate a regional security dialogue of Persian Gulf states and the U.S. (as the invited protector of several of these states)? If it is because we now prefer to act alone and at our sole discretion, rather than effect rule-based systems, then history suggests the cost in treasure and insecurity will mount over time.

Among the questions that should be put on the table in a Persian Gulf dialogue are the following:

- What feasible policies would Iran have to adopt to prompt the U.S. and its protectorates (Qatar, Kuwait, Bahrain and now Iraq) to grant Iran the prominent place in the Gulf that its size and history warrant?
- Under what conditions would the U.S., and its protectorates conclude that the American military presence in the region could be reduced dramatically, as Iranians wish?
- How do the U.S. and Israel, as possessors of weapons of mass destruction, propose to reassure Iran that it does not need such weapons for its security?
- How do Iran and the U.S. propose to help establish new security relations between post-war Iraq and Iran, recalling that Iraq in 1980 started the brutal eight-year war with Iran and attacked it with chemical weapons?
- In a world of enforced norms against terror, how can Iran be integrated into the international political economy if it does not explicitly recognize Israel's existence? If Iran does explicitly recognize Israel, how will it gain?

These questions are too important to ignore. The U.S. should propose an initial, non-negotiating forum for officials and highly informed scholars from all of the Gulf states, and the U.S. and the U.K. to address them.

Iran—like North Korea and Iraq when it was building its Osiraq nuclear reactor—also highlights the need for major reform of the nuclear nonproliferation regime's basic rules. The Nuclear Nonproliferation Treaty was negotiated in 1968. It reflects the spirit of Atoms for Peace, the belief that nuclear power was the apogee of human technological prowess and would provide electricity too cheap to meter. If nuclear power represented modernity and economic development, then all countries should be entitled to acquire nuclear technology, as long as they accepted monitoring to verify their commitments not to acquire nuclear weapons. Thus the rules of the NPT allow Iran, North Korea, and other states to acquire capabilities to enrich uranium and produce and separate plutonium. As long as the state follows the limited requirements of transparency and monitoring, and cannot be proved to be seeking nuclear weapons, it is entitled to acquire weapons-usable capabilities. Such

a state need not demonstrate that these capabilities are necessary or economical for civilian purposes.

The U.S. is now leading a charge in the International Atomic Energy Agency to find Iran in non-compliance with its NPT obligations. The impression has arisen that the contention centers on the uranium enrichment plant at Natanz. Yet, the allegations the IAEA is investigating are that Iran undertook pilot-scale enrichment at another, secret facility without notifying the IAEA, and may not have accounted fully and accurately for uranium-hexafluoride gas it received years ago from China. But under current rules Iran is entitled to have facilities to enrich uranium and produce and separate plutonium as long as it follows procedures for notification and monitoring. Thus Iranian officials, such as Vice President Reza Aghazadeh, argue forcefully back:

Our people and authorities always ask why Iran which has acceded to different nuclear treaties and safeguards agreements and has rendered all sorts of cooperation as demanded by IAEA and while its nuclear activities, as attested by the official reports of IAEA inspection teams are peaceful, still remains subject to various international pressures and restrictions. Meanwhile countries which possess weapons of mass destruction and refuse to accede to treaties such as NPT are left on their own without being asked to be accountable for their nuclear conduct.<sup>1</sup>

Clearly there is a giant loophole in the NPT that needs to be closed before other states try to use it. (Egypt, Algeria, South Korea, and Turkey come to mind, and three of these states are U.S. friends, not bad guys). The rules need to be reformed. Given the surfeit of existing uranium enrichment and plutonium production and separation capabilities in the world, no additional states need acquire such capabilities that are inherently proliferation sensitive. States like Iran that already have invested in acquiring capabilities that we reasonably want them to forego should be compensated and should be guaranteed the nuclear fuel services they need for civilian purposes. Fair-minded people rather readily could devise arrangements to utilize already operating, internationally reliable fuel-cycle capabilities to provide cost-effective fuel services to states like Iran. The challenge is to negotiate reform of the underlying rules. Space does not allow detailing all the interest groups and states that would resist such reform. Unmistakably, though, the U.S. will need the cooperation of the United Kingdom, France, Russia, China, Japan and probably Iran and other states to effect this reform which is vital for global security.

So far I have suggested needed initiatives to strengthen regional security in the Middle East and Persian Gulf and to reform the nuclear nonproliferation regime. Another priority—maybe first in order of “doability”—is to persuade all states possessing nuclear weapons materials and weapons to implement state-of-the-art security measures to ensure that terrorists cannot get their hands on these things.<sup>2</sup> Currently, knowledge of best security practices is not systematically shared. There are not agreements or programs to make state-of-the-art security procedures and technologies available to all possessors of nuclear materials and weapons—items such as vault locks, infiltrator detection systems, security cameras, and other anti-theft technologies. Care must be taken not to violate Nuclear Nonproliferation Treaty rules against sharing technology or know-how that would enhance other states’ weapons capabilities. That said, improving every relevant state’s capacity to secure sensitive nuclear assets is vital to protect the world against terrorism.

Forming a “coalition of the nuclear material possessing” is not only an anti-terrorism imperative. It also offers a way to engage India, Israel and Pakistan in cooperative international nonproliferation efforts. These three states currently stand outside the NPT. This should not be allowed to impede cooperation with them to promote the common global good by doing everything humanly possible to secure their nuclear “assets.” Such cooperation should be a minimal obligation of states that possess nuclear weapon materials.

Senator Lugar, writing in the *Washington Post*, set the ideal objectives for the initiative I am suggesting: “every nation that has weapons and materials of mass destruction must account for what it has, safely secure what it has (spending its own money or obtaining international technical and financial resources to do so) and pledge that no other nation, cell or cause will be allowed access or use.”<sup>3</sup> Imple-

<sup>1</sup>H.E. Mr. Reza Aghazadeh, “Iran’s Nuclear Policy,” speech given at IAEA Headquarters, Vienna, May 6, 2003, p. 9.

<sup>2</sup>The U.S., U.K., France, Russia, China, Israel, India, Pakistan, Japan, Germany, Belgium, South Africa, North Korea—with perhaps one or two other European states that holds small amounts of highly enriched uranium or separated plutonium.

<sup>3</sup>Senator Richard G. Lugar, “The Lugar Doctrine,” *Washington Post*, December 6, 2001.

menting even this relatively modest agenda will require exceptional diplomacy and international cooperation. The necessary standard-setting and implementation cannot be achieved through coercion or diktat.

THE ENFORCEMENT CHALLENGE: NORTH KOREA, IRAN, AND BEYOND

This last section turns to the challenge that seems to preoccupy the U.S. today: enforcing nonproliferation norms and rules on states that seem intent to violate them.

We know from theory and practice that civilized law enforcement must be by-the-book and non-selective. Actors are not arrested and prosecuted without probable evidentiary cause that they have violated specific laws. And law enforcement is not supposed to be selective. All laws, not just some, are to be enforced. All violators, not just some are to be prosecuted. Failure to live up to these injunctions undermines the legitimacy of whichever jurisdiction we are considering. Over time, doubts about legitimacy lead to instability, disorder and resistance against the enforcers.

The recent and ongoing Iraq experience remains ambiguous in its effect on future enforcement of disarmament and nonproliferation norms and terms. (The looting of nuclear facilities and dispersal of dirty-bomb materials into unknown hands, and removal of valuable files, may also have exacerbated the proliferation danger itself). The two other major cases “on the docket”—North Korea and Iran—are different from Iraq and each other, as administration officials rightly insist. Yet, one of the differences is the unavoidable need for cooperation in dealing with them, and this is where the Iraq experience may affect outcomes.

North Korea poses a rather cut-and-dried case. No one doubts that it has violated central norms and treaty provisions. Unlike with Iraq, the nature of the threat and the accuracy and motivations behind U.S. arguments are not disputed. This and other factors have helped the U.S. to persuade key regional players China, South Korea, Russia and Japan to cooperate somewhat in pressuring North Korea not to act more rashly. One can argue that this cooperation is greater than it would otherwise have been if the U.S. had spoken and acted as if it did not want or need cooperation, and instead would “handle” the challenge by itself militarily.

Using a law-based model, North Korea represents a hostage crisis wherein the hostage takers—the DPRK government—have agents outside the “house” who pose tenable threats to disperse dangerous weapons in ways that we might not detect. Moreover, if the hostage takers blow up the house, the human and financial costs of the catastrophe and its aftermath are greater than the surrounding posse feels it can bear. Not only would a collapse of government in North Korea pose enormous economic and human liabilities to South Korea, China, and the U.S., it would also exacerbate the short-term proliferation danger. Iraq, and before it, the collapse of the Soviet Union, showed that major proliferation messes occur when the controls of authoritarian governments are lifted off weapons of mass destruction inventories, facilities and scientists. Dangerous weapons and materials are left there for the taking; insiders may escape with these weapons or materials; scientists and engineers may sell their know-how, all before a new order can be established. We have not yet found ways to seamlessly impose replacement controls over these dangerous materials and people. The gap between destruction of the old regime and organization and emplacement of the new would be dangerous in North Korea.

Faced with this excruciatingly frustrating, indeed outrageous, hostage-like crisis, law enforcement tries to tighten the cordon, keep calm, and negotiate an outcome that keeps North Korea from threatening international peace and security. This negotiation will go best if the negotiators include people the hostage takers know and rely upon (i.e. China), and the co-negotiators are willing to present a unified front. Indeed, the more pillars of the community who are willing to be part of the posse, the better. Good cop/bad cop only works when the two cops share the same fundamental objectives. The negotiation with North Korea obviously is influenced by the potential use of force, but the law enforcers and the hostage takers know that they will lose much if it comes to a shoot out. (Waco comes to mind.) Better to negotiate an outcome that may spare the hostage takers the death penalty if at the same time it spares the rest of the community the dangers and costs it is not prepared to bear.

Iran actually is a much tougher case than North Korea or Iraq. The U.S. rightly is pressing the IAEA to investigate whether Iran has met absolutely all of its notification and inspection requirements under the nonproliferation treaty and related safeguard agreements. But the bigger problem is Iran’s seeming interest in acquiring nuclear weapons, and the role that otherwise permissible uranium enrichment and plutonium separation facilities could play in this acquisition.

The U.S. rightly has tried to persuade Russia and other states that Iran is in fact seeking nuclear weapons, and therefore should be stopped through collective action.

We need others to cooperate in trying to block further flows of equipment, materiel, and know-how to Iran's nuclear and missile programs. But if the U.S. concluded that Iran could by itself do the rest of the work needed to acquire nuclear weapons, is there any other "supply-side" way to stop it?

The answer to this question depends in large part on whether military options exist to negate or significantly delay Iran's acquisition of nuclear weapons and whether the U.S. could undertake these options without allies. This question cannot be answered without access to highly classified material. Yet if we lack conclusive evidence to support our argument that Iran has a secret uranium enrichment plant that already has done at least pilot-scale enrichment that would clearly violate Iran's NPT obligations, we also lack adequate information to target such a facility (or facilities). In all likelihood, U.S. and allied intelligence could identify targets whose destruction would slow down Iran's acquisition of nuclear weapons (the uranium conversion plant comes to mind), but for this to make strategic sense we would have to believe that during the time thereby bought, Iran would become less determined to acquire nuclear weapons. We would need to believe that such an attack would not stimulate countervailing asymmetrical attacks (i.e. terrorism) against U.S., Israeli and other friendly interests. We would need to assume that such an attack would not lead to major Shiite counteractions against the U.S. in Iraq. We would also need to believe that an attack on Iranian facilities without international mandate would not worsen the United States' overall political-security position in the Persian Gulf, the Middle East and the world more broadly.

Even if all of those assumptions could be made reasonably, we would still be faced with the long-term issue of dealing with the seventy million people of Iran. Would a U.S. military attack on Iran's nuclear capabilities increase or decrease the likelihood that the Iranian people and current or prospective government would integrate peacefully into the international community of norms and institutions the U.S. seeks to foster? Anyone with experience in Iran will attest that even the most democratic, internationally minded Iranians speak frequently and bitterly about the U.S. role overthrowing the nationalist Mossadegh government in 1953. Nationalist antagonism against the U.S. government—not the American people—remains after fifty years. Discussions with today's reformers in Iran, including leaders of civil society, suggest that widespread affection for the American people and the principles for which the U.S. stands would be lost if the U.S. acted coercively against Iran. For many Iranians think it is unfair that Israel and Pakistan are allowed to have nuclear weapons and even receive U.S. aid, while Iran is denied even the "peaceful" nuclear technology to which it is entitled. Among other things, this nationalist frustration over U.S. nuclear double standards could mean that even if the current leaders of Iran's security and intelligence and judicial apparatus were displaced, the successor government would be intensely nationalistic and opposed to the U.S. government. Such a nationalist government should not be expected to abandon interest in acquiring nuclear weapons.

This analysis pulls us back to the "demand-side" of the equation. We need to persuade Iran's current and future leaders that they will gain more by trading their problematic nuclear facilities and ambitions for greater integration into the international political economy. I have written a paper outlining a strategy to accomplish this objective, which I have provided the committee.

Here I would add merely that the U.S. needs to internationalize the current effort to prevent Iran from acquiring nuclear weapons. International pressure and cajolery are vital to affecting Iran. To increase the pressure, the U.S. needs to persuade Russia, the United Kingdom, France, and China that Iran's acquisition of nuclear weapons would pose a threat to international peace and security, and that the U.S. seeks a cooperative, peaceful path to persuade Iran not to pose such a threat. Doubts over the soundness of U.S. intelligence regarding Iraq's weapons of mass destruction may be obviated by the international community's apparent surprise over the recent "discovery" of Iran's facilities at Natanz and Arak. Russia, for one, seems to be reconsidering its reliance on Iran's prior claims that it was not seeking nuclear weapon capabilities. France has said that in the wake of Iraq it wants to be more proactive in combating proliferation. Concerns that the U.S. will take violent nonproliferation enforcement into its own hands provide an opportunity to motivate other major players to work cooperatively through established mechanisms to enforce global adherence to nonproliferation norms. The message from international community leaders should be that Iran's acquisition of nuclear weapons would be a threat to international peace and security, especially given Iran's non-recognition of Israel's right to exist, and its support of terrorist organizations. Such a message would establish a predicate for UN Security Council action in the event Iran were to acquire nuclear weapons.

International receptivity to more robust and cooperative enforcement of non-proliferation norms and laws will depend in part on our determination to make such enforcement non-selective and to work in genuine partnership with others. The impression has grown recently that the U.S. pursues selective treaty enforcement. This is only partly fair. A major complaint, especially by Iran and Arab states, is that the U.S. says and does nothing to seek Israel's adherence to the Nuclear Non-proliferation Treaty. Though Israel, India and Pakistan have not signed the treaty, U.S. nonproliferation efforts for years pressed heavily on India and Pakistan to do so, while no such pressure was put on Israel. Arguments can be made to justify this position, but the international political problem remains. As I mentioned above, one way to build greater support for U.S. diplomacy in the Middle East and Persian Gulf would be to exert more leadership in behalf of the long-term objective of making the Middle East a zone free of weapons of mass destruction. This goal cannot reasonably be achieved unless and until Israel and its neighbors achieve a durable, peaceful *modus vivendi*. The conditions that would allow Israel to cooperate in freeing the Middle East from weapons of mass destruction will be difficult to achieve. The point here is that the U.S. should frame its diplomatic and security initiatives as consonant and indeed informed by this larger objective.

Henry Sokolski of the Nonproliferation Policy Education Center recently has proposed a non-country specific, universal innovation to enforceably ban states from deploying chemical, biological, or nuclear weapons to any other nation whether they be under their control or not. There is more to Sokolski's proposal, of course. The point here is that it deserves careful consideration.

A second problem of selective enforcement arises when the U.S. appears to bar nuclear cooperation with parties to the NPT as called for in Article IV of the treaty and at the same time resists international calls for enforcing Article VI requirements that the nuclear-weapon states take steps to stand down their nuclear arsenals. We are alleged not to be living up to our commitments to help others with nuclear technology, while we also do not enforce our obligations to adopt measures such as the Comprehensive Test Ban Treaty. As I have suggested above, the U.S. refusal to help states like Iran's acquisition of uranium enrichment and plutonium production capabilities is reasonable, but would be greatly strengthened by an initiative to change the rules so that states no longer can claim an inherent right to acquire these capabilities. Rewriting these rules will be politically impossible if the U.S. and other nuclear-weapon states do not take more seriously their obligations to reduce the salience of nuclear weapons in their national security strategies and adopt measures like the CTBT which are intended to end nuclear arms racing. American pursuit of a new generation of nuclear weapons would gravely undermine much of the world's willingness to cooperate with us in strengthening enforcement of export controls and treaty enforcement in cases that we care greatly about.

Ultimately, nonproliferation is not unlike the war on terrorism. The U.S., starting with the strong moral leadership of the president, has stated categorically that "targeting innocent civilians for murder is always and everywhere wrong."<sup>4</sup> Undersecretary of Defense Douglas Feith has declared similarly that "Worldwide moral battles can be fought and won . . . No decent person any more . . . supports or excuses slave trading, piracy, or genocide. No decent person should support or excuse terrorism either." Civilization ultimately requires the same categorical injunction against weapons of mass destruction. After all, these weapons inherently threaten innocent civilians for murder. This is true even of our nuclear weapons and those of our friends as well as our adversaries. These weapons' destructive powers are so great that they terrorize the innocent as well as the guilty, even if their exact targets are military and command and control installations. For the moment, nuclear weapons are permitted in eight states; they serve morally defensible purposes by deterring threats to innocent civilians in many states. Yet over the long-term these weapons cannot be kept from spreading if they are not made universally anathema. Declaring the goal of universally freeing the world from threats of weapons of mass destruction will greatly strengthen our efforts to enforce the norms and terms of nonproliferation in the cases that threaten us today. Failing to accept and promote this civilizing mission, and instead focusing our efforts on a select few bad guys, will undermine the cause of nonproliferation and the rule of law.

---

<sup>4</sup> President George W. Bush, "New Threats Require New Thinking," speech to the graduating class at the United States Military Academy at West Point, June 1, 2002.

[NOTE: Additional material submitted for the record by Mr. Perkovich, entitled "Dealing With Iran's Nuclear Challenge," dated April 28, 2003, is not printed here but is included in the files of the House Committee on International Relations.]

Mr. BEREUTER. Dr. Perkovich, thank you very much.

Next we will hear from Dr. Alan Zelicoff. He is a senior scientist with the Center for Arms Control and National Security at Sandia National Laboratories, a practicing physician before he joined Sandia in 1980. He was a member of the U.S. delegation to the Biological Weapons Convention from 1992 to 2000, and currently participates in the Cooperative Measures Program with Russia Nuclear Laboratories.

Welcome, Dr. Zelicoff. You may proceed as you wish.

**STATEMENT OF ALAN ZELICOFF, PH.D., SENIOR SCIENTIST,  
CENTER FOR NATIONAL SECURITY AND ARMS CONTROL,  
SANDIA NATIONAL LABORATORIES**

Mr. ZELICOFF. Thank you, Mr. Chairman.

I am honored to testify before the Committee, and especially amidst such decorated company, and I say this not out of kindness alone, but because it really does give me great faith to know that a technical person such as myself can actually be asked to try to answer a key question before the Committee, which is: What next for U.S. North Korea policy in the aftermath of Iraq.

Let me say a few more words about myself. I am a physicist and physician. The focus of my work is on scientific cooperation with researchers and staff, primarily at biological weapons laboratories in the countries of the former Soviet Union. I am going to restrict my comments today to biological weapons proliferation as I would claim no expertise in nuclear or missile technologies.

In my role as senior scientist in Sandia's Center for National Security and Arms Control and the Advanced Concepts Group at Sandia, I have been blessed with the opportunity to actually do a couple of things that might have made a bit of difference in our understanding of the old Soviet biological weapons program.

I have set up Internet connections in far-flung outposts in the Russian and Kazak biological weapons archipelago; I have carried out some disease surveillance programs with scientists in isolated spots across EurAsia; and I have played a small part in fostering joint research in identification of an prophylaxis against dangerous infectious diseases.

Not all of which I have learned about the remnants of the Russian biological weapons program has been encouraging, and I did not expect it to be, but I will share a couple of my lessons with you in a moment.

First and foremost though, I want to tell you, Mr. Chairman, and also Mr. Lantos, I want you to know that my message is a very simple one. I concur with your united vision of a Marshall Plan for the Middle East. I watched the Committee's hearings held in July of last year, and I must say I watched them with great fascination, and I believe that the vision may serve as the model for what we do in other areas of the world.

In other words, I think the boldness of the Committee is appropriate, necessary and meaningful in this regard, and I will put my own spin on the next steps. But I think we have to focus on things

that are doable, sustainable, certainly respectful of cultures outside the United States, and I would add, mutually beneficial. This sounds easy, but I know it really is not.

So to outline what I think we can and should do, let me start with what I believe we should not do, and that is the world of pro forma arms control; for example, the Biological and Toxin Weapons Convention. While they may be useful for setting legal norms are not verifiable with current technology, even to a minimal standard of more probable than not.

I mean quite simply that despite even the most intrusive of conceivable monitoring regimes, it is clearly too easy to hide biological weapons production facilities, and it is easy to fool inspectors under any plausible set of inspection rules.

It surprises me not at all, and I would pick up on Mr. Lantos's point here, that mobile production units for biological weapons are now turning up in Iraq. This is precisely the approach that the old Soviet Union program adopted toward the end of their biological weapons program. It is a "just in time" philosophy for the manufacturer of micro-organisms for lethal purposes.

Such technological advances illustrate the inherent problems in verification of a biological weapons treaty. It is not to say that such treaties are without value, but rather it is to say that we should not pursue the holy grail of verification of the Biological Weapons Convention until our monitoring technologies advance, and advance a great deal.

Mr. Chairman, the Members of the Committee doubtless have watched the stories of the spread of West Nile virus across the United States and more recently the explosion of SARS in the Far East, Canada, and now in our own country. They inform us of at least two important lessons: Diseases respect no borders; and early detection, even when we do not know exactly what we are looking for, makes all of the difference between an infectious disease catastrophe and one which is serious but confined in its distribution.

In addition, I would posit that infectious disease mitigation is the single largest hurdle that developing countries, in the Middle East in particular but also elsewhere, must overcome in order to realize economic prosperity and to advance a culture of despair and resentment that fuels terrorism and proliferation.

The *British Medical Journal* of just last week outlined the problems in stark terms by saying that:

"The Arab world, despite its wealth and natural and human resources, has fared poorly in many aspects of development. Public health challenges include high mortality . . . wide disparities between rural and urban areas, emphasis on curative rather than preventive care, relatively weak public health institutions and unresponsive and inequitable health systems. The priorities in this area of the world are strengthening of community health, public health institutions and primary care services."

And I believe the BMJ's assessment is exactly right. Public health infrastructure has essentially evaporated in the Middle East, Russia and in most of sub-Saharan Africa. And I would also add that the monitoring system that we are now using in the West

is slow, expensive, and bureaucratically hide-bound. It is unresponsive to our needs let along those of regions in the rest of the world.

Over the past 5 years, my group of Sandia in collaboration with the very, very forward-thinking New Mexico Department of Health has been exploring the use of a simple, inexpensive, flexible system to detect serious disease in humans and animals. It avoids the limitations of the old-fashioned public health surveillance techniques, and it translates well across medical practice around the globe. It is called Rapid Syndrome Violation Project, or RSVP.

I am not here to advertise RSVP, but instead here to let you know that we have been fortunate to be able to show that it is indeed possible to achieve a high level of reporting compliance, even in the United States where there is a long history of failure in this regard, providing information that is actionable, rapidly disseminated and meaningful to physicians and public health epidemiologists around the world.

We believe such a syndrome-based systems, which requires no specific disease diagnosis, is sensitive enough to detect not only novel, naturally occurring diseases like SARS, but also any and all bioterrorism-related disease. Inherent in syndrome surveillance is the knowledge of the geographic and temporal distribution of signs and symptoms, and these additional dimensions may be of enormous value in identifying the testing or use of biological weapons.

Over on the other side of the Capitol, your colleagues in the Senate Foreign Relations Committee have introduced bi-partisan legislation called the Global Pathogens Bill. This bill envisions much of what I have described a few moments ago, and specifically calls for the most flexible syndrome-based approach to infectious disease detection that is likely to improve public health outside of the United States. The bill was adopted unanimously by the Senate last year, and I am confident that it will pass again this year.

I urge the House though to take up this legislation as well if only because such a system will assist physicians and public health officers in this country; I must reiterate; diseases respect no borders.

Finally, Mr. Chairman, I think the Global Pathogens Bill and its emphasis on collaboration, informal and otherwise, and routine exchange of information about disease outbreaks builds trust and mutual understanding among peoples. All people in all cultures value their health, and usually the health of their animals.

This is not a panacea for curing the problem of North Korea, but it will help to cure more mundane ailments that contribute to it, as you have already observed in your work on a Marshall Plan for the Middle East, and beyond.

I am very grateful for your time and patience. I truly look forward to answering your questions. Thank you.

[The prepared statement of Mr. Zelicoff follows:]

PREPARED STATEMENT OF ALAN ZELICOFF, PH.D., SENIOR SCIENTIST, CENTER FOR NATIONAL SECURITY AND ARMS CONTROL, SANDIA NATIONAL LABORATORIES

Mr. Chairman—

I am honored to testify before the Committee on International Relations—and especially amidst such decorated company. I say this not out of kindness alone, but because it gives me great faith in our process that the views of a technical person such as myself might be solicited in answering the Committee's key question: what next for US non-proliferation policy in the aftermath of the Iraq conflict?

A few words about me: I am a physician and physicist working at the Department of Energy's Sandia National Laboratories in Albuquerque, New Mexico. The focus of my work is on scientific cooperation with researchers and staff at biological weapons labs in the former Soviet Union countries and elsewhere. I am going to restrict my comments to biological weapons proliferation, as I would claim no expertise in nuclear or missile technologies. Chemical weapons, I will note in passing, should not occupy much of the Committee's time and worry; yes, they could be used to kill people, but the technology is ancient, expensive, difficult to implement and hide, and superceded by advances in other field of Weapons of Mass destruction (WMD). I'm sure I'll get complaints about my discounting of the chemical weapons threat from people who've written tomes on it, but in the scheme of things, chemical weapons are the least of our worries.

In my role as Senior Scientist in Sandia's Center for National Security and Arms Control and Advanced Concepts Group, I've been blessed with the opportunity to actually do a couple of things that might have made a bit of a difference in our understanding of the old Soviet biological weapons program. I've set up internet connections in far-flung outposts of the Russian and Kazakh biological weapons archipelago; I've carried out joint disease surveillance programs with scientists in isolated spots across EurAsia; and I've played a part in fostering joint research in identification of and prophylaxis against dangerous infectious disease. Not all of it of what I've learned about the remnants of Russian biological weapons program has been encouraging, and I didn't expect it to be. But, I've benefited from a couple of lessons that I will share with the Committee in moment. They may not seem terribly novel, but I think they are and may help you as you navigate the very, very difficult but important non-proliferation policy choices before the Congress.

However, first and foremost I want to let you, Mr. Chairman and Mr. Lantos know that my message is a simple one: I concur with your united vision of a "Marshall Plan for the Middle East", and I watched with fascination the Committee's hearings of July 24, 2002 and I believe that vision may serve as a model for what we do in the other regions of the world, regions that you have already articulated as geopolitical areas of concern. In other words, your boldness is appropriate, necessary, and meaningful. I'll put my own "spin" on the next steps to realize that vision, and I think that we must focus on those things that are (a) doable; (b) sustainable; (c) respectful of cultures outside of the US; and (d) mutually beneficial. Sounds easy, perhaps, but I know it isn't.

To outline what we can and should do, let me start with what I believe we can't and shouldn't do to advance US non-proliferation goals in the world of biological weapons. Pro forma arms control agreements—for example, the Biological and Toxin Weapons Convention (BWC)—are useful for setting legal norms, but are non-verifiable with current technology, even to the minimal standard of "more probable than not". I mean, quite simply, that despite even the most intrusive of conceivable monitoring regimes—extrapolating, for example from the UNSCOM experience in Iraq—it is clearly too easy to hide biological weapons production facilities and fool inspectors under any plausible set of inspection rules, perhaps even after a war. It surprises me not at all—and I would speculate that the intelligence community would say the same—that mobile production units for biological weapons are now turning up in Iraq. This is precisely the approach that the Soviet Union adopted toward the end of their biological weapons program, a "just-in-time" philosophy for the manufacture of micro-organisms to fill dispersal devices to be used on the battlefield or elsewhere.

Such technological advances illustrate the inherent problem in verification of any biological weapons treaty. This is not to say that such treaties are without value—indeed, I think they have great value in that they express an ideal and highly desirable future. Rather, it is to say that we shouldn't pursue the holy grail of "verification" of the BWC. Until our monitoring technologies advance (and advance a great deal) is a largely waste of time and resources to do so. We have demonstrated the pitfalls of biological weapons verification at Sandia as part of an extensive inter-agency exercise, and I'd be pleased to make a copy of the report of our mock inspection experience available to the Committee. In short and from the purely technical standpoint, I believe that the Administration was correct to reject the monitoring Protocol for the BWC; it hadn't a prayer of finding violators, yet it put the US and western countries with advanced biotechnology industries squarely in the middle of the conundrum of "false positive" findings that the Protocol was certain to generate. The political dimension of the Administration's decision I shall leave for you and others much more knowledgeable than I to ponder.

Mr. Chairman, members of the Committee doubtless have watched the stories of the spread of West Nile virus across the United States and more recently the explosion of SARS in the Far East, Canada and now in our own country. They inform

us of at least two important lessons: diseases respect no borders; and early detection (even when we don't know specifically what we are looking for) makes all of the difference between an infectious disease catastrophe and one which is serious, but confined in its distribution. In addition, I would posit that infectious disease mitigation is the single largest hurdle that developing countries—in the Middle East and elsewhere—must overcome in order to realize economic prosperity and to advance beyond a culture of despair and resentment that in turn fuels terrorism and proliferation. The British Medical Journal of just last week (BMJ, 2003; 326:1141–3) outlined the problem in stark but clear terms: “the Arab world, despite its wealth and natural and human resources has fared poorly in many aspects of development . . . Military spending is triple that of other regions, and rapid expansion of Arab populations threatens progress. Public health challenges include high maternal mortality . . . wide disparities between rural and urban areas, emphasis on curative rather than preventive care, relatively weak public health institutions and unresponsive and inequitable health systems. [Priorities are] strengthening of community health, public health institutions are primary care services”.

I believe the BMJ's assessment is exactly right—public health infrastructure has essentially disappeared in the Middle East, Russia and all of sub-Saharan Africa. I would add that the monitoring system we use in West is slow, expensive, and bureaucratically hide-bound. It is unresponsive to our own needs let alone the needs of other regions of the world.

Over the past five years, my group at Sandia in collaboration with the very forward-thinking New Mexico Department of Health has been exploring the use—domestically and internationally—of a simple, inexpensive, flexible system to detect serious disease outbreaks in humans *and* in animals. It avoids the limitations of old-fashioned public health surveillance techniques, and translates well across medical practice around the globe. It is called the Rapid Syndrome Validation Project (RSVP); “syndrome” means a description of symptoms (like cough and fever) and signs (like fluid in the lungs and temperature). I am not here to advertise it, but instead to let you know that we've been fortunate to be able to show that it is possible to achieve a high level of reporting compliance (even the US where there is a long history of failure in this regard) providing information that is actionable, rapidly disseminated and meaningful to physicians and public health epidemiologists and the patients that they ultimately serve.

In addition, we believe that such a “syndrome-based” system—which requires no specific disease diagnosis before action can occur—is sensitive enough to detect not only novel, naturally occurring diseases but also any and all bioterrorism-related diseases. Inherent in syndrome surveillance is knowledge of the geographic and temporal distributions of symptoms and signs; these additional dimensions may be of enormous value in identifying the testing or use of biological weapons, and with high probability during the very short time window where intervention can mean saving or losing the vast majority of the exposed but-not-yet ill population. In the world of bioterrorism as in the world of daily public health, hours matter. Days are simply too late. Deterrence depends in part on convincing an adversary that risky attacks with biological weapons are unlikely to succeed, and robust medical and veterinary surveillance advances that strategy.

Over on the other side of this building, your colleagues on the Senate Foreign Relations Committee have introduced bi-partisan legislation called the Global Pathogens Bill. This Bill envisions much of what I have described a few moments ago, and specifically calls for the more flexible “syndrome-based” approach to infectious disease detection that is likely to improve public health outside of the US. The Bill was adopted by unanimous consent in the Senate last year, and I am confident it will pass in that chamber again this year. I urge that the House take up this legislation as well if only because such a system will assist physicians and public health officers in *this* country; I must reiterate: diseases respect no borders.

Finally Mr. Chairman, I think the Global Pathogens Bill and its emphasis on collaboration (informal and otherwise) and routine exchange of information about disease outbreaks builds trust and mutual understanding among the peoples. All people in all cultures value their health, and the health of their animals. It is not a panacea for curing the problem of non-proliferation, but it will help to cure more mundane ailments that contribute to it, as you have already observed in your work on a Marshall Plan for the Middle East—and beyond.

My sincere thanks for your time and patience. I look forward to answering questions.

Mr. BEREUTER. Thank you very much, Dr. Zelicoff, and thanks to all of our distinguished panel.

We have substantial Member interest, understandably. We have 24 people on the list. We have Dr. Bolton coming. Even if we let that slip 15 minutes, I think that I need to as unanimous consent that Members be allowed to ask one question in 2 minutes so that we have maximum opportunity to hear from all of the Members.

Without objection, that will be the rule for the proceeding.

I will ask the first question to all panelists.

It seems to me that in the testimony we have had here, there are significant differences regarding the utility of international agreements and inspection regimes. Dr. Perkovich seems to have stressed the importance of nonproliferation efforts. The other panelists seem to take a somewhat different view.

Could you elaborate a bit on the differences? Perhaps Dr. Zelicoff, I will ask you to respond if you would like to, but welcome a comment from the other two or three of you as well.

Mr. ZELICOFF. Again, I will restrict my comments to—

Mr. BEREUTER. Biological

Mr. ZELICOFF [continuing]. Monitoring regimes with regard to biological weapons.

We have conducted a number of mock inspections in the United States. The largest single series was actually done out at Sandia a few years ago to test the existing but non-adopted protocol for the Biological Weapons Convention, and it simply falls into the category of too hard to do; not simply because one cannot detect the presence of biological weapons activity in general, but more specifically, the likelihood of such a regime identifying falsely the existence of a biological weapons program is virtually inherent in the nature of current bio technology.

So what concerns me specifically is that not only will such a verification regime, should it ever come into force, fail to identify the presence of biological weapons, VIS, for example, the intrusive U.N. inspections in Iraq, but also it would probably burden to an inordinate degree the inspection of U.S. pharmaceutical facilities which have the capability of but no interest whatsoever in making biological weapons.

Mr. BEREUTER. Thank you. I referred to Dr. Perkovich, so unless I have mischaracterized him, Mr. Sokolski or Dr. Iklé.

Mr. IKLÉ. Yes, I totally agree with Dr. Zelicoff on the false attempt to verify Biological Weapons Convention, and the way that defect, a fundamental defect of that idea was concealed is quite scandalous. That's what goes on in endless negotiations in Geneva where the diplomats enjoy their time and do not tell the truth. And the Bush Administration was criticized for scuttling that fraud.

I have a great deal of sympathy with Mr. Perkovich's idea of coming out against the weapons of mass destruction in totality. From President Truman to President Reagan, every President has at one time or another stated that we should abolish nuclear weapons. The statement was discontinued, it is kind of a perfunctory, since then.

The problem with that idea, attractive and noble as it is, is that it really opens the road to world government. And we have not charted that road. I would not want to embark on that road at this time. I see no other way of getting from here to there.

Mr. BEREUTER. My time has expired, but a brief comment from one or both of you. Mr. Sokolski.

Mr. SOKOLSKI. Well, yes. I remember studying law for 4 years at the University of Chicago, and the first thing they taught us was laws are meant to be broken, and that was not because you were supposed to break them, but because you were supposed to catch people breaking them and enforce the law.

So the problem is that the laws that we have or the rules we have are so loose that you do not break them often enough, and when you do, we are not doing enough about the violation. So we need to do some more homework.

Mr. BEREUTER. Thank you.

Mr. PERKOVICH. Just really quickly on this, my focus on the utility of treaties is primarily on nuclear weapons, so I think biological weapons are a very different story.

Nuclear weapons, there are 191 parties to the NPT, and right now there are two states that we're prosecuting, as it were, for violations. Name me another endeavor in life where you have that percentage of compliance and that few problems that you then have to prosecute.

If you do not have that framework of law, of verification, and of enforcement, you do not have warrants to go in and do your search and your enforcement, and you are in a much worse situation.

So, yes, things, need to be improved, but you have to have the framework.

Mr. BEREUTER. Thank you. I hope the question was general utility to Members.

Mr. Lantos, you are recognized. Well, we will get him when he comes back.

Mr. Berman in his absence.

Mr. BERMAN. First, do I understand a portion of both Henry Sokolski's and Dr. Iklé's testimony to be that the goals of non-proliferation should trump U.S. and international efforts to develop nuclear energy; and that we should cease, since the policy which encourages the export of things which facilitate countries developing their own peaceful nuclear energy capabilities?

Mr. IKLÉ. We should proceed with great caution and more analysis so we do not spread, as we did with the Atoms for Peace Program, we did that, unfortunately, the capability to build bombs.

If we go through the states that are now threatening to develop weapons or have done so against the NPT, those are the states that received help under the Atoms for Peace Program.

Mr. BERMAN. Well, what about things like centrifuges and—

Mr. IKLÉ. So we do not want to repeat that.

I will let Mr. Sokolski to go into more detail.

Mr. SOKOLSKI. You are lucky. There is no need to do the things that are as dangerous as what we are doing. Cut it out. You can have nuclear power, and certainly right now the demand for it is not that great, and it will not be very great for at least, at least another 20 or 30 years. You certainly can maintain what you have where you have it without spreading things that are uneconomical and dangerous.

Mr. BERMAN. Okay.

Mr. SOKOLSKI. So make some distinctions. It is not a black and white thing, and that is the reason why I think Mr. Iklé's testimony was precise in spotting programs, and I raised some myself. Cut those out.

Mr. BERMAN. Thank you.

Mr. Perkovich, you made a reference, I tried to write it down but perhaps not fast enough, that you saw signs that Iran is now thinking about dealing with U.S. concerns.

With respect to its development of nuclear weapons, what signs have you seen from Iran that it is thinking about doing anything other than going full force ahead? I am curious. Tell me those signs.

Mr. BEREUTER. Dr. Perkovich, can you answer briefly, difficult as that may be?

Mr. PERKOVICH. There are private discussions and some public discussions from Iran that they are prepared to talk about all of their security requirements as well as U.S. demands on them. They are not specifically saying we are going to give this all up. They are insisting it is peaceful, but they are looking for a dialogue. They are afraid of what is going to happen next, so we do have their attention. They know they would have to address this concern if they are going to go forward in a secure relationship and be unthreatened.

Mr. BEREUTER. Thank you. I will remind Members, unless it is for clarification, to restrict it to one question what the unanimous consent agreed to.

Mr. Tancredo, the gentleman from Colorado.

Mr. TANCREDO. Thank you, Mr. Chairman.

I would like to also just concentrate on the Iranian part of this issue, and specifically your paper, the paper that you handed to us, although I did not get a chance, of course, to read it all. But you suggest that sanctions have never persuaded Iran's revolutionary leaders to forego a nuclear weapons option. A better strategy would be to demonstrate the benefits of economic cooperation from U.S. for new economic engagements from its nationalistic framework.

What tells you, however, that holding out that particular kind of stick, or carrot I guess I should say, is the actual ultimate motivating force that we could actually apply here? Economic development inside Iran would what, change the political environment, change the ideological complexion of the country? What?

Mr. PERKOVICH. Sir, it is by no means a silver bullet, but its dynamic is part of a solution. What we have to avoid and what may be happening now is that we are creating a nationalist attachment to nuclear weapons in Iran, so it becomes not the attachment of a specific regime, but a badge of nationalist honor because Persian nationalism can be quite a force.

In order to do that, you have to mix up the story. If they think all we are doing is blocking them everywhere, blocking their development, you fuel that kind of nationalism. So you have to start picking off people by suggesting that the relationship can be somewhat positive, first of all.

Secondly, the people who are supporting Ayatollah Khamenei and the most reactionary elements are the bazaar class which do

not want international economic engagement. They benefit from a closed economy. They are small traders.

If you open up their economy, they are worried they are going to lose economically as Iran modernizes. So they are trying to keep us out.

Last point, we object to their entering the WTO. We are trying to get everybody else to enter the WTO because we think it actually leads to reform and other benefits, but with Iran we say no, we do not want you to come into the WTO. Removing that objection seems to me cost-free and can do these other things that I am alluding to.

Mr. TANCREDO. Thank you very much.

Mr. BEREUTER. Thank you.

The gentlelady from California, Ambassador Watson.

Ms. WATSON. Thank you.

I am concerned with North Korea and also Iran, and possessing all the necessary ingredients for nuclear weapons, and I am not clear of what our policy is in terms of North Korea; in Iran; I know what the policy was toward the suspicion that Iraq had weapons. But what do you see, what are the options that would be open to us? Let us just focus on North Korea at the time. Dr. Iklé, can you respond? What would be the options we would have? And the others can kick in the response too if you choose?

Mr. IKLÉ. For a definitive solution, Congresswoman Watson, you probably have to look toward the different types of regime. Now, I refer here to a statement made by Secretary of State Powell and Condoleezza Rice about a month or two ago is referring to countries that really gave up nuclear weapons. Those countries were Ukraine, Kazakhstan and South Africa.

What do these countries have in common? Only one thing, and that is change in the regime; and that is really only what eventually leads, I think, to abandonment of the nuclear weapons ambition.

Now, that may not be near term, so you want to do things in the near term. In Korea, we tried to induce the neighbors of Korea to join us in certain economic sanctions, to moderate the Korean pressure for nuclear weapons. Iran has been discussed by Mr. Perkovich, what options there would be. But in the long term I think you have to realize that it is the change in the political attitude of the country.

Ms. WATSON. Thank you.

Mr. BEREUTER. Thank you.

Next we go to Mr. Rohrabacher, the gentleman from California.

Mr. ROHRABACHER. Thank you very much, Mr. Chairman. There are several things being left out of this discussion that I find rather disturbing. We have not heard one word about democracy and what relationship freedom has to do with this issue, nor have we heard anything about missile defense and defensive systems, and the development of those systems, what that has to do with this issue, and it seems to me that both of these concepts play a role here.

For example, we may not want to be training nuclear physicists in our education system in this country if they come from countries that are non-democratic. I mean, maybe the panel can correct me, but it seems to me that we have been training high-level scientists

to go back to dictatorships that may pose a threat to our country. Is not this part of the equation? Maybe we want to train only people from democratic countries.

And in terms of missile defense, is this not something that we need to focus on even more now considering the proliferation problems and the challenges we face?

Mr. SOKOLSKI. Two points. First, I think what Dr. Iklé was referring to when he said "regime change" goes to your point about democracy. Second, you do want to bring folks in if they are not studying how to make bombs even from some countries that are not democratic. Your point, on the other hand, is one that has to be driven home with the educational institutions, and it is a real battle, but you are absolutely right.

Finally, in the case of Iran, let us not be overly optimistic. My center is doing a 2-year study in conjunction with Andy Marshall on Iran with a number of experts. They are evenly divided as to whether or not Iran going democratic will immediately mean that the nuclear weapons program dies. Just as likely it will not. And, therefore, against those kinds of problems you are going to need not just missile defenses, but something even more important—security arrangements with your friends.

We need to brush up on that in that region. I do not know what is possible, but that is something this Committee would do well to look into.

Mr. BEREUTER. Thank you very much.

The gentleman from Pennsylvania,

Mr. HOEFFEL. Thank you, Mr. Chairman.

How important are strong verification protocols?

We have a new Moscow Treaty with very little verification provided in it. The House voted last week for my amendment requiring the Administration to report each year on how many warheads are actually dismantled as opposed to perhaps stored or put in the moth balls or whatever, and attempt to have an annual report to strengthen verification. But that treaty requires none of what President Reagan talked about, trust but verify.

How important is that as we move forward in nonproliferation?

Mr. IKLE. Well, I have been involved in this a bit when I was Director of the Arms Control Agency. We had verification. We had violations. We sat on these violations because we did not want to disturb detente.

In the 1980s, we knew about the violation by the Soviet Union of the AMB Treaty. We shoved that under the carpet because we did not want to stir up additional complications relating to the Soviet Union.

At the present time in our relations with Russia I think verification is not that important. It is our own national means that let us monitor enough.

On the other hand, when it comes to nuclear installations under the NPT, like those owned by North Korea or Iran, verification can make a real good difference.

Mr. BEREUTER. Thank you. Does the gentlelady from Florida, Ms. Harris have questions? The gentlelady is recognized.

Ms. HARRIS. Thank you, Mr. Chairman. I understand that my questions are better suited for Secretary Bolton, but I wanted to

thank the panel for a really enlightening and providing us information that we realize that we must address today. I want to thank you. I look forward to the Secretary's comments.

Mr. BEREUTER. Thank you very much.

The gentelady from California, Ms. Lee, wish to be recognized now? You are in order if you are. You are in order if you wish to be recognized.

Ms. LEE. May I yield my time and then come back to me, please?

Mr. BEREUTER. Yes.

Ms. LEE. Thank you.

Mr. BEREUTER. Next we will move to Mr. Delahunt. Ms. Napolitano, the gentelady from California.

Ms. NAPOLITANO. Thank you, Mr. Chair. I apologize for being a little late getting here, so I did not hear a lot of the discussion.

When we have heard in the past few years of what is happening to us in America with the threats of terrorism, and we look at what other countries are doing, amassing, if you will, whether it is weapons of mass destruction or other means of threatening the rest of the world, including the United States. I am wondering why we are still with Pakistan giving them \$73 million in military equipment, and continue to tolerate entities that engage in international trade of weapons of mass destruction, and the missiles that are capable of carrying that.

We have seen that the countries do not live up to their international treaties. They just ignore them. They just do not feel that it applies to them anymore for whatever reason. Why is it that we are not able then to have the ability to take the money away from them and hold that money hostage until they concede that they are not going to be doing that kind of trading anymore? It just escapes me why we continually with most countries, North Korea, Pakistan, and all. I would like for somebody to address that.

Mr. BEREUTER. Any volunteers?

Mr. PERKOVICH. I spend more time in India and Pakistan than the others, I guess, so I will try to answer it.

First of all, Pakistan has not signed a treaty, so this is another point where treaties matter in the sense of you have got three states that have not signed and you have a little less leverage.

Be that as it may, what has happened with Pakistan historically, and it happened in the Reagan Administration, it is happening now is there is always something we care more about—fighting Afghanistan, fighting the war of terrorism.

Ms. NAPOLITANO. Priorities.

Mr. PERKOVICH. The Pakistanis tend to bank that, and say, all right, we are going to give you help on the thing that you care the most about, and they do not necessarily do what we ask on the other matters like proliferation.

The problem is you used the word "hostage." It is a hostage relationship. I am not defending it. Secretary Bolton should answer the question. But we feel that if we deny ourselves or they choose to deny us help in hunting Al Qaeda, that matters a great deal to us, and so we cannot pull the money because we want them to help.

It is debateable but this is the hard thing that happens every time we deal with Pakistan.

Mr. SOKOLSKI. Congressmen, keep it up.

Mr. BEREUTER. Thank you.

Mr. SOKOLSKI. You are on the right track.

Mr. BEREUTER. Thank you.

Ms. NAPOLITANO. Well, I appreciate it.

Mr. BEREUTER. The gentlelady's time has expired.

Ms. NAPOLITANO. Thank you.

Mr. BEREUTER. Sorry. The gentleman from Michigan, Mr. McCotter is recognized.

Mr. MCCOTTER. Thank you.

Just a quick question maybe you can help me with. It seems that there are two elements, there is nonproliferation, preventing it. You have the states that are bent on acquisition of weapons of mass destruction. We have heard a lot about how to deal with that.

My question is, the imperative of states to facilitate the provision of mass destruction to these countries, and it seems that during the Cold War, one of the driving reasons for some of the potential proliferation, the provision of it, was ideological. In the United States, free market, there is communism and so forth.

What I find fascinating, and please correct me if I am wrong, but nowadays it seems much more likely that the intent is motivation of providing the technology is greed, and that there is a whole lot of money and that a whole of states have engaged in this for precisely economic reasons. There was no rather survival of the state to help arm our allies against the potential enemy. There was no need strategically to foster alliances in the provision of this. So it just boils down to greed.

My question would be, what are we doing to address that aspect of it; not just the acquisition, the desire for acquisition by some states, but the desire to provide this material for economic reasons?

Mr. SOKOLSKI. Yes, my hunch is that the amount of money made from the sales of the kind of technology that Iran, North Korea and Pakistan sell to one another or receive from places like Russia or China is far less than the political capital that might be gained in tormenting the United States, its allies, and their interests. And so it is a good exchange ratio that bears less relation to profit than it does to power.

I would submit that that is probably a better place to begin, and then to the extent that Russia simply wants to make a buck, yes, you have a different set of concerns, but that has to do with something else. Their infrastructure to make nuclear power and rocketry is way too large; worse than ours, if you will. They did not downsize properly.

Mr. MCCOTTER. Just quick, and then I will stop, but I find it hard to believe that you are telling me that Russia will risk arming Iran with nuclear weapons when they are cash strapped and everything simply to irritate us when I think they have shown from the Putin government they are more than willing to have our cooperation and help with the economic rebuilding. But thank you.

Mr. BEREUTER. The time of the gentleman expired.

The gentlelady from California, Ms. Lee, is recognized.

Ms. LEE. Thank you, Mr. Chairman.

I, too, apologize for the delay in not being here and not able to hear your testimony, so forgive me if these two questions are redundant.

I had intended to ask Secretary Bolton this question, but I believe I will ask Mr. Sokolski to answer, at least my first question with regard to nonproliferation in other countries.

Of course, we are calling for nonproliferation efforts in other countries, yet we are continuing to develop new nuclear weapon technologies ourselves. So what effect with the United States research and design on low-yield nuclear weapon and nuclear earth penetrators have on our own nonproliferation efforts?

And then secondly, for anyone on the panel I guess, I would like to ask you, given the Administration's view and policy with regard to the doctrine of preemption, the use of first strike, including the use of armed force to prevent the spread of weapons of mass destruction, how will we deal with states that give us no pretext for arms and intervention as Iraq did with its invasion of Kuwait?

Mr. SOKOLSKI. Let me see now, I have two defenders, earth penetrators, preemption, and what else?

Ms. LEE. No, the first question, just in terms of the development.

Mr. SOKOLSKI. All right.

Ms. LEE. The development of new nuclear weapons technologies—

Mr. SOKOLSKI. Sure.

Ms. LEE [continuing]. That we are engaged in.

Mr. SOKOLSKI. Okay.

Ms. LEE. What effect does this research have in our efforts with regard to our position with regard to nonproliferation in other countries?

Mr. BEREUTER. We will have to consider that—

Mr. SOKOLSKI. Not much because it is still a study, and your point is well taken if we do much more than what it is that we are currently doing.

Ms. LEE. So as long as it remains in the research phase and study phase—

Mr. SOKOLSKI. Well, we have—

Ms. LEE [continuing]. It should not have an impact?

Mr. SOKOLSKI. Much more, much more, and I am going to be vague and we will take it up probably afterward.

Mr. BEREUTER. I regret that with this valuable panel here we need to proceed. Chairman Hyde will be here shortly to introduce Secretary Bolton. It has been a fascinating and very intriguing and informative session, and I hope we can provide additional time to these gentlemen the future. It would be appreciated if the witnesses can respond to any written questions from the remaining Members who wanted to testify, and recommend to Chairman Hyde that these Members be placed first on the list for the next panel in terms of questioning.

Gentlemen, thank you very much for coming and giving us some of your insight. It is very much appreciated.

[Pause.]

Chairman HYDE [presiding]. We will begin the second panel, and take great pleasure in welcoming John R. Bolton, the Under Secretary of State for Arms Control and International Security.

Prior to his appointment Mr. Bolton was Senior Vice President of the American Enterprise Institute, and has spent many years in public service. From 1989 to 1993, he was Assistant Secretary for

International Organization Affairs at the Department of State; and from 1985 to 1989, he was Assistant Attorney General at the Department of Justice. Mr. Bolton has also served as general counsel and assistant administrator for program and policy coordination at US Agency for International Development.

We certainly welcome you, Mr. Bolton, and I know of the deep complexity of the subject matter, so it is kind of difficult to confine your remarks to 5 minutes, so do the best you can, and with the understanding that your full statement will be made a part of the record, and please proceed.

**STATEMENT OF THE HONORABLE JOHN R. BOLTON, UNDER SECRETARY FOR ARMS CONTROL AND INTERNATIONAL SECURITY, U.S. DEPARTMENT OF STATE**

Mr. BOLTON. Thank you very much, Mr. Chairman. It is a pleasure to be here today, and I will try and summarize my remarks as you suggest.

On May 31, in Krakow, Poland, President Bush announced a new effort to combat weapons of mass destruction called The Proliferation Security Initiative. Our goal is to work with other concerned states to develop new means to disrupt the proliferation trade at sea, in the air, and on land.

The initiative reflects the need for a more dynamic, active approach to the global proliferation problem. It envisions partnerships of states working in concert employing their national capabilities to develop a broad range of legal, diplomatic, economic, military and other tools to interdict threatening shipments of WMD and missile-related equipment and technologies.

To jump start this initiative, we have begun working with several close allies and friends to expand our ability to stop and seize suspected WMD transfers. Over time we will extend this partnership as broadly as possible to keep the world's most destructive weapons away from our shores and out of the hands of our enemies.

The aim ultimately, not just to prevent the spread of weapons of mass destruction, but also to eliminate or roll back such weapons from rogue states and terrorist groups that already possess them or are close to doing so. While we stress peaceful and diplomatic solutions to the proliferation threat, as President Bush has said repeatedly, we rule out no options. To do so would give the proliferators the safe haven they do not deserve and pose a risk to our innocent civilian population and those of our friends and allies.

Mr. Chairman, in the statement I treat at some length the three axis of evil countries.

First, in the case of Iraq, where we are actively following up the terms of Resolution 1441, and developing substantial resources toward ensuring Iraq's full disarmament. We have developed a comprehensive approach to identifying, assessing and eliminating Iraq's WMD program and delivery systems, and to ensuring productive peaceful employment for Iraq's scientists and technicians. This effort is based on three initial activities:

First, interviewing and obtaining cooperation from key Iraqi personnel; second, accessing, assessing and exploiting a number of

sensitive sites; and third, obtaining and exploiting documents, computer hard drives and so on.

We have recently begun deploying the Iraq survey group, a significant expansion of our hunt for Iraqi WMD capabilities composed of some 1400 people from the United States, Australia and the United Kingdom, and we are anticipating that their activities will bear fruit, and I would be happy to talk about that more in the question and answer part.

On Iran, we have seen for some time indications of the clandestine effort to develop nuclear weapons. The United States and its allies expressed concern this weekend at the Evian G-8 Summit about Iran's covert nuclear weapons program stating, and I quote,

“We will not ignore the proliferation implications of Iran's advanced nuclear program, and that we offer our strongest support to comprehensive IAEA examination of the country's nuclear program.”

The world has put Iran on notice that it must stop pursuing nuclear weapons.

One unmistakable indicator of military intent is the secrecy and lack of transparency surrounding Iran's nuclear activities. Iran did not disclose its uranium enrichment facility or its heavy water production facility to the IAEA until construction was so far along that an opposition group made them public.

Iran has a long history of denying the IAEA full access to its nuclear program and continues to refuse to accept the IAEA's strength and safeguards additional protocol despite calls by IAEA Director General El Baradei and many others to do so.

Another troublesome indicator of the true nature of the Irani nuclear program is that the cover stories put forward for the development of the nuclear fuel cycles and for individual facilities are simply not credible. For example, Iran is making an enormous investment in facilities to mine, process, and enrich uranium, and says it needs to make its own reactor fuel because it cannot count on foreign supplies.

But for the next decade Iran will have at most a single power reactor, and Russia has committed itself to supply all the fuel for the lifetime of that reactor. In addition, Iran does not have enough indigenous uranium resources to fuel even one reactor over its lifetime.

So we are being asked to believe that Iran is building uranium enrichment capacity to make fuel for reactors that do not exist from uranium Iran does not have.

Iran would have us believe it is building a massive uranium enrichment facility without having tested centrifuge machines and building a heavy water production plant with no evident use for the product.

The more credible explanation is that Iran is building the infrastructure to produce highly enriched uranium in centrifuges and plutonium in a heavy water moderated reactor.

Finally, there is Iran's claim that it is building massive and expensive nuclear fuel cycle facilities to meet future electricity needs while preserving oil and gas for exports. Mr. Chairman, I have two charts I would just like to show you. I wish I had—I could put

them up on your screen, but two charts that I will distribute copies to the Committee.

Both these charts were prepared by our colleagues at the Department of Energy and it shows quadrillions of British thermal units of energy available to Iran from its indigenous energy supplies. When you see 520 quadrillion btu of oil, 829 quadrillion btu of gas, and 6 quadrillion of btu of uranium, in short, this is a country that floats on a sea of gas and oil with a minimum amount of uranium, completely belying the claims that Iran is developing a nuclear fuel cycle in order to allow it to preserve its oil and natural gas. The facts simply do not support that.

The second, again this is a chart supplied by our colleagues at the Department of Energy, Iran, unlike the United States and most other sophisticated oil and gas developers, flares or vents natural gas that is produced in association with oil drilling, which is both wasteful economically and environmentally hazardous as well. This is the amount of billion cubic feet per year of natural gas that is vented or flared in Iran, and you can see it is roughly 4,000 billion cubic feet for the most current figures we have.

The total production from the Bushehr nuclear power plant now under construction is only 1,000 megawatts of capacity per year. So that if you look at this comparison, Iran right now is wasting by venting or flaring four times the natural gas—natural gas equivalence of four times the capacity of the Bushehr fuel plant.

So if they were so concerned about losing their oil and natural gas, there would be ample ways to collect that and use it for their own economic development; again a clear indication that their economic rationale for developing a nuclear fuel cycle is simply made up.

The conclusion is inescapable that Iran is pursuing its civil nuclear energy program not for peaceful and economic purposes, but is a front for developing the capability to produce nuclear materials or nuclear weapons.

I might say also that one of our approaches to dealing with the problem of Iran is through diplomatic consultations with special focus on Russia, the constructor and supplier of the fuel for the Bushehr reactor. We believe that following sustained high level exchanges Russia shares our concern about Iran's nuclear activities, joins us in supporting the IAEA's ongoing inspections, and want Director General El Baradei to make a full and unbiased report to the Board of Governors on what his inspectors in Iran have found.

And I would just say this morning Prime Minister Blair briefing parliament about the Evian Summit of G-8 leaders noted what the leaders said about the Iranian nuclear program, and made public what we had already known when he said President Putin made clear that Russia would suspend its exports of nuclear fuel to Iran until Iran signs the IAEA additional protocol, which is something that we had been pressing for and which President Putin had committed to us, and indeed committed to the G-8 leaders at Evian.

On North Korea, whose nuclear weapons ambitions also present a grave threat to regional and global security, and a major challenge to the international nonproliferation regime, the leaders addressed that at Evian over the weekend as well, and they said, and I will quote their conclusion on North Korea:

“North Korea’s uranium enrichment and plutonium programs and its failure to comply with its IAEA safeguards agreement undermine the nonproliferation regime and are a clear breach of North Korea’s international obligations. We strongly urge North Korea to visibly, verifiably, and irreversibly dismantle any nuclear weapons program, a fundamental step to facilitate a comprehensive and peaceful solution.”

North Korea’s claims and threats will not intimidate the United States. We are not going to pay for the elimination of North Korea’s nuclear weapons program, a program that North should never have begun in the first place. North Korea’s statements are evidence that it continues to try to intimidate, even blackmail the international community into giving into its demands.

We reject these statements, and particularly the intent behind them in the strongest possible terms and continue to insist that North Korea must terminate its nuclear weapons program completely, verifiably, and irreversibly, and there will be no inducement to get them to do so.

Giving into nuclear blackmail will only encourage this behavior not only in North Korea but also in nuclear aspirants around the world. North Korea must understand that its efforts to pressure the United States and the international community into meeting its demands will not bear fruit. Indeed, resolution of the problem North Korea has created by its own pursuit of nuclear weapons can only come through verified elimination of its nuclear weapons program.

Now, Mr. Chairman, in my statement I also go beyond the axis of evil to talk about Libya, Syria and Cuba, but if you will permit—and Sudan—if you will permit, I will skip over this to just conclude with a brief statement further elaborating on some of the steps we are taking on a nonproliferation front.

In addition to the traditional diplomatic efforts, I want to stress that economic penalties or sanctions are also an essential tool in a comprehensive nonproliferation strategy. The imposition, or even the mere threat of sanctions can be a powerful lever for changing behavior, as few countries wish to be labeled publicly as irresponsible. Sanctions not only increase the cost of suppliers, but also encourage foreign governments to take steps to adopt more responsible nonproliferation practices and ensure that entities within their borders do not contribute to WMD programs.

We have recently, for example, pursuant to Executive Order 12938, sanctioned one Chinese entity, the North China Industries Corporation, and the Iranian entity, the Shaheed Hamad Industrial Group, because we had determined that both of these entities had materially contributed to the efforts of Iran to use, acquire, design, develop, produce, and stockpile missiles capable of delivering weapons of mass destruction.

Our perspective on sanctions is clear and simple. Companies around the world have a choice: Trade in WMD materials with proliferators or trade with the United States, but not both.

Where national controls fail, and when companies make the wrong choices, there will be consequences. U.S. law requires it, and we are committed to enforcing these laws to their fullest extent.

As I mentioned, on May 31st the President announced his Proliferation Security Initiative, and we are in the early stages of discussion with several close friends and allies this initiative to expand interdiction efforts related to WMD or missile-related shipment to and from countries of proliferation concern.

The So San episode in December of last year illustrates that proliferators are vulnerable to having their shipments interdicted by the U.S. and our allies. In the last 2 months, interception of aluminum tubes likely bound for North Korea's nuclear weapons program in a French and German combined effort to intercept sodium cyanide likely bound for North Korea's chemical weapons programs are examples of recent interdiction successes.

Although indirectly related to North Korea's WMD program, the seizure of the Pong Su last month as it tried to deliver heroin off the coast of Australia is another example of the importance of interdiction efforts. Criminal efforts by the North Koreans to obtain hard currency should be of no surprise.

As we close off proliferation networks, we inevitably will intercept related criminal activity and overlapping smuggling rings. Congressional support and commitment to resources for these efforts will be essential.

Mr. Chairman, perhaps I can just stop there. I appreciate the opportunity to summarize the remarks, and I would be delighted to try and address any questions the Committee may have.

[The prepared statement of Mr. Bolton follows:]

PREPARED STATEMENT OF THE HONORABLE JOHN R. BOLTON, UNDER SECRETARY FOR ARMS CONTROL AND INTERNATIONAL SECURITY, U.S. DEPARTMENT OF STATE

Thank you, Mr. Chairman and members of the Committee, for the opportunity to appear before you today. Last week in Poland, President Bush said that the greatest threat to peace is the spread of nuclear, chemical, and biological weapons, and announced a new effort to fight proliferation. I am here today to discuss America's battle against the proliferation of weapons of mass destruction and our new approach to this threat. I will summarize my prepared statement, which I ask be included in the record, and would be pleased to answer any questions the Committee may have.

On May 31st in Krakow, Poland, President Bush announced a new effort to combat weapons of mass destruction (WMD), called the Proliferation Security Initiative. Our goal is to work with other concerned states to develop new means to disrupt the proliferation trade at sea, in the air, and on land. The initiative reflects the need for a more dynamic, proactive approach to the global proliferation problem. It envisions partnerships of states working in concert, employing their national capabilities to develop a broad range of legal, diplomatic, economic, military and other tools to interdict threatening shipments of WMD- and missile-related equipment and technologies. To jumpstart this initiative, we have begun working with several close friends and allies to expand our ability to stop and seize suspected WMD transfers. Over time, we will extend this partnership as broadly as possible to keep the world's most destructive weapons away from our shores and out of the hands of our enemies.

We aim ultimately not just to prevent the spread of WMD, but also to eliminate or "roll back" such weapons from rogue states and terrorist groups that already possess them or are close to doing so. While we stress peaceful and diplomatic solutions to the proliferation threat, as President Bush has said repeatedly, we rule out no options. To do so would give the proliferators a safe haven they do not deserve, and pose a risk to our innocent civilian populations and those of our friends and allies.

Principles of nonproliferation are known and formally accepted around the world. But, they are too often ignored and flagrantly violated by determined states that view WMD as integral to their survival and international influence. Many of these states are nearly immune to conventional diplomatic dialogue. While we pursue diplomatic dialogue wherever possible, the United States and its allies must be willing to deploy more robust techniques, such as (1) economic sanctions; (2) interdiction

and seizure, as I outlined earlier; and (3) as the case of Iraq demonstrates, preemptive military force where required. The pursuit of WMD and ballistic missile delivery systems cannot be cost free. Proliferators—and especially states still deliberating whether to seek WMD—must understand that they will pay a high price for their efforts. In short, if the language of persuasion fails, these states must see and feel the logic of adverse consequences. Moreover, the logic of adverse consequences must fall not only on the states aspiring to possess these weapons, but on the states supplying them as well.

#### I. THE AXIS OF EVIL

In *Iraq*, coalition forces acted to enforce UN Security Council resolutions and have assumed the responsibility of disarming Iraq—an Iraq that both actively pursued weapons of mass destruction and harbored terrorists on the most-wanted lists. As part of the Coalition effort to establish an Iraq that is at peace with itself and its neighbors, and that poses no threat to international peace and security, we will make sure that the Iraq disarmament effort is comprehensive, and that the international community and the Iraqi people are assured that Iraq's capacity for weapons of mass destruction has been eliminated. The Coalition is committed to conducting disarmament in a methodical manner. With the passage of UN Security Council resolution 1483, the shape and scope of any future UN role regarding Iraq's WMD programs, in this new context, remain under consideration.

Saddam Hussein's Iraq had a robust program to develop all types of weapons of mass destruction—nuclear, biological, and chemical weapons, and the capability to deliver them. CIA determined in its recent *Unclassified Report to Congress on the Acquisition of Weapons of Mass Destruction and Advanced Conventional Weapons* that Iraq continued its efforts to develop a nuclear bomb, and could have produced one within one year if it had been able to acquire weapons-grade fissile material abroad. CIA also determined that Iraq had biological weapons (BW) and chemical weapons (CW) programs. UNMOVIC concurred with this assessment and maintained that Iraq had not been forthcoming about its weapons programs and retained the ability for large-scale production of BW and CW weapons. UNMOVIC concluded that Iraq did not destroy about 10,000 liters of anthrax. UNMOVIC also reported that Iraq never accounted for an estimated 6,000 missing CW munitions. Although we have not yet found Iraq's cache of CW weapons, the plethora of chemical weapons suits we have found indicated that these weapons must have been there—and in abundance. But more important, we have put an end to Saddam's capacity to produce and reacquire these weapons. That capability—the potential Saddam had to restock his chemical, biological or nuclear weapons caches using his army of trained scientists—coupled with Saddam's demonstrated willingness to use these weapons posed a real threat to the civilized world.

The clearest example of Iraq's WMD program we have found so far has been the mobile BW laboratories. CIA and DIA recently released an unclassified white paper on the labs that explained why biological weapons production was the only logical use of these labs. The CIA/DIA case is compelling and carefully deals with alternate uses and the cover stories Iraq devised to prevent UN inspectors from discerning the actual purpose of the mobile labs. As you know, the mobile BW labs were one of the examples of Iraq's WMD programs that Secretary Powell described in his speech to the UN Security Council.

The range of Iraq's Al-Samoud and Al-Fatah missiles violated UN Security Council resolution 687's limitation of 150 kilometers. CIA believes that Iraq was also developing longer range missiles. As you know, Iraq fired a handful of its missiles at Kuwait when the war began and would have fired more if our forces had not quickly neutralized these weapons. U.S. forces also found tactical rockets with warheads especially designed for CW delivery, though they were not filled with chemical agent.

The biggest threat that we now face from Iraq's defunct WMD program is from the scientists and technicians who developed these weapons. We are very concerned that other rogue states or terrorist organizations will hire and offer refuge to these WMD experts, and we are taking steps to prevent this expertise from finding its way to other WMD programs. Planning also is now also underway in the inter-agency for an effort to redirect Iraqi scientists and other WMD personnel to full-time civilian employment once the exploitation phase is over. This effort will provide WMD personnel an alternative to emigration and give the U.S. a means to keep tabs on their whereabouts in Iraq.

We are devoting substantial resources toward ensuring Iraq's full disarmament. We have developed a comprehensive approach to identifying, assessing and eliminating Iraq's WMD program and delivery systems, and to ensuring productive, peaceful employment for Iraq's scientists and technicians. This effort is based on

three initial activities: first, interviewing and obtaining cooperation from key Iraqi personnel; second, accessing, assessing and exploiting a number of sensitive sites; and third, obtaining and exploiting documents, computer hard-drives, etc. As part of this effort, Coalition forces have secured the facilities that house Iraq's natural and low-enriched uranium. The United States and the International Atomic Energy Agency (IAEA) are finalizing plans to send a 7-person IAEA team to Iraq under the protection and auspices of Coalition forces to conduct a Nuclear Nonproliferation Treaty (NPT) safeguards inspection of the storage area near Tuwaitha. That site is under IAEA safeguards pursuant to Iraq's safeguards agreement with the IAEA. We anticipate the arrival of an IAEA team in Iraq on June 6.

A crucial part of our effort to locate Iraqi WMD is the Iraq Survey Group (ISG). The ISG is a significant expansion of our hunt for Iraqi WMD. It will be composed of some 1,400 people from the United States, Australia, and the United Kingdom. Knowledgeable WMD experts will search for banned weapons in Iraq and debrief Iraqi scientists. The ISG has an analytic center in Qatar, but is headquartered in Baghdad. It also is supported by the DIA Iraq Fusion Center at the Defense Intelligence Agency's Headquarters.

The ISG is an unprecedented intelligence collection effort. Under Secretary of Defense for Intelligence Steve Cambone has done a masterful job creating it and I am confident that under his leadership the ISG will enable us to find and eliminate Iraq's WMD programs. I am proud to announce that Paula DeSutter, the Assistant Secretary of State for Verification and Compliance, is working closely with Steve's team and that her talented staff will help the ISG verify the existence of Iraq's WMD program.

We are also trying to learn more about proliferation networks, both in Iraq and abroad, in support of our broad nonproliferation objectives. This will assist us in identifying front companies and individuals that may be involved in these networks.

The hard lessons learned by Iraq must resonate with other proliferating countries. Those countries should heed that thwarting international obligations and standards—by seeking weapons of mass destruction—is not in their national interests and will not be tolerated by the international community.

On *Iran*, we have seen for some time indications of a clandestine program to develop nuclear weapons. The United States and its allies expressed concern at the Evian G-8 Summit about Iran's covert nuclear weapons program, stating that "we will not ignore proliferation implications of Iran's advanced nuclear program" and that "we offer our strongest support to comprehensive IAEA examination of this country's nuclear program." The world has put Iran on notice that it must stop pursuing nuclear weapons.

We now know that Iran is developing a uranium mine, a uranium conversion facility, a massive uranium enrichment facility designed to house tens of thousands of centrifuges, and a heavy water production plant. This costly infrastructure would support the production of both highly enriched uranium and plutonium for nuclear weapons. While Iran claims that its nuclear program is peaceful and transparent, we are convinced it is otherwise.

One unmistakable indicator of military intent is the secrecy and lack of transparency surrounding Iran's nuclear activities. Iran did not disclose its uranium enrichment facility, or its heavy water production facility to the IAEA until construction was so far along that an opposition group made them public. Iran has a long history of denying the IAEA full access to its nuclear program, and continues to refuse to accept the IAEA strengthened safeguards Additional Protocol, despite calls by IAEA Director General ElBaradei and many others to do so. Iran's failure to accept the Additional Protocol, which would give the IAEA increased access to investigate undeclared nuclear activities and facilities, exposes Iran's claims of "transparency" as clearly false.

Another troublesome indicator of the true nature of the Iranian nuclear program is that the cover stories put forward for the development of a nuclear fuel cycle and for individual facilities are simply not credible. For example, Iran is making an enormous investment in facilities to mine, process, and enrich uranium, and says it needs to make its own reactor fuel because it cannot count on foreign supplies. But for the next decade Iran will have at most a single power reactor, and Russia has committed itself to supply all the fuel for the lifetime of that reactor. In addition, Iran does not have enough indigenous uranium resources to fuel even one reactor over its lifetime. So we are being asked to believe that Iran is building uranium enrichment capacity to make fuel for reactors that do not exist from uranium Iran does not have.

Iran would have us believe it is building a massive uranium enrichment facility without having tested centrifuge machines, and building a heavy water production plant with no evident use for the product. The more credible explanation is that

Iran is building the infrastructure to produce highly enriched uranium in centrifuges and plutonium in a heavy water moderated reactor.

Finally, there is Iran's claim that it is building massive and expensive nuclear fuel cycle facilities to meet future electricity needs, while preserving oil and gas for export. In fact, Iran's uranium reserves are miniscule, accounting for less than one percent of its vast oil reserves and even larger gas reserves. A glance at a chart of the energy content of Iran's oil, gas, and uranium resources shows that there is absolutely no possibility for Iran's indigenous uranium to have any appreciable effect on Iran's ability to export oil and gas. Iran's gas reserves are the second largest in the world, and the industry estimates that Iran today flares enough gas to generate electricity equivalent to the output of four Bushehr reactors, as shown on the second chart.

The conclusion is inescapable that Iran is pursuing its "civil" nuclear energy program not for peaceful and economic purposes but as a front for developing the capability to produce nuclear materials for nuclear weapons.

Iran is a party to the NPT, and has a full-scope safeguards agreement with the IAEA. Following the revelation of Iran's construction of nuclear facilities, IAEA Director General ElBaradei visited Iran this year, found sophisticated uranium enrichment centrifuges, and raised questions in his March report to the IAEA Board of Governors. IAEA inspection teams have subsequently returned to Iran. We doubt Iran would have built such a large enrichment plant and other nuclear facilities without first conducting experiments that in turn would raise questions about Iran's sincerity in meeting its safeguards obligations to the IAEA. Iran's safeguards agreement with the IAEA requires reporting of nuclear materials and experiments using nuclear materials. If not reported to the IAEA, testing of centrifuges with uranium, for example, or experiments involving Iran's research reactor would conflict with Iran's safeguards obligations. We look forward to Director General ElBaradei's report on what his teams have found in Iran to the next meeting of the IAEA Board of Governors in June.

Despite all Iran has done, it is not too late to halt and reverse Iran's pursuit of nuclear weapons. The United States is using all diplomatic tools to this end. We have focused special attention on Russia, the supplier of the Bushehr reactor. Following sustained high-level exchanges, Russia shares our concern about Iran's nuclear activities, joins us in supporting the IAEA's ongoing inspections, and wants Director General ElBaradei to make a full and unbiased report to the Board of Governors on what his inspectors in Iran have found. My Russian colleague, Deputy Foreign Minister Mamedov, made these points publicly on May 27.

In Vienna, we are providing support to the IAEA to facilitate a rigorous examination of Iran's nuclear facilities by IAEA inspectors. If the IAEA finds that Iran's nuclear activities are not in compliance with its safeguards obligations, the case would be compelling that the international community should oppose uranium enrichment and plutonium reprocessing capabilities in Iran and halt all nuclear cooperation with Iran.

The danger that Iran poses with its clandestine nuclear weapons program is compounded by Iran's pursuit of an advanced and self-sufficient chemical weapons infrastructure, its active quest for biological warfare capabilities, and its long-range ballistic missile program. Despite being a party to the Chemical Weapons Convention (CWC), it is widely known that Iran has stockpiled blister, blood and choking CW agents, and possesses the bombs and artillery shells to deliver them. It continues to seek chemicals, production technology, training, and expertise from Chinese entities that could further Tehran's efforts at achieving an indigenous capability to produce nerve agents, which Iran previously has manufactured. The United States also believes that Iran probably has produced BW agents and likely maintains an offensive BW program, in violation of the Biological and Toxin Weapons Convention (BWC), to which it is Party. Foreign dual-use biotechnical materials, equipment, and expertise—primarily, but not exclusively, from Russia—continue to feature prominently in Iran's procurement efforts. While such materials do have legitimate uses, Iran's biological weapons program could also benefit from them. It is likely that Iran has capabilities to produce small quantities of biological weapons agents, but has a limited ability to weaponize them. Furthermore, ballistic missile-related cooperation from entities in the former Soviet Union, North Korea, and China over the years has helped Iran move toward its goal of becoming self-sufficient in the production of ballistic missiles. Such assistance includes equipment, technology, and expertise. Iran, already producing Scud short-range ballistic missiles (SRBMs), is in the late stages of developing the Shahab medium-range ballistic missile (MRBM) and is pursuing longer-range missiles.

Vigorous implementation of our sanctions policy is a key part of our Iran non-proliferation effort. We have sanctioned entities in China and Moldova for assistance to the Iranian missile program, as well as entities in Iran itself.

We cannot let Iran, a leading sponsor of international terrorism, acquire the most destructive weapons and the means to deliver them to Europe, most of central Asia and the Middle East—or further.

*North Korea's* nuclear weapons ambitions also present a grave threat to regional and global security and a major challenge to the international nonproliferation regime. At the recent Evian G-8 Summit, the United States and its allies approved this unequivocal language on Pyongyang's covert nuclear weapons program:

North Korea's uranium enrichment and plutonium programs and its failure to comply with its IAEA safeguards agreement undermine the nonproliferation regime and are a clear breach of North Korea's international obligations. We strongly urge North Korea to visibly, verifiably, and irreversibly dismantle any nuclear weapons programs, a fundamental step to facilitate a comprehensive and peaceful solution.

Not only are we dealing with a country that has repeatedly violated its international nonproliferation obligations, but we also face the prospect that North Korea could produce and then export fissile material or weapons to rogue states or terrorists. This is a danger that cannot be ignored.

By the mid-1990s, the U.S. intelligence community assessed that North Korea had one, possibly two, nuclear weapons. Since Pyongyang acknowledged in October 2002 that it was pursuing a covert uranium enrichment program, it has rejected international calls for it to reverse course and has taken escalatory actions in further violation of its international nuclear nonproliferation commitments. To summarize, North Korea in late December 2002 lifted its freeze at the Yongbyon plutonium production facilities—a freeze that had been required under the 1994 Agreed Framework—and expelled IAEA inspectors. On January 10, 2003, North Korea announced that it was withdrawing from the NPT. Despite a February 12, 2003 finding by the IAEA Board of Governors that North Korea was in further non-compliance with its safeguards obligations and a report of this finding to the UN Security Council, North Korea restarted the 5 megawatt reactor at Yongbyon. North Korea claims that the reactor is for electricity generation, but we are confident that the reactor will also produce plutonium for North Korea's nuclear weapons program. The electricity the reactor generates is roughly equal to that needed for its operation, belying the notion that it will generate electricity of any useful proportion. The reactor's real utility to North Korea is that it produces spent fuel, which contains plutonium that can be recovered through reprocessing and used for nuclear weapons. North Korea asserts that it has nearly completed reprocessing the 8,000 spent fuel rods stored at Yongbyon. We are concerned that North Korea may decide or has decided to begin reprocessing. The North could produce enough additional plutonium for as many as six nuclear weapons in several months. We have made clear to North Korea that reprocessing would be a serious escalatory step in the wrong direction.

While all options remain on the table, the United States has made clear repeatedly and at the highest levels that we seek a peaceful, diplomatic end to North Korea's nuclear weapons program. We insist on addressing the challenge multilaterally with all countries concerned, including Japan and the Republic of Korea, playing an integral role.

Trilateral talks between the United States, China, and North Korea from April 23-25 in Beijing allowed all sides to make their views known. North Korean officials made several troubling statements at the talks. In addition to assertions about reprocessing, they also told us unequivocally on the margins of the talks that they have nuclear weapons. They further threatened to demonstrate this fact, or even transfer nuclear weapons. While they said there is a way to move forward and gave us a proposal, Secretary of State Powell has already indicated that it is a proposal that is not going to take us in the direction we need to go. The proposal simply restated North Korea's previous demands. These sentiments were recently echoed by the Foreign Minister of South Korea, who noted there was nothing new in the proposal.

North Korea's claims and threats will not intimidate the United States. We are not going to pay for the elimination of North Korea's nuclear weapons program—a program the North should never have begun in the first place. North Korea's statements are evidence that it continues to try to intimidate—even blackmail—the international community into giving into its demands. We reject these statements, and particularly the intent behind them, in the strongest possible terms. We continue to insist that North Korea must terminate its nuclear weapons program completely, verifiably, and irreversibly. And there will be no inducements to get them

to do so. Giving into nuclear blackmail will only encourage this behavior, not only in North Korea, but also in nuclear aspirants around the world. North Korea must understand that its efforts to pressure the United States and the international community into meeting its demands will not bear fruit. Indeed, resolution of the problem North Korea has created by its own pursuit of nuclear weapons can only come through verified elimination of its nuclear weapons program.

North Korea must end its indigenous missile program and missile exports. North Korea possesses Scud and No-Dong missiles and is developing the Taepo-Dong 2. North Korea is by far the most aggressive proliferator of missiles and related technologies to countries of concern. These sales are one of the North's major sources of hard currency, which in turn allow continued missile development and production. Additionally, the United States believes North Korea has a dedicated, national-level effort to achieve a biological weapons capability in violation of the BWC. North Korea also has a sizeable stockpile of chemical agents and weapons, which it can employ with a variety of means. North Korea is not a State Party to the CWC.

If North Korea verifiably and irreversibly terminates its nuclear weapons program, the United States is willing to reconsider discussing its "bold approach." Assistance would be provided to North Korea through the "bold approach" if the North addresses concerns about its WMD and missile program and exports as well as other issues, including its conventional force disposition, narcotics trafficking, human rights, and its continued sponsorship of terrorism outside its borders. In the meantime, we urge North Korea to refrain from further escalatory steps that will only bring more harm to its own national interests and will further its isolation from the international community.

## II. BEYOND THE AXIS OF EVIL

We have long been concerned about *Libya's* longstanding efforts to pursue nuclear, chemical and biological weapons, and ballistic missiles. Following the suspension of UN sanctions in 1999, Libya resumed its efforts to enhance and expand its efforts to obtain WMD and ballistic missile-related equipment, technology, and expertise from foreign sources.

Allow me to briefly review the facts. Libyan President Muammar Qaddafi has unambiguously asserted that Arab countries have the right to pursue nuclear weapons. Among its WMD programs, Libya's chemical warfare effort is the most advanced. Libya is not a State Party to the CWC and continues to pursue an indigenous CW production capability. It remains heavily dependent on foreign suppliers for precursor chemicals, expertise and CW-related equipment. Following the suspension of UN sanctions, Libya reestablished contacts with foreign sources abroad, primarily in Western Europe. Libya has acceded to the BWC, but continues a biological weapons program. It has not advanced beyond the research and development stage, although it may be capable of producing small quantities of biological agent. It needs foreign assistance and technical expertise—again, made more possible with the suspension of UN sanctions—to help use available dual-use materials. Regarding missiles, outside assistance is critical and Libya continues its efforts to obtain ballistic missile equipment and technology. Libya's current capability probably remains limited to Scud B SRBMs, but with continued foreign assistance, it may achieve a MRBM capability or extended-range Scud capability.

Libya must understand that improved relations with the United States means forgoing its WMD and missile programs. We are urging the closest possible scrutiny by potential suppliers and the strictest possible enforcement of export controls to prevent sensitive transfers to Libya.

We seek also to disrupt Syria's WMD and missile-related procurement efforts. As we have informed Congress, we are looking at Syria's nuclear program with growing concern and continue to monitor it for any signs of nuclear weapons intent. Although it has never used chemical agents in a conflict, Syria has maintained a chemical weapons program for many years. It has a stockpile of the nerve agent sarin and is engaged in research and development of the more toxic and persistent nerve agents. Damascus is currently dependent on foreign sources for key elements of its chemical warfare program, including precursor chemicals and key production equipment. Syria is not a State Party to the CWC.

We know that Syria is pursuing the development of biological weapons. Due to its limited biotechnical infrastructure, it is unlikely that Syria has produced effective biological weapons agents or weapons at this point. Syria has signed but not ratified the BWC.

On missiles, Syria has a combined total of several hundred Scud B, Scud C and SS-21 SRBMs, and is believed to have chemical warheads available for a portion of its Scud missile force. Damascus is pursuing both solid- and liquid-propellant

missile programs and relies extensively on foreign assistance in these endeavors. North Korean entities have been involved in aiding Syria's ballistic missile development. All of Syria's missiles are mobile and can reach much of Israel and large portions of Iraq, Jordan, and Turkey from launch sites well within the country. Syria's development and acquisition of more capable missiles, coupled with its interests in WMD, exacerbates an already volatile situation in the Middle East.

Although *Cuba* has ratified the BWC, we believe it has at least a limited, developmental offensive biological warfare research-and-development effort. Cuba has provided dual-use biotechnology to rogue states, which could support their BW programs. Furthermore, the biotechnology industry is a top national priority and is characterized by dual-use, sophisticated equipment, modern facilities, generous funding, and highly trained personnel.

We are also working with *Sudan* to reconcile concerns we have voiced in the past about their attempts to seek capabilities from abroad to research chemical weapons production. Sudan acceded to the CWC in 1999, but is not a State Party to the BWC. Sudan does not have a nuclear weapons program, but we are concerned that Sudan may seek a ballistic missile capability in the future.

### III. A "FORWARD" POLICY ON PROLIFERATION

Our frontlines in our nonproliferation strategy need to extend beyond the immediate states of concern to the trade routes and entities that are engaged in supplying the countries of greatest proliferation concern. In support of this "forward" policy of nonproliferation, we are employing a number of tools to thwart and counter countries' weapons of mass destruction and missile programs, including sanctions, interdiction, and credible export controls. Most of these states are still dependent on outside suppliers and expertise. Thus, we can slow down and even stop their weapons development plans by employing a policy that seeks to disrupt their procurement attempts.

Proliferating states and entities are employing increasingly sophisticated and aggressive measures to obtain WMD or missile-related equipment, materials, and technologies. They rely heavily on the use of front companies and illicit arms brokers in their quest for arms, equipment, sensitive technology and dual-use goods for their WMD programs. These front companies and brokers are expert at concealing the intended destination of an item and in making an illicit export appear legitimate—in essence hiding the export in the open. Proliferators take other measures to circumvent national export controls, such as falsifying documentation, providing false end-user information, and finding the paths of least resistance for shipping an illicit commodity. If there is a loophole in a law or a weak border point, those responsible for rogue states' WMD programs will try to exploit it. All too often they succeed.

Economic penalties or sanctions are an essential tool in a comprehensive nonproliferation strategy. The imposition or even the mere threat of sanctions can be a powerful lever for changing behavior, as few countries wish to be labeled publicly as irresponsible. Sanctions not only increase the costs to suppliers but also encourage foreign governments to take steps to adopt more responsible nonproliferation practices and ensure that entities within their borders do not contribute to WMD programs.

This Administration imposed sanctions 34 times last year, and has already imposed 12 sanctions this year, with a dozen more in progress on which we will soon be consulting Congress. Compare that with the average number of sanctions passed per year during the last Administration—8—and you will see that this Administration is very serious about using sanctions as a nonproliferation tool. We have imposed measures under the Iran Nonproliferation Act, the Iran-Iraq Act, the Chemical and Biological Weapons Sanctions Law, the Missile Sanctions Law, and Executive Order 12938. Last month on May 9, the United States imposed nonproliferation penalties pursuant to E.O. 12938 on the Chinese entity, North China Industries Corporation (NORINCO), and the Iranian entity, Shahid Hemmat Industrial Group. Penalties were imposed because the United States Government determined that these entities contributed materially to the efforts of Iran to use, acquire, design, develop, produce or stockpile missiles capable of delivering weapons of mass destruction. The same day, the United States also imposed sanctions on the Moldovan entity Cuanta S.A. and its director, Mikhail Pavlovich Vladov, for missile-related cooperation with Iran.

Our perspective on sanctions is clear and simple. Companies around the world have a choice: trade in WMD materials with proliferators, or trade with the United States, but not both. Where national controls fail, and when companies make the

wrong choice, there will be consequences. U.S. law requires it and we are committed to enforcing these laws to their fullest extent.

For example, the most recent report submitted to the Congress pursuant to the Iran Nonproliferation Act illustrates our efforts to utilize U.S. statutory authorities to the fullest extent to advance our nonproliferation goals. For the first time, the State Department is reviewing every known transfer to Iran—not only of those items controlled under U.S. export regimes, but also of those items that have the potential to make a material contribution to WMD or missiles.

Interdiction efforts are also key to a comprehensive nonproliferation strategy. Interdiction involves identifying an imminent shipment or transfer, and working to impede and turn back the shipment. As the President noted in his National Strategy to Combat WMD, we must enhance the capabilities of our military, intelligence, technical, and law enforcement communities to prevent the movement of WMD materials, technology, and expertise to hostile states and terrorist organizations.

On May 31st in Krakow, the President announced the Proliferation Security Initiative. We are in the early stages of discussing with several close friends and allies the President's initiative to expand interdiction efforts related to WMD- or missile-related shipments to and from countries of proliferation concern. A robust interdiction effort requires cooperation with like-minded countries—those who are leaders in nonproliferation as well as those who may have a direct relationship with proliferation activities. Properly planned and executed, interception of critical technologies while en route can prevent hostile states and non-state actors from acquiring these dangerous capabilities. At a minimum, interdiction can lengthen the time that proliferators will need to acquire new weapons capabilities, increase the cost, and demonstrate our resolve to combat proliferation.

The *So San* episode in December of last year illustrates that proliferators are vulnerable to having their shipments interdicted by the U.S. and our allies. In the last two months, interception of aluminum tubes likely bound for North Korea's nuclear weapons program and a French and German combined effort to intercept sodium cyanide likely bound for North Korea's chemical weapons program are examples of recent interdiction successes. Although indirectly related to North Korea's WMD program, the seizure of the *Pong Su* last month as it tried to deliver heroin off the coast of Australia is another example of the importance of interdiction efforts. Criminal efforts by the North Koreans to obtain hard currency should be of no surprise. As we close off proliferation networks, we inevitably will intercept related criminal activity and overlapping smuggling rings. Targeting and exploiting the vulnerabilities of proliferators and their criminal networks will require coordinated efforts across the spectrum of diplomatic, intelligence, law enforcement, and military interests. Congressional support and commitment to resources for these efforts will be essential.

As one step in an effort to plug the holes in national export controls, we are encouraging and assisting countries around the world to enact more stringent export control laws, put in place effective licensing procedures and practices, and to back them up with effective enforcement mechanisms. Each of these three parts must be effective in order for an export control regime to be credible. For example, while tightening export controls will benefit our nonproliferation efforts, changes in law are meaningless without rigorous enforcement. We frequently hear statements that countries are tightening their export controls, but proof of that is in the marketplace, where sensitive goods and technologies continue to be sold without being subject to scrutiny, prosecution or penalty.

We continue efforts with like-minded states in the multilateral export control regimes—the Nuclear Suppliers Group, Missile Technology Control Regime, Australia Group, the Wassenaar Arrangement—to exchange information about attempts by rogue states to acquire controlled technologies, and to assess whether additional items should be added to control lists. These regimes have each undertaken efforts to address the possibility that individuals or terrorist groups may seek controlled commodities for small-scale but lethal WMD projects. While the export control regimes are an important tool in stemming the proliferation of sensitive technology and materials from advanced nations across the globe, trade between countries of proliferation concern is increasing and outside the control of these regimes. We also are urging suppliers in each of the regimes to exercise maximum vigilance toward efforts by proliferators to procure items that may not be controlled by the multilateral export control regimes, but nevertheless would assist countries in becoming self-sufficient in the production of WMD and their means of delivery. For example, as part of an effort to impede North Korea's procurement attempts, at the December 2002 Nuclear Suppliers Group (NSG) Extraordinary Plenary meeting, lists were distributed identifying items that, while not NSG-controlled, would nonetheless be useful in the North's reprocessing or enrichment programs. We are working with nu-

clear supplier regimes to tighten controls over nuclear exports to Iran, and to raise awareness of potential suppliers to Iran's aggressive clandestine procurement efforts. Such information exchange is important to our ability to thwart the acquisitive aims of rogue states and terrorists. We must ensure that companies are not exporting sensitive items to proliferators, to brokers acting on behalf of proliferators, or to agents arranging exports through third countries.

Chairman HYDE. Thank you very much, Mr. Secretary, and I want to thank Mr. Bereuter for his usual excellent job as Chairman while I was away, and I would like to continue his protocol of brief questions, and real questions, not statements, and that gives everyone an opportunity to ask questions of our witness.

So first Mr. Royce of California.

Mr. ROYCE. Thank you, Mr. Chairman. Thank you, Secretary Bolton.

I think the concept of intercepting ships and planes suspected of carrying shipments of nuclear, chemical and biological cargo is a very sound one. I would urge the Administration to also look at interception of these ships when they are carrying North Korean drugs. As you pointed out, one of the ways in which North Korea got the hard currency in order to fund their nuclear program was through their missile shipments, and that is a major focus of your efforts here.

But one of the other sources, oddly enough, is this effort on the part of North Korea to become one of the great manufacturers and exporters of drugs and they have apparently their own fleet.

And so I wanted to ask you if we could get the Australians after their recent seizure and others to help us in an effort to expand, through more aggressive measures, our interdiction of this fleet of North Korean ships, and how we would do it.

Mr. BOLTON. Well, Congressman, I think you are right on target. The North Koreans have used three sources of hard currency earnings to buttress their weapons of mass destruction programs, and really to help buttress a leap in North Korea. One is the sale of weapons of mass destruction. The North Koreans are the largest sellers of ballistic missile technology to proliferant countries in the world. The second, as you identify, is the sale of illegal drugs, and the third is a combination of remittances from illegal and quasi-legal activity outside the country from basically organized criminal networks in Japan and elsewhere.

So we have focused on all three of these sources of hard currency earnings, and particularly as part of the WMD interdiction program, to see if it is not possible to deny the North Korean dictatorship access to this money. Cutting off those hard currency earnings will not have any impact on the wretched and really horrible lives lived by the 22 million North Koreans who live in poverty. That money did not do the slightest thing to improve their existence. As I say, it went to support the ongoing North Korean WMD programs and to buttress the Kim Yong Il coterie that runs the country.

So we think this could well have a substantial effect not only in reducing proliferation, outward proliferation from North Korea, we think it could have an effect on the North Korean regime as well.

Chairman HYDE. Thank you, Secretary Bolton.

Mr. Delahunt.

Mr. DELAHUNT. Yes, thank you, Mr. Chairman.

Mr. Bolton, good to see you again.

Mr. BOLTON. Good to see you again.

Mr. DELAHUNT. The particular notice is entitled Nonproliferation Post-Iraq. I would like to go back to the issue of weapons of mass destruction as it relates to Iraq. Clearly there is considerable controversy surrounding the intelligence that was available to the White House, the accuracy of it, there has been a series of stories. International heads of state or international figures have claimed that the intelligence was flawed. There have been some within the agency that have been utilized as anonymous sources and made statements that are particularly disturbing.

In fact, I had one here. "The American people were manipulated . . ."—this is from a column, and I understand that it is a column, that it is not reporting, but it was a column that appeared in the *New York Times*.

"'The American people were manipulated,' bluntly declares one person from the Defense Intelligence Agency that says he was privy to all the intelligence there on Iraq. These people are coming forward because they are fiercely proud of the deepest ethic in the intelligence world—that such work should be non-political—and are disgusted at efforts to turn them into propogandists."

These are allegedly other individuals from the intelligence community.

I think there is a confusion as to the premise that was provided by the Administration in terms of the military intervention in Iraq. You made a statement back in January that the Administration has "a substantial body of evidence about the Iraqi program" and that "Saddam has hidden stocks of weapons." But recently you made this statement, and maybe they are consistent, I am not sure, but I would put this in the form of a question to seek clarification.

You are saying there has been a lot of misunderstanding as to what exactly we expected to find, and that the weapons were not the issue; rather, it was, and this is your quote and presumably it was accurate,

"It was the intellectual capacity in Iraq to recreate systems of weapons of mass destruction."

Now, in the first interview you seem to imply that Iraq actually had weapons, and we had hard evidence of that. But in the second quote you seem to be saying that it was merely the capacity to produce them that was the basis of the threat that led to the military intervention, the war on Iraq.

Mr. BOLTON. Thank you.

In response to your question, I take as my text Robert McNamara, and the way of analyzing weapon systems that he brought to the Pentagon, and which is now a commonplace in the way we look at military issues. And the basic premise of systems analysis is that the artillery shell that you hold in your hand is merely the end point of a system of weapon production. It is the weapon, it is the delivery system, it is the means of production, it is the research and development, it is the intellectual capacity, all of which are points on a spectrum, and all of which have to be satisfactorily car-

ried out to get you to the shell at the end of it, whether it is a hand grenade or a chemical weapon.

And I think the point that the Administration and the previous Administration and the Administration before that made was that the nature of Saddam Hussein's regime was such that he and weapons of mass destruction were inextricably intertwined; that it was his desire to have these weapons, his desire to conceal them from U.N. weapons inspectors, his desire to evade U.N. sanctions over more than a decade to procure the prerequisite to having weapons of mass destruction, and his repeated and insistent violation of numerous Security Council resolutions that brought us to the conclusion that there was no option other than the use of military force to change the regime in Baghdad and deny them the use of weapons of mass destruction.

I think that what we will see over time as we go through the process of interviewing senior and mid-level Iraqi officials connected with the production and military sides of the WMD program is it is like a coral reef of information about how these programs will go, and that the finding of the weapons and the production means will occur in due course.

If this stuff had just been lying around on the ground, UNMOVIC would have found it. And the fact is that over nearly a dozen-year period, Saddam Hussein and his top advisors engaged in a very sophisticated and successful campaign of denial and deception to hide their production facilities and to hide their stocks of weapons of mass destruction.

Let me just take one example in the nuclear area. I think it is very unlikely that we will find weapons-grade uranium or weapons-grade plutonium in Iraq, but what we will find, what we know is there now is the cadre of nuclear scientists and technicians whom Saddam Hussein himself called his nuclear mujahadeed. They are the possessors of the intellectual know-how of how to construct nuclear weapons. That was the basis on which we said some time ago that if the Iraqis obtained fissile material, they could produce weapons within about a year as an estimate, because the nuclear mujahadeed who were still there had the wherewithal and the knowledge, if they can get the fissile material.

And it was that commitment of preserving that body of nuclear know-how in the face of a dozen years of U.N. sanctions and inspections against the day when Saddam Hussein could break free of the sanctions and break free of the inspection to recreate the nuclear capacity.

So it is really finding the evidence of that entire weapon system concept that Robert McNamara talked about, from the beginning state right through to the weapons themselves.

Chairman HYDE. Mr. Pence.

Mr. PENCE. Thank you, Mr. Chairman, and I also would like to express my appreciation to the Under Secretary for being here, and really follow on my colleague, Mr. Delahunt's line of questioning, although I know your testimony is much broader.

You made the comment relative to the Iraqi WMD program that the Iraq survey group has been deployed, and that, to use your words, I believe I recorded them accurately, that you are anticipating that that effort will bear fruit.

I am confident the Under Secretary is aware of some of the media hysteria in the last 5 days on the issue, including headlines in Europe greeting the President's arrival with accusations of lies and distortion by the Administration.

What I would really invite you to comment on has to do with systems analysis or the assessment of WMD programs in Iraq during the Bush Administration versus the Clinton Administration. And I say that fully aware that after the surrender in 1991, Iraq presented a list to UNSCOM that enumerated 10,000 nerve gas warheads. Iraq also represented they were in possession of 1500 chemical weapons, 412 tons specifically of a certain type of chemical weapons, that inspectors found more. That when President Clinton bombed with cruise missiles in 1998, after the expulsion of inspectors, he justified by the attack as an attack on Iraq's nuclear, chemical and biological weapons programs.

And my question to you, from the standpoint of the State Department, which serves all of the American people, and that common denominator that moves between political changes in one Administration to a next, my question is, did our assessment of Iraq's possession of WMDs change significantly during the Bush Administration versus the assessments that were arrived at during the Democratic Administration of President Bill Clinton?

Mr. BOLTON. I think it is hard to answer that question in gross, but I can tell you some of the areas where it was precisely the same and where I think both this Administration and the prior Administration said exactly the same thing about what the Iraqis were up to.

It has been true for nearly a decade now that Iraq has failed to account for the whereabouts of substantial amounts of biological and chemical weapons, agents and precursors, pathogens, and toxins, and agents in the case of biological weapons, and agents in the case of chemical weapons, anthrax, botulism, sarin, nerve gas, and things like that.

Now, the Iraqi's consistent statement to the United Nations was, well, we destroyed all of that. Now, we do not have any records that prove it, we cannot tell you when it was done, we cannot show you where it was done, we cannot produce anybody who can explain it, but take our word for it, we destroyed all of that stuff.

I think if you look over the Administrations' statements, both the Bush Administration and the Clinton Administration statements, faced with that very important discrepancy between what had been declared and what the Iraqis could show they had destroyed, that both Administrations simply said these materials are unaccounted for, and until we know what has happened to them we have to take the precaution that perhaps they still exist, and therefore still constitute a threat to our friends and allies in the region, and our deployed forces there.

Hans Blix, the Chief Commissioner of UNMOVIC, when confronted by Iraqi statements that indeed they had destroyed the BW and CW materials said, look, this is not marmalade we are talking about. If you had really gone ahead and destroyed this you would have had meticulous records of safety and health reasons if nothing else, and the consistent failure of Saddam Hussein's regime to be able to explain what had happened to these assets that they them-

selves had declared I think is very strong evidence of the concealment and the denial and the deception mechanisms that the Iraqis had in place.

Let me just take one other example that is a little bit more recent because I think it goes to the question that you raised about the criticisms that have been made in some places about what claims the Administration made about Iraqi capabilities that were new since the Clinton Administration. And I think the presentation that Secretary Powell made to the Security Council some months ago, which he worked on day and night for 4 or 5 days before going up to New York, is actually standing up very well to the test of reality as we learn more about what was going on inside Iraq.

He explained to the Security Council, and indeed showed diagrams of mobile biological weapons production facilities. We have already found two such laboratories. They are virtually identical to the diagrams that Secretary Powell displayed at the Security Council in New York.

Now, you know, these mobile biological weapons laboratories were not designed for efficiency. If they were designed for efficiency, they would be in a production complex that would look like a regular series of buildings. They were put on tractor-trailer trucks to evade inspection.

How many mobile biological weapons trailers do we know of anywhere else in the world? It is just not credible to think that these were produced for any reason other than facilitating the BW program.

Secretary Powell also discussed with the Security Council the unmanned aerial vehicle program that the Iraqis had engaged in, and indeed there is evidence that has now been made public that substantiates what he said about that.

It is true that there are other things that the Secretary mentioned where that kind of dispositive proof has not yet been produced. But I remain confident that it will be because of the care and the scrutiny he gave before making that presentation.

Now, to be sure that presentation was not intended to be and was not an exhaustive discussion of Iraq's weapons of mass destruction program. Because of the nature of intelligence, even if you looked at pieces of information that you thought were 75 percent certain represented evidence of WMD, in his view he did not want to present that. That does not mean it was not reliable. It does not mean we will not find it. It means his test was, you know, in a reasonable period of time that he could address the Security Council, to give the best information that we had, and to date where we have obtained evidence bearing on what he said, it has been corroborated, and that is what I have confidence in a slow but inexorable process will bear out the remainder of his statement as well.

Mr. PENCE. Thank you, sir.

Chairman HYDE. Mr. Engel.

Mr. ENGEL. Thank you, Mr. Chairman.

I want to just briefly comment on the question that Mr. Delahunt and Mr. Pence mentioned. Major news organizations are reporting that many U.S. intelligence officials speaking out against alleged pressures they faced, state things were untrue or exaggerated

about Iran's weapons of mass destruction. I voted to support President Bush in Iraq, but I am deeply concerned about reports that the Administration twisted the arms of our intelligence analysts to produce analysis which agreed with the policies that he wanted to pursue.

If the books were cooked to help push the American people into supporting a war in Iraq, it is very, very troubling. So I just wanted to state that on the record. But I really wanted to ask you today, with the limited time I have, to talk to you about Syria and North Korea. I just returned yesterday from a visit to North Korea, and it is a frightening country, Stalinist state, all kinds of murals posted and picture of a so-called great leader and the dear leader, Kim Yong Il, everywhere.

I believe we have to engage the North Koreans, and I am concerned with bellicose language that has been coming out of the Administration about the North Koreans. I think bellicose language is fine if we are trying to put them into a corner so that we can negotiate with them, and put them at a disadvantage, and they obviously deserve to be put at a disadvantage, but I hope that the bellicose language does not preclude or is not a substitute for serious negotiations.

I know that we want bilateral—they want bilateral talks and we want multilateral talks which include Russia, China, Japan and South Korea. I certainly support that, but I think we need to get beyond that.

I came away convinced that they are willing to trade away ultimately their nuclear weapons and their program for a United States pledge that we not go in to seek a regime change, whether it is a treaty, a non-aggression pact, or whatever it is, but I am convinced of that, and I really do think we ought to engage in that. So I would like your comments on that.

And secondly, in terms of Syria, you and I have had discussions before, and I admire your statements in your work. I am glad that the Administration is beginning to speak out strongly against the expansion of the Syrian weapons of mass destruction and ballistic missiles program, and in particular, I appreciate, I want you to know this, the comments you have made about the Syrian unconventional arsenal, and I am going to quote you. You said . . .

“are concerned about Syrian advances in its indigenous chemical weapons infrastructure and believes that Syria is ensuing development of biological weapons and is able to produce at least small amounts of biological warfare agents.”

That is a quote from you.

I believe that Syria is a perfect example of President Bush's most serious concern that a state sponsor of terror has its hands on chemical and biological weapons.

So my legislation, as you know, places a variety of penalties upon Syria until it ends its WMD programs, its support of terrorism, and leaves Lebanon. And the importance of this bill and the urgency of this issue has led to a broad bipartisan support in the House. We already have over 150 co-sponsors.

So I would like to ask you what the Administration is doing, the rollback of Syrian WMD program, where is Syria getting its WMD

and ballistic missile expertise and parts, and finally, the recent unclassified CIA report on WMD also mentioned a Syrian and Russian nuclear research program, and I am wondering if you could describe that program as well. I know it is a mouthful.

Mr. BOLTON. Right. Let me try and address all three of your points if I could.

First, I do think that—obviously we are all aware of these allegations that somehow the Administration cooked the books in some sense or another.

I want to tell you as somebody—you know, before I joined the Administration I wrote a fair amount about policy on Iraq. Congressman Delahunt remembers hearings we had up here talking about it. When I was a civilian, I felt that the pursuit of weapons of mass destruction required regime change in Baghdad. I thought that was the only way to be sure that we and our friends and allies in the region could be secure from the threats that he represented.

But I want to assure you and the Members of the Committee that since I became an official in the Administration I have read with great care everything I could from the intelligence community about Iraq's WMD capability. I personally never asked anybody in the intelligence community to change a single thing that they presented, and I am not aware of any other official in this Administration who did that.

Sometimes what you get from the intelligence community fits with your theories and sometimes it does not, and it is the essence of sound policymaking to try to make your policies conform to reality. I believe that is what the Administration did.

I would welcome the anonymous critics coming out in public and saying what their concerns are so we could address them. The intelligence community itself is going to investigate, did so at its own initiative, where it had successes in terms of its intelligence findings on WMD and a range of other issues before the war, where it had failures, and what that should tell us how we can learn from the future.

I do not doubt that appropriate Committees of Congress will conduct their own hearings on the subject. I think it is critical that we are completely honest among ourselves about what we found, and where our intelligence succeeded and where it did not. And I have no fear that at the end of those processes we will see that the concerns that not just the Administration but overwhelming majorities of Congress had about Iraq's WMD programs will be justified.

Sir, on North Korea, I am actually quite eager to hear from you and Congressman Weldon and the other Members who just came back from Pyongyang. The President has made it very clear in his public statements, and all of us in the Administration that he seeks a peaceful solution to the North Korean nuclear weapons program. We have pushed in a variety of ways for multilateral negotiations on that subject because we believe that this is not simply a problem between North Korea and the United States. We have worked very hard to get a nearly unanimous decision by the Board of Governors of the International Atomic Energy Agency to refer the North Korean's weapons program to the Security Council as a threat to international peace and security.

My colleagues recently met in Beijing with the Chinese, the North Koreans, which is about as low a definition of a multilateral negotiations as you can get with just three countries in the room. We are prepared to consider further discussions with Japan, South Korea and other interested countries.

And as I say, the President's view is that we should find a peaceful solution to the threat posed by the North Korean nuclear weapons program, and there are a variety of ways we are going about it, including the proliferation security initiative that the President announced in Krakow.

On Syria, as you know Secretary Powell was just in Damascus and made a number of points to the Syrian leadership about their support for terrorism, terrorist groups that have headquarters in Damascus, about allegations we had heard of Syrian harboring of Iraqi, top Iraqi leaders and other assistance to the former Iraqi regime. He also made a number of points very strongly about our concerns for Syria's WMD program.

In effect, I would say now the ball is in Syria's court on a range of those issues, and we will see what the response will be.

I would be happy to talk with you and other Members of the Committee at greater length about Syria in a closed session, and perhaps with colleagues from other agencies where we can go into that in a little bit more detail.

Chairman HYDE. Ms. Davis.

Ms. DAVIS. Thank you, Mr. Chairman, and thank you, Mr. Secretary.

The previous panel, I think we heard from Mr. Sokolski who said that, you know, we have rules we just do not enforce, I think, and Mr. Iklé said that we knew of violations but we would ignore them one reason or another because we did not want to rock the boat because we were in situations. And then—I cannot remember who said it, said that we have 191 states that are signed on to the NPT, and only two that we are prosecuting, and that is supposed to be a great percentage, but I would offer to you that anything less than 100 percent on the NPT is less than acceptable.

I guess my concern is, then I read in your statement that January 10th North Korea opted to pull out of the treaty, and maybe this is not a good question. But what good is the treaty? I mean, what are we left with? Are we left with a policy of preemptive strikes?

I mean, I would be the last one to sit here and say I want to be voting every week or every month on going into one country after another to do a regime change. What are we left with?

Mr. BOLTON. Well, I think the way that this question has been approached in the past is to try to get as many countries as you can to sign up to the Biological Weapons Convention, the Chemical Weapons Convention, the Nuclear Nonproliferation Treaty, but perhaps not necessarily to pay the kind of attention that we should to compliance with those treaties.

In other words, we are trying to have a treaty, but when you find that some of the countries have happily signed up and are lying about their compliance, that is a major source of concern.

The treaties themselves do not have enforcement mechanisms, and indeed, it is difficult to see how you would construct an effec-

tive enforcement mechanism for treaties that have such broad membership.

The good news is that the rate of noncompliance with all three of the nonproliferation treaties we think is relatively small, but it is a subject that we are quite concerned about because it is precisely the subject of noncompliance which is very inconvenient to talk about for some people that pose the threat.

And I do actually have some charts on this subject that I did not use before, and I will provide copies to the Committee. But what this shows is that looking at the rogue states listed here, all of which are on the State Department's list of state sponsors of terrorism, many of them are parties to these nonproliferation treaties; not all of them but many of them.

And what we find is that they are violating the treaty. This is a chart that shows states where we think have stockpiles of the different kinds of weapons of mass destruction and ballistic missile capabilities, and others where we think there are developmental programs. And you can see that it is—through that set of states it is a characteristic that they do seek weapons of mass destruction.

Now, I think what that tells us is that while the universal treaties are useful, and we support them and support them strongly in the Administration, they are not sufficient in and of themselves. And what we try to do is focus a strategy in each case to deal with the particular problem, and it most certainly does not involve regime change or preemptive military action as the first option.

The first option is to find a peaceful way to get these countries to give up their programs in weapons of mass destruction, and that is principally at the State Department what we are about.

Chairman HYDE. Mr. Crowley.

Mr. CROWLEY. Thank you, Mr. Chairman. Thank you, Secretary Bolton, for being here today and for your testimony.

I believe the hearing notice went out that this is a hearing on U.S. nonproliferation policy after Iraq, and I note that in your testimony both oral and in written that you go beyond Iraq and talk about other countries as far away as Cuba in terms of their attempt to proliferate weapons of mass destruction, and I think that was rightfully so to talk about the broad picture.

But I thought it was interesting to say the least, in fact, incredible that your testimony did not mention either orally or written, not once or even in a note the involvement of Pakistan in relation especially specifically to proliferation in Iran and in North Korea aside from Pakistan's attaining no-don missiles from North Korea, but also in apparently Pakistan's delivery of know-how to Iran and to North Korea on uranium enrichment designs, technology and machinery, and ballistics technology as well.

What I would ask is, what is the Bush Administration and State Department doing to pressure Islamabad to fully disclose the nature and scope of its assistance to North Korea and to Iran nuclear programs? The information, I believe, is critical if you want to understand the extent of North Korea's and Iran's uranium enrichment programs.

As well as, what does this Administration and state intend to do to prevent Pakistan weapons of mass destruction and/or related material from falling into hands of terrorists which we know are

operating within the borders of Pakistan and/or preventing them from getting to countries interested in proliferation?

Mr. BOLTON. Well, I think the subject of Pakistan's nuclear weapons and India's nuclear weapons while are on the subject is of enormous concern. What I was really trying to address in this prepared statement were the countries where we saw the possession or the aspiration to possess weapons of mass destruction as having immediate concern to us and friends and allies, but not to say that the issue of India and Pakistan is not something that should be addressed.

I was already at 25 pages, and I did not even read all of that.

Mr. CROWLEY. Under Secretary, excuse me, just a moment. Are you suggesting that India itself is also engaged in delivering nuclear technology to—

Mr. BOLTON. No, no, no.

Mr. CROWLEY [continuing]. Terrorist states or to terrorist organizations?

Mr. BOLTON. No, sir. I was referring to the Indian and Pakistani nuclear weapons capabilities.

Mr. CROWLEY. Which is a separate issue, I agree.

Mr. BOLTON. Right.

Mr. CROWLEY. I am talking specifically about Pakistan and its involvement in delivering technology to two states specifically, to Iran and to North Korea.

Mr. BOLTON. Right.

Mr. CROWLEY. That was something that was not mentioned, and I think it is critical in analyzing the state of proliferation of nuclear weapons, the weapons of mass destruction around the world.

Mr. BOLTON. Right. The government of Pakistan has denied to us that they have recently made such transfers, and that subject has been discussed with them by Secretary Powell and others in very serious terms.

The question of the relationship between Pakistan and North Korea in particular has been something we have addressed, and we have been assured that it does not extend to the issues that you have raised.

Mr. CROWLEY. You do not think that the horse has already left the barn? Even the technology that is transferred from North Korea to Pakistan is substantial in terms of their ballistics capability.

Mr. BOLTON. It is the case that we have found evidence of transfers of ballistic missile technology to Pakistan, and as recently as—

Mr. CROWLEY. But they do not do it free, do they?

Mr. BOLTON. They certainly do not, and as recently as September 2001, we sanctioned the Chinese entities that transferred that material.

If I could just take a second on that, this question of transfers of technology to Pakistan from China, or two other countries from China that I mentioned in my testimony, the recent sanctions of Norinco, a major PLA company, a large, large company that we sanctioned for transfers relating to the ballistic missile program of Iran. These are very troubling to us. I quite agree with you.

But the decision to impose sanctions on Chinese entities is also one that receives very careful scrutiny before we do it, and it is something that we do pursuant to the executive order and the statutes that Congress has passed, and that remains a priority to the Administration.

Now, in terms of some of the other questions you have raised, you know there are a lot of reports that we see—speaking of intelligence—a lot of reports that we see and that we have to evaluate.

I would be happy, again, to talk to you or others in a private session about that, to try and address any additional concerns that you have.

Mr. CROWLEY. I would just say, Mr. Chairman, and finalize this for the record, that I think it was unfortunate, I think, that you did not mention in testimony or in written testimony the link of Pakistan. I just want to state that for the record.

I yield back the balance of my time.

Chairman HYDE. Thank you.

Mr. Leach.

Mr. LEACH. Good to see you again.

I would like to re-raise the Biological Weapons Convention issue and the issue of compliance. As you know, early in this Administration, a pre-9/11 decision was made not to seek a strengthened compliance regime on the Biological Weapons Convention, a treaty that had been negotiated over a number of years, one that had been at one point strongly led by the United States, and had been the goal of a number of Administrations.

The argument against seeking a compliance regime of an international stature was that it would be an intrusive on the American pharmaceutical industry, and would be imperfect; that is, there is no such thing as perfect verification.

However, the Administration is now in the awkward position of asserting, as you have today, that countries as diverse as Cuba, Syrian, Iran may be pursuing biological weapons, and yet, as you point out the charts on countries that have signed or not signed treaties, it is the United States and the United States alone that has blocked an international compliance regime for the Biological Weapons Convention.

It strikes me this is a very ideologically frail conclusion of the Administration. It also strikes me it is a conclusion that ought to be reviewed. And so I have several questions for you.

One, is the Administration prepared to review this decision?

Secondly, as we think about this whole area, should not a much greater emphasis be placed on education about the Biological Weapons Convention in this sense?

The Biological Weapons Convention was negotiated over a period of years after a decision was made in 1969 by President Nixon to unilaterally cease biological weapons production the United States because they were too dangerous to attempt to experiment with in the world's most sophisticated scientific society.

And we have this image out there in the world today that we are against countries developing biological weapons out of security concerns for the United States, and that is a valid concern. But it is clearly a massive security concern for the countries that play with these weapons and to the regions in which they are. And it strikes

me out of self-interest that that should be the major educative effort of the United States to all of these countries, do not play with them because you risk your own as well as you risk the security of the rest of the world.

Finally, I would like to ask whether it might be helpful for Congress to consider legislation of a nature that would be one of expediting emigration status for scientists around the world that might be considered whistle blowers for weapons of mass destruction violations.

Now, these are the three questions: One, are we prepared to review the decision to decline a compliance regime for the Biological Weapons Convention? Two, are you prepared as an Administration to take a much stronger pro-biological weapons convention stand than you have to date and to tell the world what is at stake? And three, what do you think about a scientist emigration status approach?

Mr. BOLTON. Congressman, when the decision was made in the summer of 2001 that the Administration would oppose the protocol that had been under negotiation in connection with the Biological Weapons Convention, and the interagency met to discuss whether we should support it, seek to continue to negotiate it, or oppose it.

That group met at basically a non-political appointee level. Every agency, every agency without exception felt that we could no longer engage in the negotiations; that there was no way we were going to come to a successful outcome.

So, so far as being a decision of this Administration it reflected a very broad and perhaps surprising, but a very broad interagency consensus that the protocol simply could not be brought to a successful conclusion for three reasons. Actually, the reasons were quite complicated.

There was concern, and I think very legitimate concern, that the kind of inspection regime proposed for the BWC protocol would have endangered the intellectual property of our pharmaceutical and bio-tech industry. There was so much advanced knowledge in facilities that were open to inspection under the draft protocol because of the inherently dual nature of virtually every aspect of biological weapons research and production. There was concern about protection the intellectual property of our pharmaceutical and bio-tech industries.

There was also a very serious concern, a compelling concern that inspections of our biological warfare defensive preparation would have revealed information about the defensive work that we were doing that would have allowed possessors of biological weapons to develop countermeasures to defeat our defensive preparations, thus endangering or potentially endangering the lives of our service members.

And third, there was a very great concern, and I might say a concern shared by a number of our allies, that the provisions of the draft protocol would have undercut the export controls efforts embodied in the Australia Group and in national legislation of Australia Group members to prevent the export of dual use materials to problem states that were seeking biological weapons capability. That the efforts to transfer technology that would have been legiti-

mate under the BWC protocol would have made the efforts of the Australia Group much more difficult, if not impossible.

So these three categories of issues dealing with the subject of biological weapons, which is more so even than chemical weapons, and far more difficult than nuclear weapons to distinguish from legitimate pharmaceutical or academic research, I think were the combined factors that led us to conclude that the BWC protocol would not be acceptable.

Now, you know, the point that you make about the importance of countries adhering to the Biological Weapons Convention is true, and it is something that we have stressed and continue to stress.

It raised an interesting question at the November 2001 Biological Weapons Convention Review Conference, which takes place every 5 years to review, essentially review the health of the BWC, where we made a decision that we were going to name the names of countries that were parties to the Biological Weapons Convention but were violating it.

And I would not have thought this was a particularly new or innovative or radical thing to do, but I was surprised to find that many countries, including friends of ours, thought that naming names of countries that were violating the Biological Weapons Convention is not something that you should really do at the BWC Review Conference, which I think is a fairly remarkable conclusion.

Now, I think that by naming names we actually brought people to a discussion of what the problem is; not that the threat of biological weapons is something that we face in 170 or 180 countries around the world, but that we face it in the case of a fortunately relatively limited number of countries that actually one can address in a case-by-case basis.

So I think we have made progress, and I think that some of the steps we are proposing now in terms national legislation that would criminalize work to create biological weapons capabilities and other steps that we have proposed in the wake of that Biological Weapons Review Conference, I think, will strengthen our hand against the threat of biological weapons, which we know all too well is real.

And then finally, in terms of your third question, I must say I find it a very interesting idea and I think it is something that the immigration part of the State Department's portfolio is not in my domain, but in terms of the point you are trying to address, which is making it easier for people who have information about BW programs, and one might also say chemical weapons programs, and perhaps nuclear weapons programs, whether the United States can be more forthcoming in assisting those people and getting advantage, taking advantage of their knowledge and using it to better defend our own people, I think is definitely worth taking a look at, and I will undertake to discuss it with my colleagues who really do have that responsibility.

Chairman HYDE. Mr. Bell.

Mr. BELL. Thank you very much, Mr. Chairman, and thank you, Under Secretary Bolton, for being here today.

I am concerned about the way that the doctrine of preemption is interpreted and applied. The national security strategy of the

United States says that we reserve the right to use offensive force when we feel that our national security is threatened.

But I think our recent actions have sent some mixed signals to the world. In the case of Iraq, its suspected possession of weapons of mass destruction was one of the principal reasons the Bush Administration used to justify the use of preemptive military force.

That was suspected possession and not declared possession.

Occurring almost simultaneously were the events unfolding in North Korea. That country declared to the world that it possessed weapons, grade plutonium, and was in the process of producing more, and it has also been reported extensively that North Korea test fired the Tapo-Don missile over Japanese air space, and that it sold no-don missile technology to Pakistan.

However, with this country, North Korea, the United States has chosen for now at least the path of diplomacy. Perhaps from a rather extreme standpoint, but one could interpret the message our country is sending to the rest of the world as being that it is in the interest of rogue states and hostile regimes to speed up development of WMD programs if your country is merely suspected of possession WMDs the United States will attack. If you actually do possess WMD technology, and if you share it, then we will talk to you about it.

Our country's preemptive actions, overwhelming military strength and unprecedented projection of power capabilities have engendered distrust, resentment and hostile feelings in countries around the world, and I am afraid that in the interest of possessing some kind of leverage against what may be seen as overwhelming force we have not provided a disincentive for nonproliferation, but rather an incentive.

The question then is, how do we prevent the doctrine of preemption's inconsistent application from encouraging widespread weapons of mass destruction proliferation?

Mr. BOLTON. Well, I do not think we have been applying the preemptive option inconsistently. I think in the case of Iraq, although it was preemptive in the sense that they had not attacked us directly, it followed 12 years, 12 years of Iraqi refusal to comply with Security Council resolutions.

Now, you know, the United States is often accused of being an impatient nation, but 12 years of waiting for the Iraqis to comply with Security Council resolutions I do not think anyone could say it was overly hasty, and it was not simply a case of suspecting the Iraqis had weapons of mass destruction, they have used weapons of mass destruction. They have used them against the Iranians during the Iran/Iraq War. They used them against their own people at Halabja and at other places, and the UNSCOM weapons inspectors had found ample stocks of weapons of mass destruction during the years immediately after the first Persian Gulf War.

So what we found, and I did go into that at some lengths earlier, was that the inextricable link between weapons of mass destruction capabilities in Saddam Hussein's regime meant that the only way ultimately that we could be secure both in ourselves and in terms of our friends and allies that the intent of Resolution 687 be carried out was to resort to military force.

Now, the question then of how one deals with other countries that have WMD capabilities or aspirations depends on the particular circumstances that we face. And in the case of Korea, North Korea, as I have said, the President has made it absolutely clear that he wants a peaceful resolution to the North Korean weapons program, but he has also said unambiguously all options are on the table.

And I think that the efforts that we are undertaking through the Proliferation Security Initiative to be more effective in interdiction efforts, to prevent the transfer of technologies and components and materials, precursor chemicals and other things that are essential to countries seeking weapons of mass destruction is another important arrow in our quiver.

So it seems to me the lesson for the proliferators is that we do not think that these weapons that you seek are things that you should have when they threaten us and our friends and our allies, and we are determined either to prevent you from getting them or to roll back the capacity if you have it.

And obviously, the way we are going to try and do that is peacefully, but this is a policy that goes well beyond rhetoric.

Mr. BELL. Well, let me ask you this, and I do not want to get bogged down in the weapons of mass destruction argument as it pertains to Iraq because we could be here all day as to what was offered as the basis for going forward with that military action, but going forward because in the wake of September 11th I doubt we will ever wait 12 years again and engage in those types of talks as we did with Iraq. There will be a great deal of incentive to move much quickly.

And in a case like North Korea, if they continue to not respond to our demands, and we do not move forward in any type of military faction, do you think that that damages this whole doctrine regarding preemption and our policy?

Mr. BOLTON. Well, I think in the case of North Korea one thing that is very important as demonstrated both by the G-8 leaders' statement issued at Evian, and also by the statements of leaders that were not part of the G-8, the Chinese and the South Koreans, is there is complete agreement that North Korea's possession of a nuclear weapons program is unacceptable.

This is not a case where some people are saying, oh, it is just a small program, or it does not threaten us. There really is uniform agreement that this program is destabilizing, threatening to the countries in the region, and a global threat as well because of North Korea's proclivity to proliferate WMD technology once it has it.

Now, there is no guarantee that that kind of unanimity on the end state that we want to seek can be translated into unanimity as we pursue the peaceful elimination of the nuclear weapons program. But I think it is at least a good place to start, and that is why, as I think many people in the Administration said, Secretary Powell I know has said it, focusing on preemption as such is really putting the cart before the horse. Preemption is an option, as it has always been an option that we need to have ever since, as President Kennedy said, since the invention of ballistic missiles our safety is a matter of minutes.

But it is not necessarily the first option or the preferred option. It is an option. In the case of the North Korea, what we are pursuing is a multilateral diplomatic track.

Mr. BELL. That is helpful. Thank you.

Chairman HYDE. The gentleman—

Mr. BELL. Thank you, Mr. Chairman.

Chairman HYDE [continuing]. Has exhausted his time.

Ms. Ros-Lehtinen.

Ms. ROS-LEHTINEN. Thank you so much, Mr. Chairman. Thank you, Mr. Secretary. It is always an honor to be with you, and we thank you for your valuable and insightful information that you are always willing to share with our Committee. Thank you again for being with us.

I wanted to ask you a series of questions about Iran and its linkage to Libya also, and to Cuba. What can you tell us about the reports unveiling the existence of additional secret facilities in Iran which serve as satellites to the newly uncovered enrichment facilities? And if found to be linked to Avelis, the laser-based enrichment, would the Iranian regime not be in violation of the agreement that it recently signed with IAEA?

And also, the Iranian regime has said that it has more than 100 sites linked to centrifuges. Do you believe that Iran has indigenous capabilities? And what about the reports of an Iran-Libya link?

And as you know, it is not the first time that you have raised the potential of bio weapons threat posed by the Castro regime. In your own chart that you pointed out that Cuba has biological capabilities. As you know, Castro said in his trip to Iran, together we can bring the United States to its knees.

And given the Cuba's cooperation with Iran on the bio-technical engineering program, would this indicate that Cuba continues to be posing a biological threat? And given Castro's official recent statements highlighting its possession of anthrax antidotes, could this indicate that Cuba could have the anthrax agent already?

Thank you.

Mr. BOLTON. Thank you.

In the case of Iran, one of the attributes of their nuclear program that is most troubling is the way they have tried to conceal their activities from the IAEA in particular, and the rest of the world in general, and it was only after public disclosure is made of their heavy water production facility and their enrichment capacity at Natanz did they invite the IAEA in, and then they obstruct them, they delay, they make it difficult for them to carry out their work.

And because of the range of Iranian activity, it is very hard to believe that they are engaged in all of these activities simply to provide fuel for a nuclear reactor at Bushehr for civil nuclear purposes.

If the Iranians had nothing to hide, it would be easy enough for them to sign the additional protocol, open themselves up to IAEA inspection, and demonstrate the truth of what they say. That is one reason why we are looking very carefully at this upcoming IAEA Board of Governors meeting to the possibility of a resolution that would say that the Iranians have not yet satisfied all the questions that we have, and I think that is reflective not just of American opinion, but of President Putin and many others as well.

You know, the Iranians made a presentation to the IAEA last month that was supposed to answer some of the questions that had been raised by visits by the IAEA to Tehran to help assemble the report that we expect from the Director General next week.

And the permanent representative of the IAEA of a Latin American country came up to our delegation after the Iranian presentation was finished and he said, you know, there must have been something wrong with the interpretation today because nothing the Iranians said made any sense. And I think that is a pretty fair description of what our concerns is and others as well.

We are going to pursue this. We are going to see what happens with Director General El Baradei's report, and follow up on President Bush's continuing discussions with President Putin on the subject.

We would be quite concerned about Iranian-Libyan cooperation on nuclear weapons program. I think I said in the prepared statement ever since the temporary lifting of Security Council sanctions on Libya they have pursued the full range of WMD capabilities in a very aggressive fashion, and we think they are continuing to do so.

And in the case of Cuba, as I have said, we do think they have a limited research and development capability but one of the things that is very troubling is the way in which Cuban leaders and technicians do meet with representatives of states like Iran that also seek or have BW capabilities, and one has to wonder what is going on there, and that is why we keep a close eye on that situation.

Ms. ROS-LEHTINEN. Thank you so much. We will be having a Syria hearing in our Subcommittee on July 9th, and we hope that you will be able to testify, Mr. Secretary.

Mr. BOLTON. Be happy to.

Ms. ROS-LEHTINEN. Thank you.

Chairman HYDE. The last questioner from the first round, and I am going to ask the people who want to ask questions on the second round to submit them in writing. You will get a more in detailed answer than otherwise you might.

Mr. Sherman.

Mr. BERMAN. Mr. Chairman, may I interrupt for 1 second?

Chairman HYDE. Mr. Berman.

Mr. BERMAN. The first round of the previous panel or the first round with Mr. Bolton? Some of us have not had a chance to ask Mr. Bolton a question.

Chairman HYDE. Well, there was a first round of the first panel, but if you have a—it is well after one o'clock.

Mr. BOLTON. Mr. Chairman, I will try and answer questions from anybody who is here.

Chairman HYDE. Okay. That was more for the benefit of your staff.

Mr. BOLTON. I suspect that is right.

Chairman HYDE. They have been anxious to get you on your way, and I appreciate your generosity.

Okay, if you will please be succinct, Mr. Sherman.

Mr. SHERMAN. That is not something I am known for. [Laughter.]

The President identified in a burst of unfortunate honesty the three axis of evil regimes. Iraq was clearly not the most dangerous. It was just the easiest to deal with.

I will ask you to respond to my comments about Korea and North Korea for the record because I want to hear your responses to a question I have about Iran.

But imagine a meeting in Beijing in which they are arguing whether to continue their policies toward North Korea pretty much as they are now, or whether to impose sanctions on that regime as long as it continues its nuclear program to cut off trade, to cut off aid.

And let us say at this meeting it was put forward, well, it may be in our interests to leave things the way they are, and that will not impair trading relationship with the United States because there is so much corporate power in the United States in favor of that trading relationship that the corporate power will sweep away anybody who would see China's aid and trade to North Korea as the linchpin to dealing with that regime.

So I would like for you to respond for the record, is Beijing correct in assuming that corporate power has dulled our ability to deal with our own national security, and that the Chinese can be safe in the belief that they can do whatever they want with North Korea, or continue their current policies toward North Korea without losing a single dollar of American trade?

Shifting to Iran, yesterday the World Bank approved \$180 million of concessionary loans to that government. That allows that government to meet its own domestic needs and to use its oil revenue for nefarious purposes you have already described. That also allows them to go their own people and say the whole world does business with us, even gives us concessionary loans.

Is there any evidence that you can reveal to us that the President at the G-7 or G-8 conference asked the other countries there to vote against these loans? And is there any evidence that the Administration will not continue to support an appropriation to the World Bank of well over \$700 million?

I know we vote no, and then we went and had tea and crumpets with all the people who voted yes and outvoted us.

Mr. BOLTON. Well, on the subject of China and North Korea, I think one of the points that we have made to the Chinese is that an ongoing North Korean nuclear weapons capability, while it may not be a direct threat to them, nonetheless poses a substantial risk of proliferation to—

Mr. SHERMAN. Mr. Secretary, I have got limited time. If they decide for their own reasons not to change their policy, they do not lose a single dollar of American trade; is that it?

Mr. BOLTON. I was trying to come to that point, so if you will forgive me for skipping the predicate. I think China has changed its mind to at least some extent, and I think that is reflected by their willingness to sponsor the trilateral talks that were held in Beijing a few weeks ago.

They have said that they do not believe North Korea should have a nuclear weapons program, and that is entirely consistent with our policy, and something that we have been pursuing with them.

The question for China, I think, is whether and to what extent they will be successful with us in eliminating the North Korean nuclear weapons program in a way that from their point of view does not result in the reunification of the Korean Peninsula.

Now, that, of course, has been—a peaceful reunification of the Korean Peninsula has been our objective under a host of Administrations and remains our objective.

The subject of how to tread with China on Korea is something that we have addressed. The President met with Wu Jiniad in Evian this past weekend, and that is the subject that is very much on everyone's mind.

On the question of Iran, the issue it seems to me for dealing with World Bank loans and that sort of thing, as you noted, we voted against it because of the existing obligations we have. We have been working with the Europeans, along with the Russians, to convince the Europeans of what we know from our own information, that is to say that the Iranians do have a clandestine nuclear weapons program. It is no secret that a number of European countries felt that their trade relationships with Iran were sufficient benefit for them that they did not give the same priority to stopping the Iranian nuclear weapons program that we did.

I believe that that attitude has begun to change.

Mr. SHERMAN. If I can interrupt. What you are coming to here is China can subsidize North Korea and not lose a single dollar from America. The World Bank can subsidize the government of Iran and not lose a single dollar from America. But strongly worded letter and nice meetings and tea and crumpets will be the policy to protect the American people from these nuclear threats.

Mr. BOLTON. Well, I do not think that is the policy at all. I mean, the—and I have laid out—

Mr. SHERMAN. Can you point to one dollar that China will lose if it decides to continue to subsidize North Korea, or one dollar that the World Bank will lose if it continues to subsidize the government of Iran? Other than tea and crumpets, what are we talking about?

Mr. BOLTON. I do not know about tea and crumpets, Congressman. Somebody else deals with tea and crumpets.

On the question of what China and North Korea do, we have made it clear to the Chinese that their supply of between 80 to 90 percent of North Korea's energy supply is a powerful lever that they can exert, and I think that the suspension of the oil shipments a couple of months ago for 2 or 3 days, although attributed publicly to technical reasons, was a kind of signal to the North Koreans.

So the issue of how one deals with China where we have multiple interests, but one of which most certainly is assisting in eliminating North Korea's nuclear weapons program is one that we balance within the Administration, and try to take into account all of our interests.

On the subject of Iran, we do not run the World Bank. You know, we vote in the World Bank, and we voted the way I think—

Mr. SHERMAN. Would it not have been more effective if we had said we are going to pull the \$750 million that the President is trying to get this Congress to give to the World Bank? Would that not

have made our voice more powerful than just pushing the red button?

Mr. BOLTON. You know, I do not know whether it would have made our voice more powerful or not. What I can tell you, what I was trying to answer in your earlier question was that we, I believe, have now moved the Europeans toward a view of the Irani nuclear weapons program that is more consistent with ours, and I think the G-8 statement was the strongest statement that many of those European countries that have substantial trade and investments with Iran have ever made.

Are they where we are at the moment? No, they are not. Are we working on them to bring them to that point to show them and to convince them why we take the Iranian program seriously? Yes, we are.

Mr. SHERMAN. All I can say is this is a feckless policy. We shed blood in Iraq, and we have not redirected one dollar of aid, trade or contribution with regard to North Korea or Iran.

My time has expired.

Chairman HYDE. Mr. Sherman, your time certainly has.

Mr. Hoeffel.

Mr. HOEFFEL. Thank you, Mr. Chairman.

Mr. Secretary, I agree with you that weapons of mass destruction in the hands of terrorists are a huge security challenge. I voted for the war authority in Iraq because I believe that Hussein had to be disarmed of weapons of mass destruction. Like millions of Americans, I am wondering where the hell the weapons of mass destruction are.

I think the Administration faces a growing credibility gap regarding the weapons of mass destruction. Could these weapons have been successfully hidden? Could they have been secretly destroyed? Could they have been transported to another country? Was our intelligence faulty? Was the intelligence misled?

These questions need to be answered because, as you have correctly pointed out, weapons of mass destruction are proliferating, and we need to be credible in our attempts to stop that. I do not think the CIA reviewing the performance of the CIA is adequate. I know you have established the new Iraq survey group, and I hope it is successful. According to your testimony you are confident that they will find and eliminate Iraq's weapons of mass destruction; that they will help verify the existence.

We all thought that would have been found, eliminated and verified long before today.

The 1400 people in your Iraq survey group will come from the United States, Australia and Great Britain. Should we be internationalizing that group more? Should we be calling up whatever expertise the United Nations and UNMOVIC has or had? What can we do to deal with the credibility we need to determine what happened to those weapons?

And please understand the Administration's efforts to deal with this in other countries will depend upon facing the facts in Iraq and not just trying to paper over the fact that we have not found what the Administration said, you know, site-specific poundate was identified beforehand, and we cannot seem to find anything now

except mobile laboratories that apparently do not have any traces of weapons of mass destruction in them.

Mr. BOLTON. That is right. They are some of the cleanest laboratories in Iraq.

Mr. HOEFFEL. What do we need to regain what is, I am afraid, a growing credibility gap?

Mr. BOLTON. Well, I think that the question of how long it takes to uncover the total Iraqi WMD capability is not one that I can answer now. I wish that it had been easier to find the WMD capabilities, although I must say the mobile biological weapons laboratories maybe are not a smoking gun but they are certainly a very hot pistol.

Mr. HOEFFEL. They are not smoking.

Mr. BOLTON. They were wiped clean. No evidence that we could find, and I think one of the things that is important to understand about the way that the intelligence community has been proceeding in Iraq is not to make any claims before the most rigorous tests have been carried out, and there have been news reports about early positive tests of chemical agents that have turned out on further testing to be rocket fuel or something like that.

So I think we are behaving and proceeding in a very prudent way, and not as fast as everybody might like, but I think like a coral reef this evidence is going to grow.

The principal way in which I think the evidence will accumulate will be through the forensic process of interviewing and reviewing of documents, and what we have seen so far in interviewing both senior level Iraqi officials who are in coalition custody, and perhaps even more from the statements of witnesses who are kind of mid-level or even lower level officials who were involved in chemical or biological warfare or other programs has been a reluctance to say very much. That I think is testimony to the extent of the authoritarian nature of Saddam Hussein's regime, the concern that these people have for themselves and their families even to this day that Saddam may yet be able to exact retribution against them.

I think there is also a concern about what we are going to do. I think we very properly made it clear before the military hostilities broke out that any use of weapons of mass destruction against coalition forces would result in those responsible being brought to justice, and I think there is ambiguity in the minds of many of the Iraqis we are talking to about what is going to happen to them if they admit having been part of the Iraqi WMD program. That is something that we need to work our way through.

Mr. HOEFFEL. Would it be helpful if we internationalize the search?

Mr. BOLTON. It is an important point, Congressman. I will address it here. I just wanted to say that the question of how the interviewing process is going, the unfolding of the forensic investigation is proceeding. Having heard questions that members of the panel have asked, I would like nothing better than to have been able to come up here and say, and today I can announce A, B, C, and D. But that is the wrong way to proceed. The wrong way to proceed because we do not want to make this information public until we are certain about it as in the case of the mobile BW lab-

oratories, and because we want to do a thorough job of seeing the implications of release of information before we do so.

Now, it has been our view for some time that having prevailed in the hostilities it is the principal responsibility of the coalition forces to find and neutralize the WMD. But I can tell you that the Department of Defense and others involved in this have been actively seeking international participation beyond the coalition, considering the possibility, for example, of using laboratories in Europe or elsewhere to do analyses of chemicals or biological agents that we may find, so that laboratories other than American or British or Australian would be able to verify these materials once they are uncovered.

And I think there is a variety of other steps that we are considering precisely because we do believe that the credibility of what we said before the onset of military action and the credibility of what we find in Iraq now does have an important consequence for us as we talk about the WMD program in other countries, some of which we have discussed here today.

So there is no disagreement on that proposition, and, you know, if you were to ask me do I feel impatient that we do not have more information, do I wish there was more that we could discuss here publicly, absolutely. But I am confident that that information is coming, and I will restrain my normal desire to get it out more quickly because I feel that when the information does come out it should come only after the most rigorous analyses, and the conclusion that we get that that is hard information that people can rely on, and that is a slower process than perhaps one would think in the abstract, but I would submit to you, sir, that that is the way we should proceed.

And as that information comes out people will see that the case that Secretary Powell made before the Security Council is accurate indeed.

Chairman HYDE. The last questioner will be Mr. Berman. Before you do though, Howard, I just want to suggest to my friends that I recall back in the Gulf War when the Iraqis took their air force and transferred it of all places to Iran, and they still have the Iraqi aircraft in Iran, a mortal enemy.

But I guess that shows that they are not above transferring military assets across the border, and I dare say Syria and Iran would be—Syria anyway, it would be very interesting to take a geiger counter and walk around and see where Iraq's military resources are.

And also the Osirik situation, to think in 1981, they had a nuclear facility going and that because the Israelis took it out, they have left that whole topic alone. I do not believe that. That is crazy. Of course, they have scientists in there who are specialized in nuclear weapons. So the probabilities are there. There is no margin for error.

Anyway I did not mean to usurp your time, Mr. Berman.

Mr. BERMAN. I do not treat it as a usurpation of my time. I just add on.

Chairman HYDE. Oh.

Mr. BERMAN. Just one other point on your point, you do not have to go back to Osirik. We know after Osirik they began a nuclear

weapons program which our intelligence agencies estimated would produce nuclear weapons much later than it later turned out that it would have after the Gulf War when the inspectors found more data.

Three questions I'm going ask in rapid fire.

First, I would like to give you number one. You have left an impression with one of your answers that apart from whatever else might be produced, that it is sufficient that under the McNamara specter the mere possession of intellectual capability to produce weapons of mass destruction is enough to conclude that a country has weapons of mass destruction capabilities. Surely the Administration did not rely simply on the presence of intellectual capability for their conclusion that weapons of mass destruction existed in Iraq. I hope you could clarify that.

Mr. BOLTON. Yes, that was simply one piece of the evidence.

Mr. BERMAN. All right.

Mr. BOLTON. Particularly on the nuclear front.

Mr. BERMAN. Well, on the nuclear front, I understand that point, but it wasn't clear to me you limited it to the nuclear front, and on the biological and chemical weapons fronts surely the intellectual, we had something more than intellectual capability.

Mr. BOLTON. Absolutely.

Mr. BERMAN. Okay. Second, China may have come to the conclusion that it is not in their interest for North Korea to have nuclear weapons. But tell me how either a containment strategy or an economic sanctions strategy work if China's interest in maintaining the existing regime to avoid either the chaos or the reunification of the Korean Peninsula trumps their dislike of a North Korean nuclear capability?

In other words, how do some of these strategies, short of preemptive strike, work without China as a player, and why, given them what we know about China, do we ever think they will be a partner in either containment or sanctions on North Korea?

Mr. BOLTON. Well, I think in that case—sorry, I will—

Mr. BERMAN. Should I go to my third question?

Mr. BOLTON. Sure, go ahead.

Mr. BERMAN. Then I will never talk again. [Laughter.]

A good deal.

The third question, are we at a point in Iran where even if the Russians cut off the fuel to Bushehr, Iran now has an indigenous capability to produce nuclear weapons that will not require them to get outside components to develop that capability?

Mr. BOLTON. Well, on the China/North Korea question, you know, China has clearly conflicted here, and what I was trying to say earlier in response to a related question was that a nuclear capable North Korea may not be a direct threat to China as such, although given the regime in North Korea, I would say one never knows. But I think the balance of opinion of those who have looked at the region carefully is that a nuclear capable North Korea could well produce a decision in Japan to seek a nuclear weapons capability. And a nuclear capable Japan would fundamentally alter the calculus in Northeast Asia, and that does get China's attention.

So the issue that they have to face is now to get to a situation that we both want, that is to say the elimination of North Korea's

nuclear weapons program in a way that keeps this regime in power. Obviously, we have been committed for some time to the peaceful reunification of the Korean Peninsula. I am not sure how the Chinese resolve that dilemma. I do not think it is really for us to be that concerned about it, frankly.

I think what we need to do is focus on the weapons program and make them see that in the long term it is a much bigger risk to them than whatever may happen in terms of reunification in Korea.

On the question of Iran, I think that one of the things that moves both Russia and some of the European countries more in our direction in terms of their assessment of the level and sophistication of Iran's nuclear weapons program was the recent visit by the IAEA where they saw a uranium centrifuge cascade that the Iranians said was up and in a vacuum, leads to a lot of questions of whether they have tested that centrifuge cascade with uranium hexafluoride. But I think the Russians and many in Europe were surprised at how advanced the Iranian capability was.

Is it completely—are they self-sufficient indigenously now? I do not think we can answer that, but they are very far advanced and very sophisticated.

Even if they were capable indigenously, they are still obviously making international procurement efforts and therefore our attempts to prevent them from procuring at a minimum can dramatically slow down their progress. But I think this ties in as well, particularly with the Russians and their decision as they have now articulated to the—by President Putin to the G-8 not to supply fuel to the Bushehr reactor at least until the Iranians sign the additional protocol.

That means the Bushehr reactor does not start to operate and it means that there is no spent fuel coming out of the reactor that they could reprocess to extract plutonium from.

We have done an analysis, and we shared this with the Russians, said to them, look, you have argued Bushehr is under safeguards, there is no problem, you ought to be allowed to go ahead and deliver the fuel for the lifetime of the reactor. Our calculations show that if the reactor came on-stream and operated in fairly normal tempo for about 5 or 6 years, when you look at the fuel that would be waiting to go in, the fuel that was in the reactor, and the fuel that is in the spent fuel rods, that if Iran were hypothetically to withdraw from the nonproliferation treaty and end its safeguards agreement, it could extract from that regular life of the fuel cycle supply of radioactive material enough plutonium for over 80 nuclear weapons.

And we said to the Russians, you know, withdrawal from the nonproliferation treaty is not a hypothetical. The North Koreans have just done it. So our concern with Iran and your supply of this material to Iran is very serious.

Now, I do not want to overstate this. The Russians are not where we are, but the decision not to supply any fuel, thus preventing the Bushehr reactor from starting, is a significant change from the earlier Russian position where it looked like Bushehr might be on the stream as early as this year.

There is clearly more work that we need to do both with respect to Russia and with respect to the Europeans, but I think that it shows that we can materially impair the Iranian program whether or not it is sufficient indigeneously. I think probably the balance of evidence is that it is not, but there is a lot we do not know about the program. There is no question about it.

Chairman HYDE. The Committee thanks you, Mr. Bolton, for your candor, your courtesy, your cooperation. I think we are lucky to have you where you are.

Mr. BOLTON. Thank you, Mr. Chairman.

Chairman HYDE. The Committee stands adjourned.

Mr. BOLTON. Thank you.

[Whereupon, at 1:35 p.m.,the Committee was adjourned.]



## A P P E N D I X

---

### MATERIAL SUBMITTED FOR THE HEARING RECORD

PREPARED STATEMENT OF THE HONORABLE NICK SMITH, A REPRESENTATIVE IN  
CONGRESS FROM THE STATE OF MICHIGAN

Mr. Chairman, I'd like to thank you for this opportunity today to hear from this panel of experts and Under Secretary Bolton about the course of U.S. nonproliferation policy.

The world's attention may be currently focused on whether or not we uncover Saddam Hussein's hidden weapons of mass destruction in Iraq. Though a failure to recover such weapons would raise troubling questions about our intelligence capabilities, it would do nothing to diminish the legitimacy of our actions. The international community gave the Saddam Hussein regime numerous opportunities to show that it had disarmed and it repeatedly failed to do so. Regardless of what we find in Iraq, and there is additional evidence to uncover, Saddam Hussein's actions and weapons were a dangerous threat to the Free World. They were a threat that Saddam Hussein perpetuated and that representatives of the Free World finally had to address. Terrorists and tyrant dictators now know that it will not be to their advantage to develop weapons of mass destruction in order to intimidate or blackmail.

We must now explore what our actions in Iraq say about our more general strategies for nonproliferation. Even after the removal of Saddam Hussein, the world is still a very dangerous place. North Korea has taken very brash, very confrontational steps to re-establish its nuclear weapons programs. Though less overt, Iran is working to possess a nuclear threat that similarly impacts regional stability and gives terrorist groups unimaginable lethality.

What from our experience with Iraq can be applied to these other scenarios? Does a rogue regime that defiantly asserts its possession of weapons of mass destruction to intimidate neighbors require a different response from one that builds them in a shroud of official denial? After Iraq, does the UN have less credibility to control WMD proliferation? Can the Iraq example of preventing weapons proliferation by forcing regime change be generalized as an "effective" or at least "justifiable" policy option? To state it differently, will the U.S. continue to consider use of military force a viable option? Unless weapons of mass destruction are discovered in Iraq, public support for any military invasion will require better verified evidence that such weapons exist.

I am sure that the witnesses before us will help shed light on these issues and answer at least some of my questions. I look forward to benefiting from their insight and I thank you, Mr. Chairman, for this opportunity. I yield back the balance of my time.

---

PREPARED STATEMENT OF THE HONORABLE DIANE E. WATSON, A REPRESENTATIVE IN  
CONGRESS FROM THE STATE OF CALIFORNIA

Whether or not we want to admit it, we still live in the nuclear age. Perhaps we will always live in it. A dozen years after the Soviet Union disintegrated, nuclear weapons have not receded from the margins of our interest, as many expected, but remain at the heart. They still govern our foreign policy as never expected. Nuclear proliferation is at the heart of our confrontations with North Korea and Iran. It is also a central justification our nation used to engage Iraq in a preemptive strike, despite the fact that weapons of mass destruction have yet to be found.

Even more disquieting, the taboo of using nuclear weapons appears to have worn thin. India and Pakistan, our ostensible ally in the war on terrorism, instead of hiding their acquisition of nuclear weapons revel in their discovery. Other nations

openly and eagerly seek to acquire them not just for status or preemptive purposes. No longer are they viewed as weapons of last resort, but are now seen by their masters as a means to fight wars. Sadly, the threshold for the use of WMDs is quickly being eroded.

The argument can be made that the Administration's threshold for the use of nuclear weapons has also been lowered as is evidenced by its cavalier attitude towards testing, the production of new battlefield nuclear weapons, and international agreements. The old arms control regimes-SALT, ABM-have been torn down. But nothing has been erected in their place, except for the future and still very questionable promise of a defensive shield that will protect Americans from nuclear first strikes. However, deployment of a credible defensive shield could very well have the unintended consequence of contributing to the wider proliferation of WMDs.

The war in Iraq represents perhaps the most important change in our nation's arms control posture in the last 50 years. What I and I believe others in this room fear is that this Administration relies too heavily on strong rhetoric and the threat of the use of force and undervalues arms control diplomacy. It has abandoned the ABM Treaty, calling it an anachronism, and has dismissed the Chemical Weapons Convention as unverifiable. To date, however, it has not offered up any alternatives, except the dubious proposition of preemptive first strikes.

Mr. Chairman, I look forward to the testimony presented by Mr. Bolton as well as our other distinguished panelists and look forward to their comments on some of the issues I have raised.

---

QUESTIONS FOR THE RECORD SUBMITTED TO THE HONORABLE JOHN R. BOLTON, UNDER SECRETARY FOR ARMS CONTROL AND INTERNATIONAL SECURITY, U.S. DEPARTMENT OF STATE, BY THE HONORABLE BETTY MCCOLLUM, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA, AND MR. BOLTON'S RESPONSES

*Question:*

*What steps is the Administration taking to focus intensive, sustained leadership on the issues of threat reduction in Russia and the states of the former Soviet Union? What challenges do you face from the Russian government in this regard?*

*Answer:*

The Administration is committed to robust nonproliferation and threat reduction programs in Russia and the other states of the former Soviet Union.

The Departments of Energy, Defense, and State have collaborated under the Cooperative Threat Reduction and other authorities, to lock down threats that arose from the former Soviet arsenal. This Administration has funded these programs at historically high levels, although there remains much more still to do, and we must continue boldly down this path. The United States is spending about one billion dollars a year on nonproliferation and weapons reduction projects in former Soviet states, including to improve security at Russian storage facilities, to consolidate stored fissile materials, to stop new production, and to purchase or down-blend former nuclear weapons material to reduce supply.

In March, Energy Secretary Abraham signed an amendment to the U.S.-Russian Federation Plutonium Production Reactor Agreement, as well as an implementing agreement between DOE and the Ministry of the Russian Federation for Atomic Energy, which together should lead to permanent closure of Russia's three plutonium production facilities. The State Department provides funds for the International Science Centers in Russia and Ukraine, which implement peaceful, commercial projects that employ former Soviet weapons scientists to reduce the temptation for those scientists to hire themselves out to proliferators.

We have also taken important steps to encourage stronger contributions by other countries. U.S. leadership resulted in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, which was launched by G-8 leaders at the June 2002 Kananaskis Summit. It represents a major milestone in international commitment to nonproliferation. G-8 leaders pledged to raise up to \$20 billion over ten years for nonproliferation, disarmament, counter-terrorism, and nuclear safety projects in Russia to prevent WMD from falling into the hands of terrorists or states that sponsor them.

Since the Kananaskis Summit, we have continued strong efforts to ensure the success of the initiative. Over the last year, our challenge has been to persuade Russia to take concrete actions to meet donor concerns about implementation obstacles in order for projects to move forward. This is our greatest current challenge in working with Russia, and we and our partners are working hard with Moscow and Russian regional authorities to find appropriate resolutions.

*Question:*

*What efforts are you making to establish relationships with other key states like India or Pakistan whose nuclear weapons could fall into the hands of terrorists?*

*Answer:*

We are vigorously pursuing strong policies and programs to reduce the risks of nuclear proliferation worldwide. We want to reduce the availability of dangerous nuclear materials and know-how, as well as reduce the demand for them. We have established, and are strengthening, partnerships with a large number of key states worldwide and with the International Atomic Energy Agency (IAEA), whose safeguards program aims to ensure that civilian nuclear facilities remain exactly that—civilian—and to enable the IAEA to ferret out covert weapons efforts. We are prepared to back tough safeguards with increased funding. We are constantly working to make the international nuclear nonproliferation regimes more effective. We are aggressively engaged in multinational efforts to strengthen export control partnerships such as the Nuclear Suppliers Group and the Zangger Committee.

We also are impressing upon other governments, such as India and Pakistan, the importance that they protect their security interests as well as ours by exercising greater scrutiny over their exports and to use their diplomacy more actively to dissuade proliferators.

We believe India and Pakistan are well aware of the importance of securing any nuclear material, components, and weapons they have. We are also confident that they are taking steps to assure the security of their nuclear assets.

*Question:*

*What additional efforts are needed from Congress to ensure that nuclear weapons and other weapons of mass destruction in Russia and the other states of the former Soviet Union are safe and secure from potential terrorists?*

*Answer:*

Continued strong support from Congress for nonproliferation and threat reduction efforts, in the states of the former Soviet Union and elsewhere, is vitally important. We share your support for the President's request for nonproliferation and threat reduction appropriations and authorities. This will ensure the continuation and, in some cases, the planned expansion of important ongoing work and provide increased flexibility in the use of Cooperative Threat Reduction funds. The CTR program has been a vital and very effective component of our efforts to advance U.S. nonproliferation and threat reduction goals in the former Soviet Union and could also be a helpful tool in taking advantage of new opportunities.

The Administration has expressed concern about provisions in the House version of the National Defense Authorization Act for FY 04 (HR 1588) that would hinder DOD's and DOE's ability to implement more rigorously and effectively CTR and other nuclear nonproliferation activities and would limit the President's flexibility to apply CTR resources to the most pressing non-proliferation challenges in support of the Global War on Terrorism.

Strong ongoing support from Congress has also allowed the Department of State to undertake programs like the Science Centers, Bio-Redirect and Export Control and Related Border Security (EXBS). It has also allowed the vigorous pursuit of DOE's Defense Nonproliferation programs and DOD's Cooperative Threat Reduction effort. We ask your continued support for these efforts, as set forth in the President's budget request.

