

**ADHERENCE TO AND COMPLIANCE
WITH
ARMS CONTROL, NONPROLIFERATION
AND
DISARMAMENT AGREEMENTS
AND COMMITMENTS**



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ADHERENCE TO AND COMPLIANCE WITH ARMS CONTROL, NONPROLIFERATION, AND DISARMAMENT AGREEMENTS AND COMMITMENTS

I. PURPOSE

This Noncompliance Report (NCR) is submitted pursuant to Section 403 of the Arms Control and Disarmament Act, as amended (22 U.S.C. 2593) which requires a Report by the President on *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*.

This Report – the August 2005 edition of this Congressionally-mandated report – reflects the importance the Administration and the U.S. Congress place upon compliance with arms control, nonproliferation, and disarmament agreements and commitments. Such agreements and commitments only serve the national security interests of the United States if they are fully complied with. Other states' violations of such obligations can present grave threats to our security. For this reason, the United States places a very high priority upon verifying compliance with, and detecting violations of, such agreements and commitments – as well as upon ensuring that violators promptly return to compliance and that other would-be violators are deterred from breaking their own promises.

The United States has had some success in helping bring noncompliant countries back into compliance with their agreements and commitments, and in demonstrating that their return to compliance leads to improved relations with the United States. However, other countries have presented significant compliance problems, which are detailed herein, and of which U.S. decision-makers need to be aware. Particularly in a post-9/11 world in which there exists a very real threat of weapons of mass destruction (WMD) being used as weapons of terror, it is vital that the international community take all steps necessary to end noncompliance with arms control, nonproliferation, and disarmament agreements and commitments and ensure that would-be future violators are deterred from taking such a provocative and dangerous course. The urgency of these tasks highlights the importance of the various initiatives President Bush has put forward to enhance compliance enforcement efforts, prevent WMD terrorism, and reduce proliferation risks. This Report contributes toward these goals by highlighting cases of noncompliance or of compliance concern so that policymakers can focus their attention upon returning violators to full compliance as rapidly as possible.

Another key objective of this Report is to make it very clear that the United States takes compliance assessment very seriously, and applies only the highest standards of analytical rigor in making its compliance findings. This point is not always well understood, particularly among countries that themselves may apply less rigorous approaches, or which may even make “compliance” judgments simply on the basis of policy likes or dislikes. Now more than ever, it is important that everyone understand the

effort, seriousness, and rigor that go into U.S. compliance assessments. The unprecedented clarity and detail provided in this Report are designed to set the global standard for such work.

II. SCOPE OF THE REPORT

This Report provides an assessment of U.S. adherence to obligations undertaken in arms control, nonproliferation, and disarmament agreements as well as an assessment of the adherence of other nations to obligations undertaken in arms control, nonproliferation, and disarmament agreements or commitments, including the Missile Technology Control Regime, to which the United States is a participating state.

Pursuant to Section 403(a)(6), this version of the Report identifies questions, to the maximum extent practicable, that exist with respect to compliance by other countries with their arms control, nonproliferation, and disarmament agreements and commitments. To fulfill this statutory requirement while at the same time safeguarding sensitive or special reporting, the unclassified version of the Report may contain less detailed information about U.S. compliance assessments and findings' judgments. As a result, this version of the Report presents a relatively brief account of findings and the unclassified information that underlies them. In setting out the United States' findings in this version of the Report, we wish to emphasize that the findings are based on all available information, including information that may only be discussed in classified versions of the Report.

Although the Report primarily reflects activities that occurred from January 1, 2002, through January 1, 2004, every effort has been made to include significant developments that have occurred more recently. Unless otherwise noted, compliance issues that first came to light after that period will be addressed in the NCR due to Congress on April 15, 2006.

III. OVERVIEW

The United States has long recognized the importance of reaching the most rigorous judgments possible as to whether parties to arms control, nonproliferation, and disarmament agreements or commitments are complying with the obligations or commitments they have made. This Report represents the most recent in a series of Noncompliance Reports issued to alert policymakers, Congress, and – with the unclassified version of the Noncompliance Report – the public, to questions of arms control, nonproliferation, and disarmament noncompliance. All governments that give their word in this vital area should be held to it, and the United States is committed not only to holding others to a high standard of compliance but also to adhering to such a high standard itself.

The Report, in turn, addresses U.S. compliance, compliance by Russia and other successor states of the Soviet Union with treaties and agreements concluded bilaterally with the Soviet Union, compliance by other countries that are parties to multilateral agreements with the United States, and compliance with commitments made less formally but that bear directly upon arms control, nonproliferation, and/or disarmament issues.

Several items of particular importance that have arisen since the last edition of the Report merit mention.

Libyan Renunciation of Weapons of Mass Destruction

Perhaps the most significant event since the submission of the last Noncompliance Report in June 2003 is Libya's historic undertaking, on December 19, 2003, to renounce its pursuit of WMD and long-range missiles and to come back into compliance with its obligations under the Nuclear Nonproliferation Treaty, as well as to join and comply with the Chemical Weapons Convention and begin to eliminate its long-range missiles. In the next Report, the United States will publish a detailed analysis regarding our efforts to assist in Libya fulfill its commitments, with specific emphasis upon our degree of confidence that such WMD programs no longer remain in Libya and that its Missile Technology Control Regime (MTCR)-class ballistic missiles have been, or will be, eliminated.

This Report addresses Libya's previous noncompliance with arms control, nonproliferation, and disarmament agreements – *e.g.*, with Articles II and III of the Nuclear Non-Proliferation Treaty (NPT) – *before* Libya renounced its WMD and MTCR-class missile programs and provides updates on the unprecedented cooperative WMD elimination and verification effort undertaken by Libya in 2004. Libya's return to compliance will be discussed in more detail in the next edition of the Noncompliance Report.

Nuclear Non-Proliferation Treaty (NPT)

Another important development – albeit a less salutary one – during the period since the submission of the last Noncompliance Report has been North Korea's withdrawal from the NPT and the large volume of new information available about the challenge to the NPT regime presented by Iran's long history of clandestine nuclear activity.

The United States has warned publicly for more than ten years that Iran was engaged in a covert effort to develop nuclear weapons, but it was only in 2002 that much information began to appear in public about the Iranian nuclear program. Since that time, the International Atomic Energy Agency (IAEA) has extensively documented much of the Iranian program, making detailed information available about Iran's long history of undeclared activity and lies to the IAEA and the rest of the international community.

This Report marks the first time that U.S. noncompliance findings have specified violations of the NPT on an article-by-article basis. Such distinctions are particularly important in cases such as Iran's, because of the potentially quite different implications of Article II and Article III noncompliance. A violation of Article III – *e.g.*, a country's noncompliance with its IAEA Safeguards Agreement – might occur for a variety of reasons, not all of which are sinister (*e.g.*, simple error). An Article II violation, however – that is, an effort to manufacture or otherwise acquire a nuclear weapon or other nuclear explosive device, or seeking or receiving any assistance in such manufacture – necessarily represents a willful subversion of the NPT's core nonproliferation principles. For this reason, and in keeping with the United States' emphatic commitment to rigor and clarity in all compliance assessments, this Report sets forth NPT noncompliance findings with greater specificity than in previous reports.

This Report also contains much new information on North Korea's nuclear weapons program, and its longstanding violation of the NPT prior to its withdrawal from that Treaty becoming effective in 2003. Recent developments in North Korea have been particularly significant because of Pyongyang's admission to a U.S. delegation in October 2002 that it had been pursuing a clandestine uranium enrichment program, its resumption of activities at the Yongbyon facility, its announcement of the resumption of plutonium reprocessing, and its shifting admissions and denials with respect to the plutonium weapons it has already produced. This Report details North Korea's violations – through the pursuit of both uranium- and additional plutonium-based nuclear weapons – of its IAEA Safeguards Agreements, Articles II and III of the NPT, the 1994 Agreed Framework, and the Joint North-South Declaration on the Denuclearization of the Korean Peninsula.

Expansion of START Compliance Section

Section 403 of the Arms Control and Disarmament Act – the legislative basis for the submission to Congress of this series of Noncompliance Reports – requires that the Report provide greater specificity about compliance concerns. To wit, the law requires the Report to include “a specific identification, to the maximum extent practicable in an unclassified form, of each and every question that exists with respect to compliance by other countries with arms control, nonproliferation, and disarmament agreements with the United States.” To comply with this requirement, this edition of the Report has included more information than ever before on, among other things, Russia's implementation of the Strategic Arms Reduction Treaty (START).

To facilitate this effort, in 2003 the United States conducted consultations with the Russian Government regarding a number of longstanding, unresolved U.S. concerns about Russian compliance with the START Treaty – some of which actually date back to the first year of START implementation. These included Russia preventing U.S. inspectors from measuring the launch canisters of certain Intercontinental Ballistic Missiles (ICBMs) or verifying that certain ICBMs do not contain more warheads than attributed under the Treaty. The U.S. concerns also included Russia failing to provide all

required telemetry materials for some START-accountable flight tests, failing properly to declare certain ICBM road-mobile launchers accountable under the Treaty, and locating some deployed SS-25 ICBM launchers outside their declared restricted areas. With respect to this last issue, however, it should be noted that Russia has taken steps that have resolved U.S. compliance concerns.

Chemical Weapons Convention (CWC)

During this reporting period, the United States increased its efforts to engage in compliance-related dialogue with States Parties with which we continue to have concerns. The bilateral discussions underpin the United States' effort to pursue strict compliance with the CWC and resolve questions regarding a State Party's compliance. These actions have been taken under the Article IX provisions of the CWC for Consultations, Cooperation, and Fact-Finding. Article IX provides a role for every State Party to participate actively in resolving questions of concern which may cause doubt about compliance with the Convention. For its part, the United States has successfully used bilateral consultations under Article IX to resolve numerous compliance concerns.

The CWC section of this Report addresses our concerns with China, Iran, Russia and Sudan, as well as the results of our interactions with Libya to assist it with declaring and eliminating its chemical weapons (CW) program. However, the United States also has conducted bilateral discussions with other States Parties during this reporting period. These bilateral efforts have been well received and useful in laying the groundwork for judging compliance; as a result, the United States has resolved a number of its CWC compliance concerns. In this regard, the United States welcomes the actions undertaken by Albania to declare newly discovered chemical weapons, obtain an extension to its CW destruction deadlines, and work transparently and cooperatively to ensure the security and elimination of these chemical weapons stocks. Such actions set a positive precedent for CWC compliance and deserve to be commended.

Open Skies Treaty

Finally, it is worth noting that the Open Skies Treaty came into force in January 2002, making this Report the first to discuss compliance with that Treaty.

IV. ADHERENCE TO AGREEMENTS

A. POLICY

Effective progress by the international community in achieving key arms control, nonproliferation, and disarmament goals requires parties to comply fully with the obligations and commitments they have undertaken. Compliance with agreements or commitments freely negotiated or undertaken by parties is a fundamental cornerstone of U.S. national security policy and a bedrock norm of international relations. The rigorous U.S. approach to compliance is deeply rooted in our own legal system and fundamental

principles and values. To that end, the United States is committed to adhering to the same high standard of compliance that it requires of others. In order to provide policymakers with information they need to fulfill their responsibilities, this Report identifies not only countries that we assess to be violating their obligations or commitments, but also those about which the United States has developed concerns about potential noncompliance. Every effort is made clearly to distinguish such cases, but it is important to raise both types of issues for attention.

B. U.S. ORGANIZATIONS AND PROGRAMS TO EVALUATE AND ENSURE TREATY COMPLIANCE

Our deep-seated legal tradition, a commitment to U.S. agreements that enhance our security and that of our allies and friends, and the transparency and accountability that result from our open and democratic society, create powerful incentives to comply with agreements to control nuclear weapons, other weapons of mass destruction, and other dangerous technologies. Legal and institutional procedures to ensure compliance have been established, and specialized compliance-related organs set up within the U.S. Government by law and by longstanding policy; they reflect the seriousness with which these obligations are taken and they reinforce these underlying policies and principles. Department of Defense (DoD) compliance review groups, for instance, oversee and manage DoD compliance with arms control, nonproliferation, and disarmament agreements and related commitments. The Verification and Compliance Analysis Working Group (VCAWG), an interagency organization, oversees and manages analysis of compliance of other nations with arms control, nonproliferation, and disarmament agreements and related commitments. In addition, the VCAWG participates actively in the preparation of this annual report detailing the assessment of both the United States' and other nations' adherence to obligations undertaken in arms control, nonproliferation, and disarmament agreements, and related commitments. Moreover, an interagency review is conducted in appropriate cases, including when other Treaty Parties officially raise questions regarding U.S. implementation of its obligations. In addition, federal law mandates the existence, within the U.S. State Department, of the Bureau of Verification and Compliance; this bureau is devoted by law to detecting and assessing noncompliance with such agreements and commitments. U.S. law also mandates the production of this report on compliance with arms control, nonproliferation, and disarmament agreements and commitments, the compliance findings of which are discussed and debated extensively within the U.S. interagency community and then forwarded to Congress by the Secretary of State on behalf of the President. Finally, Congress – which has long shown a keen interest in compliance matters – performs oversight functions through committee hearings, budget allocations, and a variety of formal and informal investigative means pursuant to its powers as a coordinate branch of the U.S. federal system.

C. IMPORTANCE OF TREATY AND COMMITMENT ENFORCEMENT

The United States uses its assessments of a country's compliance with arms control, nonproliferation, and disarmament agreements and commitments as guides to

policymaking. Such agreements and commitments cannot serve their purpose of increasing U.S. and international security if countries do not fulfill their obligations or pledges. Verification, compliance assessment, and enforcement are sometimes seen as separate and separable activities, but they are not: all three elements are interrelated, and none can have real value without the others. Compliance enforcement is an essential component of the process. Only by making violators face consequences for their violations can they be expected to take compliance seriously, and only by making violators face such consequences will other would-be violators be deterred. Indeed, without taking steps to bring such compliance pressure to bear, or to counter the threats posed by noncompliance, there would be little point in trying to detect noncompliance in the first place. The United States works vigorously not just to detect noncompliance but also to induce violators to return to compliance. Because all participating states have a similar security interest in ensuring compliance, we urge other countries to do the same.

Though the most immediate responsibilities for compliance enforcement will vary depending upon the nature of the agreement or commitment in question, all responsible members of the international community share a common security interest in ensuring that parties to arms control, nonproliferation, and disarmament agreements and commitments comply with their undertakings. A wide range of tools is available for compliance enforcement purposes, including diplomatic pressure and economic sanctions. The United States supports effective compliance enforcement, and, in furtherance of this goal, seeks to build international coalitions to exert effective compliance pressures upon violators – either to induce a return to compliance or to thwart or degrade the advantages the violator may seek to obtain from its noncompliance. The United States also is prepared to employ unilateral measures when necessary and appropriate to address such noncompliance.

1. NONCOMPLIANCE CHALLENGES AND REQUIRED RESPONSES

Two themes emerged over the past two years as this Report was prepared and updated – first, that serious compliance challenges exist, but also that countries can make the strategic decision to come into compliance, particularly if other parties work to seek such a strategic commitment.

There has been a serious failure by two NPT Parties to comply with the core nonproliferation undertakings of Articles II and III of the Treaty. The United States and other like-minded states have been struggling with one such case for more than a decade. North Korea has violated these Articles by its continued development of plutonium weapons and pursuit of uranium ones, and it has refused thus far to make the strategic decision to accept the complete, verifiable, and irreversible dismantlement of its nuclear program. Another case of Article II and III violations has thrust itself upon the attention of the international community as more and more of Iran's secret nuclear weapons programs have been exposed to public view. Such cases illustrate the challenge of persuading committed violators to reverse their violations and enforcing full adherence to and compliance with the NPT's core nonproliferation obligations. Other international

arms control and nonproliferation regimes or commitments face their own sets of compliance challenges.

On the other hand, the world has observed the emergence of a few remarkable compliance success stories. Most significant is Libya's historic announcement, on December 19, 2003, to renounce its pursuit of WMD and long-range missiles and its implementation of that commitment. Similarly, Albania's actions to declare newly discovered chemical weapons, obtain an extension to its CW destruction deadlines, and work transparently and cooperatively to ensure the security and elimination of these chemical weapons stocks set a positive precedent for CWC compliance and deserve to be commended.

2. ENFORCING COMPLIANCE

Even if violations are detected early and are quickly understood as such, an arms control, nonproliferation or disarmament regime can still be in peril if its members are unable or unwilling to address them as compliance challenges. Detection is only part of what is needed: violations must have consequences. National governments play a critical role both in deterring and detecting violations, and in taking resolute action – individually and collectively – to enforce compliance and hold violators accountable for their actions. Verification only works when these elements act together to deter, detect, and remedy noncompliance.

D. U.S. COMPLIANCE WITH ARMS CONTROL, NONPROLIFERATION, AND DISARMAMENT AGREEMENTS AND COMMITMENTS

1. U.S. INSTITUTIONAL AND PROCEDURAL ORGANIZATION FOR ENSURING COMPLIANCE

There are three major programs within the U.S. executive branch that operate to ensure that U.S. plans and programs remain consistent with U.S. international obligations. These procedures include internal Department of Defense (DoD) controls, Department of Energy (DOE) procedures and controls, and separate evaluations produced by the Department of State. These procedures operate in parallel, and in addition, to congressional oversight.

In 1972, by direction of the President, the DoD established a process to ensure that all DoD programs comply with U.S. international obligations. Under this compliance process (established with the SALT I agreements), key offices in DoD are responsible for overseeing DoD compliance with all U.S. arms control, nonproliferation, and disarmament commitments. DoD components ensure that their implementing program offices adhere to DoD compliance directives and seek guidance from the offices charged with oversight responsibility. Interagency reviews are also conducted in appropriate cases, such as when other Treaty Parties formally raise questions regarding U.S. implementation of its arms control obligations.

2. TREATY COMPLIANCE

The United States is in compliance with all its obligations under arms control, nonproliferation, and disarmament agreements, and continues to make every effort to comply scrupulously. Because of the breadth and intrusiveness of most arms control, nonproliferation, and disarmament regimes and their extensive notification and data exchange requirements, the United States has on occasion committed some errors in meeting our treaty obligations. When our Treaty Partners have raised compliance questions regarding U.S. implementation activities, the United States has carefully reviewed the matter to determine whether its actions were in compliance with its treaty obligations. When an error has been made, the United States has acknowledged this fact to our Treaty Partners and taken steps to correct the problem.

3. ISSUES RAISED BY OTHER TREATY PARTIES CONCERNING U.S. COMPLIANCE

a. THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY

The Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles (INF Treaty) required the elimination of all U.S. and Soviet ground-launched ballistic and cruise missiles with ranges of between 500 and 5,500 kilometers, their launchers and associated support equipment and permanently banned the possession, production, and flight-testing of such missiles. The United States and the Soviet Union completed the elimination of all declared INF-prohibited systems in 1991. Inspection rights under the Treaty ceased at midnight on May 31, 2001.

With the dissolution of the Soviet Union, all 12 former Soviet republics became Parties to the Treaty. The United States, Belarus, Kazakhstan, Russia, and Ukraine are the active participants in the Special Verification Commission (SVC), the implementing body for the INF Treaty.

Russia has expressed INF compliance concerns related to certain procedures used during past inspections in the United States, and to the treaty status of specific missiles and a silo test launcher. With regard to each of these concerns, the United States has determined that it is in full compliance with the INF Treaty. U.S. officials have addressed these concerns in great detail in the SVC, through diplomatic channels, and meetings at the political level, explaining why U.S. actions are fully consistent with the Treaty.

b. THE STRATEGIC ARMS REDUCTION TREATY (START)

The entry into force of the START Treaty on December 5, 1994, ushered in a verification regime of unprecedented complexity and intrusiveness. In addition to verification by national technical means, data notifications, missile flight test telemetry

exchanges, and other cooperative measures, the Treaty provides for 12 types of on-site inspections and exhibitions, as well as continuous on-site monitoring activities at specified facilities. As required, the Parties have exchanged updated START Memorandum of Understanding (MOU) data on a semiannual basis and continued to exercise their right to conduct on-site inspections. During 2002 and 2003, the United States hosted 30 such on-site inspections each year at U.S. facilities.

As might be expected under a verification regime with the breadth and intrusiveness of START, a number of compliance questions have been raised by our Treaty Partners. These questions primarily concern procedural issues related to inspections, flight tests of submarine-launched ballistic missiles (SLBMs) and telemetry, as well as a few substantive disagreements with U.S. equipping and positioning of its heavy bombers and the nature of certain intercontinental ballistic missile (ICBM) launchers. A number of these issues have been resolved in the Joint Compliance and Inspection Commission (JCIC) and through diplomatic channels, while others have been under active discussion since 1995.

With regard to each of these concerns, the United States has determined that it is in full compliance with the START Treaty. U.S. officials have addressed these concerns in great detail in the JCIC, through diplomatic channels, and meetings at the political level, explaining why U.S. actions are fully consistent with the Treaty.

V. COMPLIANCE BY SUCCESSORS TO TREATIES AND AGREEMENTS CONCLUDED BILATERALLY WITH THE SOVIET UNION

A. THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY

The Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles (INF Treaty) was signed by U.S. President Ronald Reagan and Soviet General Secretary Mikhail Gorbachev on December 8, 1987, and entered into force on June 1, 1988. Elimination of all declared missiles and launchers under the Treaty was completed in 1991.

The Treaty is of unlimited duration, and bans the possession, production, and flight testing of intermediate- and shorter-range missile systems. The Treaty required the complete elimination of all the approximately 800 U.S. and approximately 1,800 former Soviet ground-launched missiles with ranges between 500 and 5,500 kilometers, as well as their launchers and associated support equipment and structures. All such items were eliminated by May 28, 1991.

The Treaty established a verification regime using national technical means (NTM), notifications, and an on-site inspection system to detect and thus help deter

violations of Treaty obligations. This inspection regime concluded on May 31, 2001, at the end of 13 years following the Treaty's entry into force. All Treaty-related on-site inspection activities have now ceased. The remainder of the verification regime, however, continues for the life of the Treaty (*i.e.*, indefinitely).

The United States has identified no INF Treaty compliance issues with its Treaty Partners as of this report. The United States will continue to verify compliance with the INF Treaty through NTM for the duration of the Treaty.

UPDATE ON SS-23 MISSILES

In 1990, the United States discovered that the Soviet Union had transferred a number of SS-23 shorter-range missiles to the former German Democratic Republic, Czechoslovakia, and Bulgaria. While this transfer did not violate the INF Treaty since it occurred prior to Treaty signature, the United States had serious compliance concerns regarding this issue. The nations whose military forces held the SS-23 missiles were not INF Parties, and thus were never legally obligated under the Treaty. As a matter of policy, the United States has sought the destruction of these missiles in order to fulfill the objectives of the INF Treaty.

Germany and the Czech Republic destroyed their SS-23 missiles and associated support equipment during the 1990s.

The Slovak Republic, which gained possession of a number of SS-23 missiles following the "Velvet Divorce" with Czechoslovakia, agreed to destroy its missiles with financial assistance provided by the Department of State's Nonproliferation and Disarmament Fund (NDF). On October 27, 2000, a team of U.S. observers confirmed that the Slovak Republic had completed the destruction of its SS-23 missiles and associated support equipment.

Bulgaria announced its intention in December 2001 to destroy its SS-23 missiles by October 2002. The United States offered to provide technical and financial assistance under the NDF, which Bulgaria accepted. The destruction of Bulgaria's SS-23 missiles began in July 2002. On January 16, 2004, a team of U.S. observers confirmed that Bulgaria had completed the destruction of its SS-23 missiles and associated support equipment. This issue has now been resolved.

B. THE STRATEGIC ARMS REDUCTION TREATY (START)

Belarus, Kazakhstan, Russia, and Ukraine are in compliance with the START strategic offensive arms (SOA) central limits. Both the United States and Russia met the START seven-year reduction final ceilings of 1,600 delivery vehicles and 6,000 attributed warheads by the December 4, 2001, deadline. By December 2001, these four Former Soviet Union (FSU) successor states had reduced their aggregate forces to 1,136 deployed launchers, 5,518 deployed warheads, and 4,894 deployed ballistic missile

warheads, as defined by Article II of the Treaty, and all strategic weapons had been removed or eliminated from the territories of Ukraine, Belarus, and Kazakhstan. Additionally, START required the four FSU successor states to eliminate at least 154 heavy ICBM (SS-18) silo launchers by December 2001. In the original MOU, dated September 1, 1990, the Soviet Union declared 308 SS-18 heavy ICBM silo launchers. As of November 30, 2001, a total of 158 SS-18 silo launchers had been eliminated – 104 in Kazakhstan and 54 in Russia – leaving a total of 150 deployed heavy ICBMs.

Notwithstanding the overall success of START implementation, a significant number of longstanding compliance issues that have been raised in the START Treaty's Joint Compliance and Inspection Commission (JCIC) remain unresolved. The Parties continue to work through diplomatic channels and in the JCIC to ensure smooth implementation of the Treaty and effective resolution of compliance issues and questions.

The United States raised six new compliance issues during the period of this report. The United States considers four of these to have been closed. However, several previous – often long-standing – compliance issues remain unresolved. A number of these issues, some of which originated as early as the first year of Treaty implementation, highlight the different interpretations of the Parties about how to implement the complex inspection and verification provisions of the START Treaty.

ICBM ISSUES

Inability to Confirm during Reentry Vehicle Inspections (RVOSIs) that the Number of Attributed ICBM Warheads Has Not Been Exceeded. During RVOSIs of deployed Russian ICBMs, U.S. inspectors have been hampered, in some cases, from ascertaining whether the missile had a front section, or that the front section contained no more reentry vehicles (RVs) than the number of warheads attributed to a missile of the declared type under the Treaty.

The purpose of an RVOSI, as set forth in paragraph 6 of Article XI of the Treaty, is to confirm that a ballistic missile contains no more RVs than the number of warheads attributed to a missile of that type. The RVOSI procedures are referenced in paragraph 16 of Section IX of the Inspection Protocol and contained in Annex 3 to the Inspection Protocol. Paragraph 11 of Annex 3 allows the inspected Party to cover RVs. Inspectors have a right to view these covers and to measure hard covers prior to their placement on the RVs. The covers are then installed on the RVs before the inspectors view the front section. Under the Treaty, such covers must not hamper inspectors in ascertaining that the front section contains no more RVs than the number of warheads attributed to a missile of that type. Russian RV covers, in some instances, are too large; consequently, they fail to meet this requirement.

During certain RVOSIs, Russia did not demonstrate to the satisfaction of the U.S. inspection team that additional covered objects located on the front section, and declared by Russia not to be RVs, were not RVs. Although START does not differentiate between

nuclear and non-nuclear RVs, Russia's willingness to use radiation detection equipment (RDE) during such RVOSIs to establish that the extra objects were not nuclear has been useful for resolving some, but not all, U.S. concerns.

FINDING. Russian RV covers, and their method of emplacement, have in some cases hampered U.S. inspectors from ascertaining that the front section of the missiles contains no more RVs than the number of warheads attributed to a missile of that type under the Treaty. Russian cooperation in the use of RDE and other measures has been helpful in addressing some, but not all, of the difficulties encountered by U.S. inspectors.

Russian Road-Mobile Launchers' "Break-in." Russia has failed to declare certain road-mobile launchers of ICBMs when they first leave their production facility, as required by the Treaty. Russia has moved some of these launchers to an undeclared "break-in" area located over 60 miles from the production facility without declaring that they have left the production facility and are accountable under the Treaty.

Pursuant to paragraph 6(b) of Article III of the Treaty, a mobile launcher of ICBMs becomes subject to the Treaty limitations when it first leaves a production facility. Not later than five days following the first exit of such a newly produced non-deployed road-mobile launcher, and its entry into Treaty accountability, Section I of the Notification Protocol requires the Party producing the new Treaty-accountable item to provide a notification of this change in data. Except for transits, Parties are proscribed from locating non-deployed mobile launchers outside the boundaries of the START-declared facilities identified in sub-paragraph 9(b) of Article IV of the Treaty.

FINDING. Russia continues to violate START provisions relevant to these obligations.

Deployed SS-25 Road-Mobile Launchers Based Outside Their Designated Restricted Areas. Russia based some deployed SS-25 road-mobile launchers outside their declared restricted areas (RAs) at two road-mobile ICBM bases while these RAs were under construction. The United States and Russia concluded a temporary, interim policy arrangement regarding the conduct of inspections and cooperative measures at the facilities where the launchers were housed during the period of construction. This arrangement permitted U.S. inspectors to conduct data update inspections and RVOSIs that they had not previously been able to perform, and allowed Russia to cooperate fully with providing cooperative measures access for the launchers that were previously unavailable. All of these road-mobile ICBMs and their launchers have since been transferred from their bases, and their declared RAs have been eliminated as START facilities.

FINDING. Notwithstanding the interim policy arrangement, Russia's practice of locating deployed SS-25 road-mobile launchers outside their declared RAs for long periods of time constituted basing in a manner that violated the provisions of paragraphs

1 and 9 of Article VI of the Treaty. This practice has ceased and the United States considers this issue closed.

Denial of the Right to Measure Certain Deployed ICBM Launch Canisters on Mobile Launchers. U.S. inspectors have been prevented from exercising the Treaty right to measure certain ICBM launch canisters on mobile launchers, both deployed and non-deployed, that are encountered during data update inspections to confirm data regarding the type of item of inspection. Russia, for instance, has prevented U.S. inspectors from measuring launch canisters for SS-24 ICBMs contained in rail-mobile launchers that are located within the boundaries of an inspection site. Similar concerns have arisen with regard to launch canisters for SS-25 and SS-27 mobile ICBMs located on road-mobile launchers. With regard to launch canisters for these latter types, Russia and the United States have agreed upon a policy arrangement to address this issue, though it has not yet been implemented for the SS-27 ICBM.

Subparagraph 20(a) of Section VI of the Inspection Protocol identifies ICBM launch canisters as one of the items of inspection for data update inspections. In accordance with the procedures in Annex 1 to the Inspection Protocol, inspectors have the right to confirm the number and, if applicable, the types of items of inspection that are specified for the facility to be inspected and declared for the inspection site, and the right to confirm the absence of any other item of inspection at the inspection site. Pursuant to paragraph 6 of Annex 1, inspectors may view and measure the dimensions of a launch canister declared to contain an item of inspection to confirm it is of the declared type.

FINDING. Russia prevented U.S. inspectors from exercising their Treaty right to measure launch canisters for SS-24 ICBMs contained in rail-mobile launchers that are located within the boundaries of an inspection site, in contravention of paragraphs 1 and 6 of Annex 1 to the Inspection Protocol. With regard to launch canisters for SS-25 and SS-27 ICBMs located on road-mobile launchers, the Parties have agreed upon a policy arrangement to address this issue, but it has not yet been implemented for the SS-27 ICBM.

TELEMETRY ISSUES

As part of the START verification regime, the Parties are obligated to notify each other of missile flight tests and to exchange telemetry tapes, tape summaries, interpretive data, and acceleration profiles for each flight test of a START-accountable ICBM or SLBM. The United States has raised several concerns regarding Russia's failure to provide all Treaty-required telemetry materials for some START-accountable flight tests in violation of paragraphs 4 and 5 of Article X of the Treaty, and paragraph 1 of Section I and paragraphs 1 and 2 of Section II of the Telemetry Protocol.

FINDING. Russia has in some instances failed to comply with Treaty requirements regarding the provision of telemetry information on missile flight testing pursuant to Article X of the START Treaty and Sections I and II of the Telemetry Protocol.

VI. COMPLIANCE OF OTHER NATIONS (INCLUDING SUCCESSORS TO THE SOVIET UNION) WITH MULTILATERAL AGREEMENTS

A. THE 1972 BIOLOGICAL AND TOXIN WEAPONS CONVENTION (BWC)

As of December 2003, there were 151 States Parties to the 1972 Biological and Toxin Weapons Convention. An additional 16 countries have signed but have not yet ratified the agreement, including Syria. This Report addresses the activities of China, Cuba, Iran, Iraq, Libya, North Korea, Russia (and the former Soviet Union) and Syria. This Report examines whether these States Parties are complying with the obligations assumed under the BWC and are providing accurate data under agreed BWC Confidence Building Measures (CBMs). It also addresses the BW-related activities of Syria, which is a signatory to the Convention. While the United States has concerns regarding the activities of other countries, the specific cases addressed here are those that have assumed obligations relevant to the BWC and for which the most evidence exists of actual or potential noncompliance.

At the 1986 BWC Review Conference, the States Parties adopted a set of non-binding CBMs; these were expanded at the 1991 Review Conference. The States Parties also agreed that the data called for in these CBMs should be submitted to the United Nations annually (by April 15).

Since adoption of the non-binding CBMs in 1987, some 85 of the 151 BWC States Parties have submitted at least one declaration. Of those, a small number of States Parties have made only an initial declaration, instead of annual declarations. Still others submitted declarations at one time but have not done so recently. Some have simply submitted a statement that they have nothing to declare, or that they are in compliance with the BWC. The lack of participation in the CBMs is a concern to the United States. Data provided by the CBMs has some limited utility for enhancing U.S. understanding of foreign biotechnical activities and capabilities, and CBMs clearly poorly serve their intended confidence-building purposes when States Parties implement them with such inconsistency and lack of transparency.

The Fifth BWC Review Conference suspended its 2001 session without agreement, and resumed in November 2002. At that time, it made a consensus decision to hold a series of annual meetings of States Parties in 2003, 2004, and 2005, leading up to the Sixth Review Conference in 2006. Each meeting was to be prepared by a meeting of relevant Experts. Setting aside previous failed attempts to use traditional arms control measures to enhance the transparency of biotechnical activities, the States Parties agreed to discuss, and promote common understanding and effective action on, a specified set of topics that – if implemented nationally or through relevant international organizations – could have practical utility in helping counter the BW threat. This approach is particularly important in an era in which the capability to create and employ biological weapons is spreading beyond state actors to terrorist groups and even individuals. These

topics are:

- the adoption of necessary national measures to implement the prohibitions set forth in the Convention, including enactment of penal legislation (2003);
- national mechanisms to establish and maintain the security and oversight of pathogenic microorganisms and toxins (2003);
- enhancing international capabilities for responding to, investigating, and mitigating the effects of cases of alleged use of biological or toxin weapons or suspicious outbreaks of disease (2004);
- strengthening and broadening national and international institutional efforts and existing mechanisms for the surveillance, detection, diagnosis, and combating of infectious disease affecting humans, animals, and plants (2004); and
- the content, promulgation, and adoption of codes of conduct for scientists (2005).

The meetings held in 2003 brought experts together to share experiences and views, and resulted in recommendations for national actions that – if taken – will reinforce the BWC and contribute to stemming the BW threat. The United States continues to encourage States Parties to follow through on their work program commitments.

There are significant challenges in monitoring and verifying compliance with the BWC. Article I, paragraph 1 of the Convention prohibits development, production, stockpiling, acquisition, or retention of microbial or other biological agents or toxins, of types and in quantities that have no justification for prophylactic, protective, or other peaceful purposes. Article I, paragraph 2 also prohibits the development, production, or stockpiling of weapons, equipment, or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict. The emphasis in Article I upon whether or not the purposes for which materials or items are possessed are “peaceful” or “hostile” makes clear that not only the existence, but also the *intent* of any country’s biological program, must be part of any compliance determination. Making a judgment about intent is challenging given the dual-use nature of most biotechnology equipment, facilities, and activities. As with other agreements – particularly those involving dual-use technologies that may be used in a variety of legitimate or illegitimate ways – intent is a critical element, and it may have to be inferred from the circumstances, in light of all available information, if direct evidence is not available.

COUNTRY ASSESSMENTS

CHINA

ISSUE. The United States believes that China continues to maintain some elements of an offensive BW capability. The issue is whether this capability constitutes a violation of the BWC.

HISTORY OF COMPLIANCE EVALUATION. The United States has assessed the People's Republic of China's compliance with the BWC as early as June 1992. At that time, the United States concluded that it was highly probable that China had not eliminated its BW program since becoming a State Party to the BWC in 1984. In the 1994 Report, we indicated that China's CBM-mandated declarations had not resolved U.S. concerns about this probable BW program, and reported that there were strong indications that China "probably maintains its offensive program." In the unclassified version of the June 2003 Report, the United States concluded more specifically that:

The United States believes that in the years after its accession to the BWC, China was not in compliance with its BWC obligations. China continues to maintain some elements of an offensive biological warfare program it is believed to have started in the 1950s.

DISCUSSION OF OBLIGATIONS. China deposited its instrument of accession, and thereby became a State Party to the BWC on November 15, 1984. Since that point, China has been obligated to comply fully with the provisions of the Convention.

ACTIONS. The United States believes that China began its offensive BW program in the 1950s and continued its program throughout the Cold War, even after China acceded to the BWC in 1984. Undoubtedly China perceived a threat from the BW programs of its neighbor, the Soviet Union. There are some reports that China may still retain elements of its biological warfare program. Such reports support the United States' continued belief that China has not abandoned its offensive BW program.

China has a number of civilian and military facilities that could be associated with an offensive BW program. For example:

- The Chinese Ministry of Defense's Academy of Military Medical Sciences (AMMS) Institute of Microbiology and Epidemiology (IME) in Beijing is acknowledged as a biodefense research facility.
- The Lanzhou Institute of Biological Products (LIBP) has been identified as a vaccine producer. We believe that LIBP has several BL-3 laboratories and dual use capabilities.

From 1993 to the present, military scientists have published in open literature the results of studies of aerosol stability of bacteria, models of infectious virus aerosols, and detection of aerosolized viruses using polymerase chain reaction technology. Such advanced biotechnology techniques could be applicable to the development of offensive BW agents and weapons.

Facilities in China that may have legitimate public health and commercial uses could also offer access to additional BW-enabling capabilities.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. U.S. concerns regarding China's BWC compliance are based on a number of indicators over a number of years. First, the United States believes that China possessed an offensive BW program prior to its accession to the BWC in 1984. Upon accession, China was obliged to eliminate its offensive program, but China never admitted this program and the United States believes that it maintained the program throughout most of the 1980s, at the very least.

Although China has submitted its voluntary annual BWC CBM data declarations every year – and did so again in 2002 and 2003 – we assess that the information submitted therein continues to be inaccurate and misleading. BWC CBMs since 1991 have called on the States Parties to declare, among other things, their past offensive activities, which China has not done. On the contrary, China insists it never had such a program at all. In its October 17, 2002, announcement on the promulgation of “Regulations on Export Control of Dual-use Biological Agents and related Equipment and Technologies,” for instance, China stated that it “has always fulfilled earnestly its obligations under the Convention” and “has never developed, produced or stockpiled any biological weapons, and never assisted any country to acquire or develop these weapons.” These claims, we believe, are inaccurate.

China's current research activities and dual-use capabilities raise the possibility that sophisticated BW work could be underway. For example, because of the possible offensive applications of aerosolization techniques, the United States' concerns are underscored by publications indicating military involvement in such research.

FINDING. The United States reaffirms its judgment that China maintains some elements of an offensive BW capability in violation of its BWC obligations. Despite China's BWC CBM declarations to the contrary, indications suggest that China maintained an offensive BW program prior to acceding to the Convention in 1984.

CUBA

ISSUE. Cuba has the technical capability to conduct limited offensive BW research and development.

HISTORY OF COMPLIANCE EVALUATION. Prior to the June 2003 NCR, there were no specific discussions of Cuban noncompliance in this Report. The June 2003 NCR finding on Cuba concluded that:

The United States believes that Cuba has at least a limited, developmental offensive biological warfare research and development effort. Such efforts are prohibited by the BWC.

DISCUSSION OF OBLIGATIONS. Cuba became a party to the BWC in 1976. Since 1991, Cuba has submitted annual declarations pursuant to the agreed BWC CBMs.

ACTIONS. Cuba has a highly sophisticated biotechnology industry encompassing the pharmaceutical, biomedical, vaccine, veterinary, and agricultural sectors. Cuba has well qualified scientists skilled in microbiology, virology, and biochemistry, who collaborate extensively with scientists around the world, including other countries of concern.

Reflecting a very large capital investment, Cuba's biotechnology industry includes a full range of modern dual-use facilities for R & D, large-scale production, down-stream processing, and product finishing. Its product inventory includes vaccines, research reagents, medical diagnostic supplies, transgenic animals and plants, agricultural materials, and various pharmaceuticals supplying over 40 countries. Many of these products were developed using state-of-the-art recombinant DNA technology and reflect a sophisticated technical capability.

Although Cuba has had a long history of medical research, much of the current infrastructure was developed within the past 20 years such that the Cuban biotechnology sector offers low-cost products and services throughout the world. Reflecting a very large capital investment, the biotechnology program owes its genesis and ongoing support to Fidel Castro, largely to generate revenue and as a matter of national prestige.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. As noted above, the June 2003 NCR finding stated that Cuba likely had "at least a limited, developmental offensive biological warfare research and development effort."

While it is clear that Cuba's biotechnology industry could be put to offensive BW uses – and that this industry's extensive international contacts could be a focus of BW-related proliferation – the key factual issue is whether or not Cuba has in fact applied its biotechnology skills to offensive BW work.

Based on the same body of reporting, there is a split view over whether Cuba maintains a BW effort. This arises because the body of information available on Cuba is inconclusive, supporting hypotheses both for and against Cuba having an offensive effort. In a recent National Intelligence Estimate, the Intelligence Community unanimously held that it was unclear whether Cuba has an active offensive biological warfare effort now, or even had one in the past. On the basis of the same reporting, the policy community believes that the compliance judgment of the June 2003 NCR that Cuba has “at least a limited, developmental offensive BW research and development effort” remains correct.

FINDING. Some continue to believe that Cuba has at least a limited offensive biological warfare research and development effort and that this effort is in violation of Cuba’s obligations under the Biological and Toxin Weapons Convention. Others believe that it is unclear whether Cuba has an active offensive biological warfare (BW) effort now, or even had one in the past. However, all judge with high confidence that Cuba has the technical capability to pursue some aspects of offensive BW.

The U.S. Government will seek to pursue additional information on which to assess this issue.

IRAN

ISSUE. Despite being a long-standing State Party to the Biological Weapons Convention and submitting confidence-building measures under the provisions of the BWC, Iran’s capabilities and activities continue to raise concerns about the nature of its BW-related activities.

HISTORY OF COMPLIANCE EVALUATION. In the unclassified version of the June 2003 Report, the United States concluded that:

The United States judges, based on available evidence, that Iran has an offensive biological weapons program in violation of the BWC. Iran is technically capable of producing at least rudimentary biological warheads for a variety of delivery systems, including missiles.

DISCUSSION OF OBLIGATIONS. Iran is an original state party to the BWC; it ratified the treaty in 1973. Iran submitted CBM data in 1998, 1999, and 2002.

ACTIONS. Iran began its offensive BW program in the early 1980s during the Iran-Iraq war. Hashemi-Rafsanjani – then Acting Commander in Chief of the Armed Forces, as well as Speaker of the Majlis – was reported to have announced during an October 1988 speech: “We should fully equip ourselves both in the offensive and defensive use of chemical, bacteriological, and radiological weapons. From now on, you should make use of the opportunity and perform this task.” The United States believes Iran has endeavored to follow through on Rafsanjani’s direction in this regard.

Iran's technical base in biotechnology has advanced since the mid-1980s, providing further expertise that could be – and may well be – employed in support of a BW program. Over the past decade, Iran has also improved its bioproduction capabilities across the board.

In spite of its growing indigenous manufacturing capability, Iran continues to aggressively seek foreign technology, training, and expertise to advance its biotechnology industry. Although these relationships are ostensibly for legitimate reasons, Iran could use them to support its BW program.

According to open press reporting, Iran is expanding its biotechnology and biomedical industries by building large, state-of-the-art research and pharmaceutical production facilities. These industries could easily hide pilot to industrial-scale production capabilities for a potential BW program, and could mask procurement of BW-related process equipment.

Iran is technically capable of producing at least rudimentary, bulk-fill biological warheads for a variety of delivery systems, including missiles.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. The scope and nature of Iranian activities demonstrate an expanding legitimate biotechnology industry, which could house an offensive biological weapons program. Particularly in light of Iran's approach towards compliance with its nuclear and chemical weapons-related nonproliferation obligations (see below), available information about Iranian activities indicates a maturing offensive program with a rapidly evolving capability that may soon include the ability to deliver these weapons by a variety of means.

The Iranian BW program has been embedded within Iran's extensive biotechnology and pharmaceutical industries so as to obscure its activities. The Iranian military has used medical, education, and scientific research organizations for many aspects of BW-related agent procurement, research, and development. Iran has also failed to submit the data declarations called for in the BWC CBMs.

FINDING. The United States judges that, based on all available information, Iran has an offensive biological weapons program in violation of the BWC.

IRAQ

ISSUE. During Saddam Hussein's regime prior to 1991, Iraq engaged in activities that raised concerns regarding Iraq's compliance with its BWC obligations and its adherence to UN Security Council resolutions.

HISTORY OF COMPLIANCE EVALUATION. In the early 1990s, the United States judged that Iraq had developed and produced biological warfare agents and weapons and had likely stockpiled them. This assessment noted that inspections,

conducted after the end of the first Gulf War under the auspices of the United Nations, were not able to provide any support for Iraq's uncorroborated claims that it had performed only basic BW research. However, following the 1995 defection of General Hussein Kamel Hassan, Iraq then presented the UN Special Commission (UNSCOM) with dramatically new information on its past biological warfare program, including details concerning agent production, weaponization, and sites. We then expressed the belief that Iraq was capable of producing biological warfare agents and was probably intent on continuing its offensive BW program if the threat of UNSCOM inspections and long-term monitoring were removed.

The United States declared its suspicions that "Iraq may not be in compliance with the BWC" as early as CY1996 Report; however, we could not formally assess Iraq's compliance until we completed our review of Iraq's "Full, Final, and Complete Declaration." In that Report, however, we noted that "though the recent Iraqi disclosures have been substantial, we believe that Iraq has not yet presented all details of its offensive BW program."

This judgment remained unchanged until the CY1999 Report (dated October 1, 2000). In the CY1999 NCR, we noted that there had been no UNSCOM weapons inspections or monitoring since December 1998. In the June 2003 Report, the United States concluded that:

The United States judges that Iraq has biological weapons and a significant offensive biological weapons program in violation of its obligations under the BWC. After signing the BWC in 1972, Iraq developed, produced, and stockpiled biological warfare agents and weapons and continued this activity after ratifying the BWC in 1991. Since inspections ended in 1998, Iraq has invested more heavily in biological weapons. Iraq has rebuilt its biological infrastructure under the cover of civilian production. Iraq has established large-scale, redundant, and concealed BW agent production capabilities based on mobile facilities. The Iraqi Government's determination to hold onto a sizable remnant of its WMD arsenal, agents, equipment, and expertise has led to years of dissembling and obstruction of UNSCOM inspectors.

DISCUSSION OF OBLIGATIONS. Iraq signed the BWC in 1972. As required under UN Security Council Resolution 687, Iraq ratified the BWC in April 1991, thereby obligating it, pursuant to paragraph 1 of Article I of the BWC, to destroy or divert to peaceful purposes all agents, toxins, weapons, equipment, and delivery means in its possession or under its jurisdiction or control and not to develop, produce, stockpile, or otherwise acquire or retain biological agents or toxins "of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes." Iraq was also required, pursuant to paragraph 2 of Article I of the BWC, to give up all weapons and means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

ACTIONS. Until July 1995, Iraq claimed that it had met its obligations under the BWC. As noted above, however, after the August 1995 defection of General Hussein Kamel Hassan to Jordan, Iraq presented UNSCOM with dramatically new information on its past biological warfare program, including details concerning agent production, weaponization, and sites. Nevertheless, Iraq's accounts of weapon development and deployment remained incomplete, as did its accounts of overall military doctrine and concepts of use. By end of 2002, the UN had not yet received documentation or other evidence from Iraq that corroborated: (1) the majority of the information contained in Iraq's Full, Final, and Complete Declaration; (2) Iraqi claims that all BW agents and weapons have been unilaterally destroyed; and (3) Iraqi claims that its BW program has been completely dismantled. On December 7, 2002, Iraq presented to the UN Monitoring, Verification, and Inspection Commission (UNMOVIC) a "Currently Accurate Full and complete Declaration" for its BW program, but this contained little new information to answer the remaining questions about the program. In violation of its obligations under UN Security Council resolutions, Iraq did not permit any inspections or provide any new information to the UN from December 1998 until September 2002. In UNSCR 1441, adopted November 8, 2002, the Security Council declared that "Iraq has been and remains in material breach of its obligations under relevant resolutions"

Iraq agreed to renewed UN inspections under UNMOVIC in November 2002, and UNMOVIC and IAEA issued daily inspections reports from November 27, 2002 to March 13, 2003. During this time UNMOVIC collected over 100 biological samples for analysis and found them all consistent with Iraq's declarations.

Prior to Operation Iraqi Freedom (OIF), which took place between March 20 and May 1, 2003, Iraq was legally bound by the BWC and a series of UN Security Council Resolutions obligating it to declare and destroy its WMD stockpiles and capabilities. The passage of UNSCR 1483 in May 2003 reaffirmed that Iraq must meet these disarmament obligations, and asked the United States and United Kingdom to keep the Council informed of U.S./UK activities in this regard. In June 2003, the Iraq Survey Group (ISG), composed of largely military experts from some coalition countries, began to conduct WMD/missile search and analysis operations.

On October 2, 2003, the then-head of the ISG, Dr. David Kay, submitted his Interim Progress Report on the Activities of the Iraq Survey Group to the Senate Committee on Intelligence (SSCI) and the House Permanent Select Committee on Intelligence (HPSCI). Dr. Kay reported that Saddam Hussein had not given up his aspirations and intentions to continue work on offensive BW capabilities, and that the Ba'athist Iraqi Government had intended to resume WMD-related activities as soon as external restrictions (*e.g.*, international sanctions, coalition "no-fly" patrols, and UN inspections) were removed.

In September 2004, Charles Duelfer issued a comprehensive report to the Director of Central Intelligence on Iraq's WMD. The report notes that Saddam continued to see the utility of WMD. He explained that Saddam purposely gave an ambiguous impression

about possession as a deterrent to Iran. The Iraq Survey Group (ISG) found no direct evidence that Iraq, after 1996 (including the reporting period of this report), had plans for a new BW program or was conducting BW-specific work for military purposes. The Duelfer report judges that in 1991 and 1992, Iraq appears to have destroyed its undeclared stocks of BW weapons and probably destroyed remaining holdings of bulk BW agent. However, the ISG lacked evidence to document complete destruction. The Baa'thist Iraqi Government retained some BW-related seed stocks until their discovery after OIF.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. The United States finds that Iraq, during the course of the Saddam Hussein regime, was in violation of its obligations under the BWC. After signing the BWC in 1972, Iraq developed, produced, and stockpiled biological warfare agents and weapons and continued this activity even after ratifying the BWC in 1991. Despite an Iraqi obligation under UN Security Council resolutions adopted after the Gulf War to fully disclose and destroy its BW program, UNSCOM reported and the United States agrees that Iraq has concealed many details of its offensive biological warfare program and has engaged in a repeated pattern of obstruction, denial, and evasion. After UNSCOM weapons inspections and monitoring in Iraq ceased in December 1998, its successor, UNMOVIC, resumed on-site activities in Iraq but it never received full and active cooperation by Iraq. Iraq's Declaration of December 7, 2002, failed to provide any new information or answer remaining questions about its BW program. Although the ISG found no direct evidence that Saddam's regime, after 1996, had plans for a new offensive BW program or was conducting BW-specific work for military purposes, it did retain some BW-related seed stocks until their discovery after OIF.

FINDING. The United States finds that Iraq, during Saddam Hussein's regime, pursued an active offensive BW development program and that various aspects of this program violated its obligations under the BWC. The United States has further determined that during this period Iraq was in violation of its obligation under UN Security Council resolutions to declare and destroy its prohibited WMD and long-range missile programs and to cooperate fully with UN and IAEA inspections and monitoring.

LIBYA

ISSUE. In the wake of Libyan leader Col. Muammar Qadhafi's pledge on December 19, 2003 to forswear all weapons of mass destruction programs, U.S. representatives continue to work to determine the extent to which Libya's BW-related activities progressed prior to the Libyan commitment, and thus the extent to which Libya was compliant with the BWC.

HISTORY OF COMPLIANCE EVALUATION. The United States assessed Libyan compliance with the BWC as early as June 1992. In that initial assessment, we concluded that Libya had the technical manpower and knowledge to produce small quantities of warfare agents and an interest in obtaining dual-use biological equipment,

but that there was insufficient evidence to determine whether Libya had “developed, produced, weaponized or stockpiled BW agents for hostile purposes.” The CY1993 through CY2000 Reports reached similar conclusions, noting in CY1994 Libya’s progress in “seeking to move their research program into a program of weaponized BW agents.” In the June 2003 Report, however, the United States concluded that “[e]vidence indicates that Libya has the expertise to produce small quantities of biological equipment for its BW program and that the Libyan Government is seeking to move its research program into a program of weaponized BW agents. The United States judges that Libya is in probable violation of its obligations under the BWC.”

DISCUSSION OF OBLIGATIONS. On 19 December 2003, Col. Muammar Qadhafi pledged to eliminate material and equipment that might lead to the production of internationally proscribed weapons, and confirmed that Libya would be bound by its obligations under the Biological Weapons Convention, to which it acceded in January 1982. Libya has never submitted annual CBM declarations. As part of its December 2003 WMD commitment, Libya has stated its intent to submit BWC CBMs, perhaps within the year, to satisfy its promise to abide by the BWC.

ACTIONS. As noted, in mid-December 2003, Libya publicly announced its intention to eliminate all internationally proscribed weapons programs, and affirmed that it would comply with its obligations under the Biological Weapons Convention.

Since 1999, Libyan dictator Qadhafi invested the equivalent of millions of U.S. dollars in Libya’s biotechnology infrastructure. Tripoli has also centralized all biotechnology research efforts under the Libyan Academy of Sciences umbrella, an organization headed by Professor Ma’tuq Mohammed Ma’tuq. The Libyan biotechnological infrastructure continued to see significant growth in 2002.

Prior to the Libyan disclosures in 2003, the United States had assessed that Libya had the expertise to produce small quantities of biological equipment for its BW program, and that information suggested that Libya was seeking to acquire the capability to develop and produce BW agents for offensive purposes. Such development or production would have violated key provisions of the BWC.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. We judge that Libya had an offensive BW program prior to December 2003, but that this program had not progressed beyond the R&D stage.

FINDING. Libya’s efforts over time result in an assessment that it had an active, developmental offensive BW program in the past that was in violation of Libya’s obligations under the BWC. While questions remain regarding the past offensive program – questions the Government of Libya has committed to help resolve – the United States judges that there is no longer an offensive biological weapons program.

NORTH KOREA

ISSUE. We continue to have serious concerns about the nature of North Korea's BW-related activities.

HISTORY OF COMPLIANCE EVALUATION. In the June 2003 Report, the United States concluded that:

The United States believes North Korea has a dedicated, national-level effort to achieve a BW capability and that it has developed and produced, and may have weaponized for use, BW agents in violation of the Convention. North Korea likely has the capability to produce sufficient quantities of biological agents for military purposes within weeks of a decision to do so.

DISCUSSION OF OBLIGATIONS. North Korea became a State Party to the BWC in March 1987. North Korea's only BWC data submission pursuant to the BWC Confidence-Building Measures was in 1990. That submission asserted that North Korea had nothing to declare.

ACTIONS. Available information suggests that North Korea has a mature offensive BW program, and that it may consider the use of biological weapons as an option in any future conflict. Its BW program probably includes *Bacillus anthracis*, *Vibrio cholerae*, and possibly other agents or toxins.

North Korea has pursued biological warfare capabilities since the 1960s and continued its program despite having become a State Party to the BWC in 1987. In the past several years, North Korea has focused on building its biotechnology infrastructure some of which could be exploited for BW purposes.

We assess that North Korea has developed and possesses a number of organisms that could be used as BW agents, including anthrax, plague, and cholera. Infectious diseases remain a serious problem in North Korea, and for the most part its vaccine program is consistent with current public health concerns. Nevertheless, North Korea is believed to possess a munitions-production infrastructure that would allow it to weaponize biological warfare agents, and may have such biological weapons available for use.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. We judge that North Korea possesses a number of organisms that could be used as BW agents, including anthrax, plague, and cholera.

North Korea made its only CBM declaration — a “null declaration” stating essentially that it had nothing to declare — in 1990 and claimed to be in full compliance. The United States continues to believe that this declaration is false.

FINDING. The United States believes North Korea has a dedicated, national-level effort to develop a BW capability and has developed, produced, and may have weaponized for use, BW agents in violation of the BWC. North Korea probably has the capability to produce sufficient quantities of biological agents for military purposes within weeks of a decision to do so.

RUSSIA

ISSUE. The United States is concerned that Russia maintains a mature offensive BW program.

HISTORY OF COMPLIANCE EVALUATION. In January 1984, then-President Ronald Reagan reported to Congress that the Soviet Union was maintaining an offensive biological warfare program and capabilities and that the Soviet Union had repeatedly violated its legal obligations under the BWC. The former Soviet Union's offensive biological warfare program, in fact, was the world's largest and consisted of both military facilities and civilian research and development institutes. Following the collapse of the Soviet Union, the Russian Government publicly committed to ending the former Soviet BW program; it claims to have done so in 1992. Nevertheless, serious concerns remain about Russia's offensive biological warfare capabilities and about the status of some elements of the offensive BW capability inherited from the former Soviet Union (FSU). U.S. assessments in recent years have continued to cite these concerns, highlighting the apparent tension between what appears to be the commitment of key members of the Russian leadership to resolve BWC issues, and the continued involvement of veterans of the Soviet offensive program in both BWC-related meetings and in what Russia describes as its *defensive* BW program. In the unclassified June 2003 Report, the United States concluded that: "[t]he United States judges, based on available evidence, that Russia continues to maintain an offensive BW program in violation of the BWC. "

DISCUSSION OF OBLIGATIONS. The Soviet Union, the United Kingdom, and the United States, as the three depository governments for the BWC, all deposited their Instruments of Ratification on March 26, 1975. Russia has assumed BWC successor status from the Soviet Union and therefore is bound to comply fully with the obligations contained therein.

Even though the Soviet Union, and now Russia, regularly submitted annual CBMs, including in 2003, these submissions continue to be incomplete and misleading.

ACTIONS. The United States continues to assess that Russia maintains a mature offensive BW program and that its nature and status have not changed. Russia's BW program builds on capabilities and expertise inherited from the far more extensive Soviet BW program that dates back to the 1920s. Since the Soviet era, elements of that former Soviet BW program have been subject to varying degrees of downsizing and restructuring. There have also been severe cuts in funding and personnel at some key BW facilities. However, some key components of the former Soviet program may

remain largely intact and may support a mobilization capability for the production of biological agents and delivery systems. The United States continues to receive unconfirmed reports of some ongoing offensive biological warfare activities, and key officials from the Soviet offensive BW program continue to occupy influential positions.

A substantial amount of dual-use research conducted in recent years has legitimate biodefense applicability, but also could be used to further an offensive program. For example,

- In 2001, the former BW entity Vektor proposed work through the International Science and Technology Center (ISTC) to examine Ebola vaccines using nanoemulsions. Although such work has clear biodefense applicability, it also could be used for offensive purposes.
- Scientists from the Ministry of Defense's (MOD) Scientific Research Institute of Microbiology in Kirov published an article, in August 2001, concerning antibiotic treatment of bubonic plague in primates.
- Researchers at Vektor in 2002 published an article on genetic manipulation of the Marburg virus.
- Researchers at the Volgograd Anti-Plague Institute published work in 2002 on *Burkholderia pseudomallei* – the causative agent of melioidosis – that attempted to explain through genetic engineering the difference between this organism and related ones.

The United States also assesses that Russia has the capability to mobilize BW production.

Since the demise of the Soviet Union in 1991, there has been a pronounced lack of openness and candor about the past offensive biological weapons program. Russia regularly submits its annual BWC CBM declarations to the United Nations, including in 2003, but these declarations are assessed to be only partially complete, and to include misleading information.

The Soviet Government refused to admit the existence of its large and elaborate offensive BW program, despite repeated U.S. and UK inquiries and demarches. In April 1992, after the demise of the Soviet Union, then-President Boris Yeltsin issued a decree prohibiting all activities that contravene the BWC.

In September 1992, the United States, United Kingdom, and Russia agreed on a Trilateral Process to create confidence that Russia had terminated all illegal biological weapons activity. While there was progress towards achieving the openness intended in the Joint Statement (which calls for a series of confidence-building visits and information exchanges), not all U.S. concerns were resolved. The Trilateral Process broke down in

the mid-1990s without resolving U.S. and UK concerns regarding Russia's compliance with the BWC. In June 2000, Russian President Vladimir Putin reiterated Russia's adherence to the Convention. In April 2001, the Duma removed Russia's reservations to the 1925 Geneva Protocol that allowed for Russia's retaliatory use of biological weapons – thereby eliminating an inconsistency with its BWC obligations.

The U.S.-funded Cooperative Threat Reduction (CTR) and International Science and Technology Center (ISTC) programs continue to have access to several civilian facilities formerly involved in the Soviet offensive BW program. This transparency has lessened, but not eliminated our concerns that these civilian facilities are directly involved in an ongoing, offensive BW program.

In 2002 and 2003, for instance, the United States was unable to certify, under the Cooperative Threat Reduction Act and Title V of the Freedom Support Act (FSA), Russia's commitment to comply with the Biological (and Chemical) Weapons Conventions, explaining U.S. concerns as follows:

... Russia continues an offensive BW program, although it is much smaller than the massive Soviet BW program. Research activities with potential offensive applications are ongoing at certain facilities known to have been involved in offensive BW work during the Soviet era. Some civilian facilities previously-associated with the Soviet offensive BW program have been subject to varying degrees of modification and equipment removal, and U.S. assistance has facilitated access to some of these civilian facilities, although many retain a capability to engage in offensive activity. Many key officials from the former Soviet offensive BW program continue to occupy influential positions. Funding for possible offensive BW activities at certain military sites has continued. Because the Ministry of Defense facilities remain closed to the West, the nature of Russian activities there remains uncertain.

Russia's Pathogen Biodefense Initiative, publicly initiated in 1999, is ostensibly aimed at providing a unified government system to defend against human, animal, and environmental pathogens, but could also potentially support or provide cover for offensive BW capabilities.

Moscow has stated that it possesses no stockpile of BW agents and filled munitions. The United States is concerned, however, that dedicated and dual-use Russian facilities maintain a mobilization capability to produce such weapons [agents] quickly in time of need.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. The United States continues to have concerns in several areas with respect to a Russian offensive BW program.

The United States discussed Russia's BWC noncompliance, in the CTR Waiver request, as follows:

The Administration has continuing concerns about Russia's commitment to comply with the 1972 BWC and believes that Russia continues to maintain a covert offensive BW program in violation of the BWC. Russian offensive BW activities are detailed above in the discussion of CTR Act and FSA Certification No. 2, in the section entitled 'Biological Weapons.'

Russia regularly submits an annual BWC declaration to the United Nations, pursuant to voluntary Confidence-Building Measures adopted at past BWC Review Conferences. Russia's initial 1992 declaration was purported to be a complete declaration of the Soviet BW program. A review of Russia's 2001 BWC Confidence Building Measures Data Declaration, however, reaffirmed U.S. concerns that Russia's 1992 declaration was incomplete and misleading in certain areas. There continues to be a profound lack of openness about the offensive BW program inherited from the Soviet Union. Subsequent data declarations provide no additions to Russia's 1992 declaration of past offensive BW activities, which falsely denied past production and stockpiling of BW. The 1992 declaration also failed to list all of the sites that supported the Soviet offensive BW program and that retain at least some of their offensive capability. The more recent declarations focus on the ostensibly defensive aspects of military and civilian facilities without acknowledging the support many of them provided to the massive Soviet offensive BW program in the past and that at least some continue to provide to the current Russian program.

It is a matter of concern that contacts between the United States and the Russian Federation on BWC-related issues are increasingly strained, with public statements by Russian officials appearing to retreat from the statements made by President Yeltsin in 1992. Some have asserted that Russia has never had an offensive BW program. The United States has offered several times to have regular bilateral meetings on the BWC, but Russia has not accepted.

Notwithstanding U.S. concerns with Russia's offensive BW capabilities, the massive BW program Russia inherited from the Soviet Union has been considerably reduced. Since the Soviet era, there have been severe cuts in funding and personnel at key BW facilities associated with the Soviet program. In another positive development, U.S.-Russian cooperative biotechnology programs in recent years have enhanced transparency by providing controlled access to non-MoD [Ministry of Defense] facilities and personnel associated with the Soviet Union's offensive BW program. This transparency has reduced, but not eliminated, U.S. concerns that

these civilian facilities are directly involved in an ongoing, offensive BW program. This year, access for United States Government personnel was expanded to include cooperation-related visits to several key Soviet-era civilian BW production facilities in Russia. In another positive development, in November 2001, President Putin signed a Joint Statement with President Bush that reaffirmed Russia's commitment to the BWC. Russia continues, however, to deny Western access to certain biological facilities, including Ministry of Defense and Ministry of Health facilities believed to have been associated with the Soviet offensive BW program.

This remains the United States' assessment. Russia continues to challenge these charges.

FINDING. The United States judges based on all available evidence that Russia continues to maintain an offensive BW program in violation of the Convention.

SYRIA

ISSUE. We continue to have concerns regarding the nature of Syria's BW-related activities.

HISTORY OF COMPLIANCE EVALUATION. The first time the United States discussed Syrian compliance in this version of the Report was in the June 2003 NCR. In that Report, we concluded that: "[t]he United States judges, based upon the evidence available, that Syria is pursuing the development of biological weapons that would constitute a violation of the BWC if Syria were a State Party."

DISCUSSION OF OBLIGATIONS. Syria signed the BWC in 1972, but has yet to ratify the Convention. Syria has indicated that its ratification of the BWC is contingent upon Israeli accession to the Nuclear Non-Proliferation Treaty.

ACTIONS. Syria's biotechnical infrastructure is capable of supporting agent development. However, Syria lacks the technical infrastructure for a robust or sophisticated BW program and depends on foreign assistance to upgrade its biotechnology infrastructure.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. The United States believes that Syria, as a signatory to the BWC, has conducted research and development for an offensive BW program.

FINDING. The United States judges that based upon the evidence available, Syria is developing an offensive biological warfare capability that would constitute a violation of the BWC if Syria were a State Party.

B. THE TREATY ON CONVENTIONAL ARMED FORCES IN EUROPE (CFE)

The Treaty on Conventional Armed Forces in Europe (CFE) was signed November 19, 1990, by 22 States. On June 14, 1991, the Soviet Union issued two related statements in an extraordinary conference in Vienna and in the Joint Consultative Group (JCG). One contained legally-binding obligations related to equipment of the same categories as treaty-limited equipment (TLE) held by Naval Infantry, Coastal Defense (NI/CD), and Strategic Rocket Forces. The second contained political commitments related to equipment of Treaty-limited types removed from the CFE area of application by the Soviet Union prior to Treaty signature.

In December 1991, the Soviet Union dissolved, and 12 newly-independent states (NIS) came into existence. In the Tashkent Agreement of May 15, 1992, the eight NIS with territory in the CFE Treaty's area of application (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, Russia and Ukraine) agreed on principles for, and most of the details of, allocating the CFE rights and obligations of the Soviet Union. At the Oslo Extraordinary Conference of all CFE participants in June 1992, these eight states confirmed their acceptance of all CFE and CFE-related rights and obligations of the former Soviet Union (FSU).

On July 17, 1992, the CFE Treaty came into full provisional application. After the final instrument of ratification was deposited, the Treaty formally entered into force on November 9, 1992, with all Treaty timelines calculated from July 17, 1992.

CFE-1A, an associated agreement that came into effect simultaneously with the CFE Treaty, establishes aggregate national ceilings for personnel in military forces in the area of application. It requires each CFE State Party to provide data on its peacetime authorized personnel strength and to brief on-site inspection (OSI) teams on the personnel holdings of units inspected.

In January 1993, the Czechoslovak Federated Republic (CSFR) split into two separate states, the Czech Republic and the Slovak Republic, which accepted the rights and obligations of the former CSFR and were accepted into the Treaty. This brought the number of CFE States Parties to its present 30.

Detailed CFE data, as of July 17, 1992, were exchanged in August 1992. Subsequent data exchanges required by the Treaty have occurred each year on December 15, with information as of January 1 of the following year. There was an additional data exchange as of November 16, 1995, at the end of the Treaty reduction period, when the Treaty's limits on TLE and CFE-1A's limits on personnel went into effect.

The first Review Conference of States Parties to the Treaty took place on May 15-31, 1996. Among the achievements of this conference were: agreement on understandings and interpretations to improve the viability and effectiveness of the

Treaty; identification of technical/administrative issues requiring further consideration in the Treaty's Joint Consultative Group (JCG); a commitment to begin a negotiation process aimed at preserving the Treaty's viability and improving its operation in a changing security environment (CFE adaptation); acceptance of a new schedule with some additional modalities for Russia's obligations to destroy or convert equipment east of the Urals; and, in response to recognized Russian and Ukrainian flank concerns, an agreement revising the Treaty's flank regime.

The Flank Document has three basic elements: (1) reduction of the size of the flank zone in Russia and Ukraine by a map realignment; (2) establishment of limits on overall Russian TLE that could be in the original flank zone, and on Russian ACVs and all three categories of Ukrainian ground TLE in specific areas removed from the original flank zone; and (3) provision of greater transparency regarding military forces on Russian and Ukrainian territory in the original flank zone through additional inspections, data exchanges, and notifications.

Under the agreement, Russia and Ukraine were required to meet all CFE obligations in the new and old (original) flank zones by May 31, 1999.

Major parts of the Flank Document went into provisional effect immediately (including an interim cap on Russian TLE in the original flank area, as well as the enhanced transparency measures). The Flank Document entered into force on May 15, 1997.

In January 1997, the States Parties began negotiations in the JCG to adapt the Treaty to new political circumstances, including the dissolution of the Warsaw Pact and the Soviet Union and enlargement of NATO. During 1997, NATO proposed a new structure of limitations that all States Parties accepted. In summer 1998, NATO tabled detailed proposals concerning the operation of the new limitations, including key military flexibilities, enhancement of data and verification provisions, and reconciliation of the 1996 Flank Agreement and related provisions. On November 19, 1999, an amendment document to adapt the CFE Treaty was signed at the OSCE summit in Istanbul; it will enter into force upon ratification by all 30 States Parties. Key elements of the Adapted Treaty include: national and territorial ceilings (NC and TC); flexibilities for situations when it would be necessary to exceed TCs; enhanced provisions regarding host state consent for the presence of foreign forces; enhanced transparency on forces, activities, and TLE holdings; increased opportunities for on-site inspections; and the opening of the Treaty to accession on a case-by-case basis.

As noted in previous reports, including last year's Condition 5 Report, in spite of some troubling exceptions, most of the provisions of the Treaty have been implemented with success. By the end of 2001, more than 52,000 pieces of conventional armaments and equipment had been reduced inside the CFE zone according to the Treaty's reduction provisions, with many States Parties having reduced their holdings to lower levels than required – notifying over 6,000 voluntary reductions below limits. By that date, Russia

had notified for destruction or conversion approximately 15,400 additional items in accordance with the provisions of Treaty-related agreements. Almost 4,100 intrusive on-site inspections had taken place by the end of 2001 (including supplementary flank inspections, expert's visits, and reduction inspections). Through December 2002, Russia notified the destruction of over 5,700 tanks against its remaining east of the Urals (EoU) commitments. Through December 2003, States Parties notified over 1500 added reductions below their limits. Finally, the States Parties notified some 550 on-site inspections during 2002 and 2003 (including supplementary flank inspections, expert's visits, and reduction inspections).

On a major compliance concern – Russian stationing of forces in Moldova and Georgia without host state consent – some important progress has been made, but more needs to be done. In regard to a second major concern, Russian data and related notifications indicated that the overages above Adapted Treaty flank limits had been almost eliminated. Nevertheless, there remained a continuing need to monitor the situation. (Subsequently, Russia's flank data as of July 1, 2002, and a related notification indicated that Russian holdings of TLE for the adapted flank area were within the future limits of the Adapted Treaty.) In addition, a number of other longstanding concerns remained in regard to Armenia, Azerbaijan, Belarus, Russia, and Ukraine. In addition, new issues arose in 2002 and 2003. These are all discussed below. Additional details can be found in the CFE Compliance Report pursuant to Condition 5 on the Senate Resolution of Advice and Consent to the CFE Flank Document.

Finally, there were a number of smaller, more technical concerns such as late or erroneous notifications, failure to notify removal of TLE from designated permanent storage sites (DPSS), failure to report correctly objects of verification (OOV), and the inability of escorts and unit commanders to account for missing TLE.

COUNTRY ASSESSMENTS

ARMENIA

Declaring and Meeting Required Reduction Liabilities. As noted in previous Reports, Armenia has failed to notify properly or carry out all of the reductions required by the Treaty. This problem has existed since the Treaty came into force. Armenia's failure to notify properly or to complete its required CFE reduction obligations contributes to the collective failure by the Soviet CFE successor states to meet their 1992 Oslo commitment to declare and to complete reduction requirements that are no less than the reduction requirements of the FSU (discussed under Collective Obligations).

Apparent Failure to Report TLE Received from Russia. Reports over the last three years outlined possible Treaty implications of TLE transfers from Russia into Armenia between 1994 and 1996. There has been no change in this issue on the Armenian side, and there have been no new steps toward resolving the CFE issues surrounding these transfers. It is not clear whether it will be possible to make progress on

this issue outside of the context of a political settlement of the Nagorno-Karabakh (N-K) dispute which is the focus of the OSCE's Minsk Group (co-chaired by the United States, Russia, and France).

Failure to Declare Look-Alikes of the MT-LB Variant Armored Personnel Carrier (APC). For the first time in several years (after repeated U.S. questioning, and after an on-site inspection [OSI] in 2000 observed several MT-LB-U APC look-alikes at a site in Armenia), Armenia declared in its data as of January 1, 2001, exactly the number of MT-LB APC look-alikes based on the MT-LB-U chassis that had been observed during the inspection. Questions, however, remain. When Armenia previously declared MT-LB-U's in its annual data, for instance, it declared a much larger figure, and the declared Armenian force structure has not changed significantly.

Late, and Possibly Incomplete, Notification of TLE Entry into Service. As reported previously, Armenia was late in notifying entry into service of multiple rocket launcher (MRL) systems acquired from China, and may have failed to report the full number received (according to press reports). Armenian representatives deny that more MRLs were received than the number they notified. The Armenians did not follow CFE procedures for providing technical data and photographs of these systems, but they hosted a Vienna Document 1999 demonstration of the new equipment in August 2000.

Improper Site Diagram and Denial of Inspection Access. As reported last year, during the U.S.-led inspection in May 2000, the Armenian site diagram improperly excluded two common area units and access was denied to those areas. This problem, however, has not resurfaced and Armenian representatives have attributed it to inadequately trained escort personnel.

Compliance with Limits. Previously, Armenia, while asserting compliance with its limits in the five major categories of TLE, exceeded its limit in the armored infantry fighting vehicle (AIFV)/heavy armament combat vehicle (HACV) sub-category of ACVs by more than 30. This overage had remained unchanged since Treaty limits came into effect. However, on August 22, 2000, Armenia notified the transfer of almost 60 AIFVs from the conventional armed forces to internal security forces and Armenian data as of January 1, 2001 through January 1, 2004 showed Armenia to be within all of its limits, including those for AIFV/HACVs. However, because of other questions we continue to track this issue.

Possibly Unreported TLE. In addition to the MT-LBu variant APC look-alikes and any TLE apparently transferred to Armenian forces from Russia between 1994 and 1996, there have been several indications and confirmations of other TLE (and possibly APC look-alikes) that Armenia has never declared.

Tanks: As reported previously, although Armenia never reported T-54s or T-55s in any of its CFE data declarations through 2000, information in 1999 and later indicated that it did possess such equipment. In May 1999, a U.S. inspector reported several T-55s

at a Russian Armor Maintenance Facility in Georgia, and the Russian escorts stated that three of them belonged to Armenia. The Russians also stated that one of these tanks had arrived in 1996 and the other two in 1998. In its data as of January 1, 2001, for the first time, Armenia declared the same number of “T-54/T-55” tanks as those seen at the Russian facility in Georgia. Subsequently the Armenians issued a notification raising the number by several more. However, the designation “T-54/T-55” was highly questionable. Although not always readily distinguishable by external observation, the owner would be expected to know the difference between the two types, and other States Parties holding T-54 or T-55 tanks identify them separately. This sequence strongly suggested that the Armenians were responding to their having been caught in noncompliance with reporting obligations in regard to these tanks. Later, in its data as of January 1, 2004, Armenia did break out these tanks separately into T-54s and T-55s.

Artillery: As previously reported, figures in Russian open sources identified 18 D-1 artillery pieces as being shipped from Russia into Armenia between 1994 and 1996. Since its data as of January 1, 1994 (prior to the shipping of items from Russia into Armenia), Armenia has consistently declared less than five D-1s. This may leave several D-1s transferred from Russia unaccounted for. Finally, as discussed in previous reports, although Armenia has declared only a small number of WM-80 MRLs received from China, Azerbaijani officials have claimed, and the Russian open press has indicated that the actual number received may have been slightly larger. See last year’s report for additional details.

ACVs: Armenia has never declared any MT-LB APCs in its data and ceased reporting MT-LBT APC look-alikes as of January 1, 1998. However, during the past three years inspection reporting has documented the presence of MT-LB APCs and/or MTLB APC look-alikes among Armenia’s conventional forces. A U.S.-led inspection in May 2000 revealed a small number of both MT-LB APCs and MT-LBT APC look-alikes, none of which were included in Armenian data for the site inspected or briefed during the inspection. The Armenians stated that the MT-LBs belonged to the Volunteer Society for Assistance to the Army, Air Force, and Navy (DOSAAF) -- the auxiliary organization that prepares youths for service in the armed forces. However, Armenia has still not declared any MT-LB APCs in either its conventional armed forces or its internal security forces. The Treaty requires that armored combat vehicles (ACVs) in the conventional armed forces be declared both by number and type, but APCs in internal security forces are only required to be declared by aggregate numbers in each administrative district or region. However, Armenia’s data each year show all declared internal security APCs by type and have never included any MT-LBs.

FINDINGS. Armenia has failed to comply with Treaty provisions in regard to reduction liability declarations and reductions completed. According to notifications and Armenian data as of January 1, 2000, through January 1, 2004, Armenia no longer exceeds Treaty limits in the AIFV/HACV sub-category of ACVs, but the possibly unreported TLE creates questions. There is evidence that Armenia may have failed to notify increases in unit holdings involving TLE transferred from Russia. After several

years during which Armenia failed to report MT-LB-U look-alikes of the MT-LB APC that have remained in its inventory, Armenia in its latest data did report several such look-alikes, but far fewer than it had regularly reported in the years before Armenia stopped including them in its data. Also, in 2000, Armenia notified the acquisition of MRLs late, and may not have reported all of them. There is also evidence of possibly unreported TLE. Finally, Armenia presented an improper site diagram and improperly denied access to two excluded common area units during an U.S.-led inspection in May 2000, although this problem has not resurfaced since then and is considered to have been corrected.

AZERBAIJAN

Declaring and Meeting Required Reduction Liabilities. As noted in previous reports, Azerbaijan has stated that it cannot notify and carry out its required reductions so long as the dispute in N-K continues. This position has not changed. Nevertheless, Azerbaijan has notified and carried out reduction events. To date, Azerbaijan has notified and apparently completed some 430 TLE reductions out of a putative liability of over 1,000. Azerbaijan's failure either to notify or to complete its required reductions contributes to the collective failure by the Soviet CFE successor states to meet the Oslo commitment to declare and to complete reduction requirements that are no less than the reduction requirements of the FSU.

Compliance with Limits. According to its data as of January 1, 2000, January 1, 2001, and January 1, 2002, Azerbaijan no longer exceeds its declared limits in any TLE category. However, as described in previous reports, two inspections (one in 1999 and one in 2000) led to questions about these data. See previous Reports for details.

Suspension of CFE Provisions. In its data as of January 1, 2001, Azerbaijan continued to fail correctly to report eight objects of verification (OOVs). Then, in its data as of January 1, 2002, January 1, 2003, and January 1, 2004, this number rose to nine. Also, during 2002 and 2003, Azerbaijan continued its unilateral suspension of CFE provisions requiring notifications of changes of ten percent or more in TLE assigned to units. Azerbaijan has continued to defend its unilateral suspension of certain Treaty notifications on the grounds that these notifications would provide operational information to Armenia in the N-K context, and again alluded to military security necessity in regard to the lack of notifications on changes in unit holdings and the failure to report locations for deployed units whose garrisons were occupied by the enemy. However, considering that a cease-fire in Nagorno-Karabakh has been in place for several years, it is difficult to justify increasing the number of units whose garrisons are "enemy-occupied."

FINDINGS. Azerbaijan has failed to comply with Treaty provisions with regard to reduction liability declarations, and has continued to unilaterally suspend selected Treaty requirements. Although, according to its last three data exchanges, Azerbaijan has asserted that it is in compliance with its Treaty limits, there is continuing information to

suggest improper use of equipment allegedly reduced by virtue of being transformed into working order static display items.

BELARUS

Questionable Declaration of Tanks for Export. As reported for several years, there have been questions about the number of tanks Belarus has declared as being in the “awaiting export” category. Over the last few years, these numbers have decreased, and subsequent UN and OSCE data about Belarusian tank exports confirm that (except for one instance in which the number of modern tanks decreased due to their replacement in the export category by older, more exportable models) the decreases have represented exports. Belarusian data as of January 1, 2001, continued to show almost 150 tanks awaiting export. Its data as of January 1, 2002 through January 1, 2004 showed very slightly fewer. Although Belarus now apparently is properly implementing its obligations in regard to TLE awaiting export, this does not fully resolve all of our concerns about previous Belarusian use of the exemption from accountability for equipment awaiting export, especially in regard to its reduction liability and to the collective obligation described below. Belarus continues to state that the tanks declared as awaiting export are in excess of its needs and that it needs the hard currency they could bring if exported.

Denial of Access to a Portion of a Declared Site and Failure to Declare Equipment. In its data as of January 1, 2001 through January 1, 2004, Belarus continued to declare the Spetsnaz brigade at Marina Gorka, but again without any of the TLE that could still remain there. The site has not been subject to inspection since 1999, when access was last denied.

FINDINGS. Belarus’ recent tank exports reinforce the conclusion reported previously that Belarus is now using its holdings of equipment for export in the manner intended. Belarus has continued to fail to report TLE at one site, and to deny access to part of that site, where TLE could still be present.

RUSSIA

Failure to Declare Look-Alikes. There has been no change on this issue. Russia continues to refuse to declare either APC look-alikes of the MT-LB-U version or Engineer Reconnaissance Vehicle (IRM) AIFV look-alikes, insisting that their earlier inclusion in Soviet data as of Treaty signature and in Russia’s first data exchange of July 17, 1992, was merely a technical error. The United States rejects this view. Moreover, the MT-LB-U is included in the Protocol on Existing Types (POET) and Russia’s refusal to declare these APC look-alikes is not in accord with Treaty rules.

Russian Stationed Forces. For several years, there have been important concerns about Russian forces stationed in Moldova and Georgia without host state consent. At the November 1999 OSCE Summit in Istanbul, Russia committed to specific

actions related to withdrawal of Russian forces from Georgia and Moldova, and there was, until recently, considerable progress in the case of Russian forces in Georgia. Meanwhile, after a year and a half of virtually no progress in Moldova, a number of encouraging developments have taken place there since the summer of 2001.

The United States and the OSCE have continued to offer and provide assistance in the form of reimbursement for costs associated with the relocation of Russian troops and military equipment from Georgia and Moldova, as well as for removal or destruction of military equipment and ammunition stored at Russian facilities in Moldova. (Previous reports, including last year's Condition 5 Report, provide additional details.)

As also reported previously, in Annex 14 of the CFE Final Act, Russia committed to decrease, by no later than December 31, 2000, its TLE holdings on Georgian territory to not more than 153 tanks, 241 ACVs, and 140 pieces of artillery. Russian CFE data reported some 140 tanks, over 500 ACVs, and close to 170 pieces of artillery in Georgia as of January 1, 2000, not including ACVs and artillery in Russian "peacekeeping" forces present in the Abkhaz and South Ossetian regions of Georgia. Russia's flank data as of July 1, 2000, showed the same numbers of tanks and pieces of artillery, but a drop in ACVs to about 480. But counting the peacekeeping forces and over 20 decommissioned ACVs, the total number of ground items present on Georgian territory was some 140 tanks, close to 650 ACVs, and almost 170 pieces of artillery. After a series of withdrawals and TLE destruction events which were all either observed and confirmed by U.S. and/or OSCE observers or confirmed by Georgia, Russia met this TLE commitment by the end of 2000 and issued a notification to that effect. Russia's data as of both January 1, 2001, and July 1, 2001 (adjusted to include the peacekeeping forces), showed total TLE holdings in Georgia to be within the levels committed to at Istanbul.

At Istanbul, Russia also agreed to withdraw or dispose of the TLE at the Russian military bases at Vaziani and Gudauta and the repair facility in Tbilisi by December 31, 2000, and to disband and to withdraw from the bases at Vaziani and Gudauta by July 1, 2001. Other aspects of the remaining Russian presence in Georgia were to be resolved in the same timeframe. While the Vaziani base was turned over on time, agreement over some of the terms of the closure of Gudauta was not reached by the July deadline. In November, the Russians announced fulfillment of their Istanbul Summit commitments with respect to Gudauta, claiming to have disbanded the base and withdrawn regular military forces there – leaving only CIS "peacekeepers" and the necessary facilities to support their presence. Georgia, however, disputed Russia's characterization of the status of Gudauta. The United States and NATO Allies underscored to Russia that it was essential to reach agreement with Georgia on any continuing Russian presence at Gudauta and urged Russia and Georgia to renew their talks. This theme was echoed in the Statement on Georgia agreed by all 54 OSCE Ministers at their meeting in Bucharest December 3-4. The Ministerial document, agreed by Russia and Georgia, called for the resumption of Georgia-Russia talks on transparency regarding Gudauta and early legal transfer of the facility to Georgia. This appears to offer a way forward on these issues that both Russia and Georgia can accept. (In May 2005, Georgian and Russian Foreign

Ministers signed a Joint Statement establishing timelines for the withdrawal of Russian forces from the Akhalkalaki and Batumi bases and addressing the Russian presence at the Gudauta base. Under the Joint Statement additional actions are needed, including completion of a technical agreement -- which was under negotiation in summer 2005 -- on Akhalkalaki and Batumi, and further steps regarding Gudauta, in order to fulfill the Istanbul commitments with respect to Georgia.)

With regard to Moldova, Russia announced in November that it had fulfilled its Istanbul commitment to withdraw or destroy all TLE by the end of 2001. In Russia's CFE data both as of January 1, 2001, and as of July 1, 2001, there were close to 110 tanks, some 130 ACVs, and over 120 pieces of artillery stationed in Moldova. Russia began notifying and carrying out destruction events in July, completing the TLE portion of the Istanbul requirement. By December 2001, OSCE observers, including CFE inspectors, confirmed the withdrawal or destruction of all TLE Russia had declared in Moldova, and Russian data as of January 1, 2002 through January 1, 2004 showed no TLE in Moldova.

The second Istanbul commitment regarding Moldova was for the full withdrawal of all Russian forces by the end of 2002. Other than the politics related to Transnistria, the biggest obstacle to meeting this second commitment is the removal, destruction, or demilitarization of some 42,000 tons of stored Russian ammunition. In addition, there are over 25,000 stored Russian small arms that must be withdrawn. Throughout the summer and fall, intensive negotiations were under way to identify the best and most satisfactory methods, including on a cost-effectiveness basis, to accomplish the disposal of the ammunition and the withdrawal of the remaining Russian materiel. Russia invited the OSCE mission to observe loading of the first four trainloads of ammunition to be withdrawn to Russia. The first trainload of Russian munitions departed the Kolbasna depot December 2, containing 20 cars carrying approximately 1,000 220mm Uragan rockets. Developments on Moldova were welcomed at the December OSCE Ministerial, and several states, including the United States, announced their intention to make additional contributions to the OSCE Voluntary fund-Moldova to help support the Russian withdrawal effort, in particular the costly process of disposing of ammunition stocks.

Throughout 2002 and 2003, U.S. and NATO officials continued to press the Russians bilaterally and at the OSCE in Vienna to take action to fulfill their commitment to withdraw Russian equipment and personnel from Moldova. Important progress began in spring 2001. The OSCE Head of Mission agreed with Russian authorities on procedures for the use of the OSCE Voluntary Fund to support withdrawal and/or destruction of Russian troops, arms, and military equipment from Moldova. It was agreed to establish a group of experts to work out the technical procedures for the destruction, conversion, or removal of the large quantities of Russian ammunition stored in Moldova. Meetings were held in August and September of 2001. Discussions have also been ongoing between Russia and the OSCE to arrange the withdrawal of the large numbers of stored Russian small arms. Contributions by the United States to the OSCE

Voluntary Fund to support the withdrawal of Russian troops and to support the withdrawal or destruction of Russian arms and military equipment from Moldova have been critical to these efforts.

A Russian representative has also reiterated the argument that Russia's non-TLE related Istanbul commitments regarding Georgia and Moldova "did not have anything to do with CFE." This is not correct. The stationing of a State Party's forces on another State Party's territory without permission from the host state is a violation of Treaty rules (specifically in Article IV, paragraph 5) regardless of whether or not TLE is present.

Additional details on U.S. actions can be found in the Secretary of State's Annual Report on Withdrawal of Russian Armed Forces and Military Equipment.

Failure to Notify of Equipment Transfers within the CFE Zone. The last three Reports outlined details of the possible Treaty implications of TLE transfers from Russia into Armenia between 1994 and 1996. There has been no change in this issue on the Russian side (as previously reported, Russia has admitted that "illegal" transfers did take place), and there have been no new steps toward resolving the CFE issues surrounding these transfers. It is not clear whether it will be possible to make progress on this without a political settlement of the N-K dispute, which is the focus of the OSCE's Minsk Group (co-chaired by the United States, Russia, and France).

Improper Designation of ACVs as Ambulances. Last year's Condition 5 Report, based on examination of Russia's data as of January 1, 1999, indicated that, at least at two sites of previous concern, units might no longer hold improperly marked "ambulances" – suggesting that this issue had been resolved. Subsequently, however, a U.S.-led challenge inspection of the Sevastopol area discovered a number of questionable APC "ambulances" and a corresponding reduction in previous declared holdings of APCs. As a result, it is not clear how much of the APC ambulance problem was eliminated and how much had just been relocated. In a number of these inspections BTR-70 APCs and BTR-80 APCs marked as ambulances were observed. The designation of BTR-70s and BTR-80s as ambulances raises questions because the small access doors make it virtually impossible for a stretcher carrying an injured soldier to be placed inside the vehicle – thus seeming to preclude the vehicles' use as ambulances and suggesting the possibility of a fraudulent redesignation.

Since September 2000, Russian representatives have maintained that this issue had been solved. But, as noted earlier, subsequent inspections again suggested it was not. In 2001, when this issue was raised, the Russian representatives questioned the significance of the instances cited and stated that Russian inspectors often saw more ambulances than this during inspections at U.S. and German sites. The United States pointed out that its concerns had nothing to do with the relative number of ambulances, but with situations where the previous unit holdings of APCs (*e.g.*, in a motorized rifle battalion) had been replaced by APC ambulances that were marked only by the addition of a red cross, with no other modifications, and were parked in motorized rifle battalion

sets alongside the other equipment of a motorized rifle battalion. The Russians responded only by indicating that they did not see this as a continuing problem.

Decommissioned Equipment. As noted in previous Reports, Russian data through July 1, 1999, regularly declared more decommissioned tanks, ACVs, and artillery items than the Treaty allows to be exempted from counting against limits. Russian data as of January 1, 2000, no longer showed an excess of decommissioned items. However, in those data, Russia improperly wrote off a total of almost 190 tanks and over 250 ACVs that were present at two capital repair facilities and had previously been reported as either decommissioned or in service (see discussion below on the issue of manipulation of annual data). Because these tanks and ACVs have never been properly removed from Russia's accountable holdings, they should still be listed as either decommissioned or in service. Subsequent Russian data continued to exclude somewhat diminishing numbers of such items. Russian data as of January 1, 2001, once again showed an excess in decommissioned items (over 10 items), while still continuing improperly to exclude almost 15 tanks and over 250 ACVs that should either be included in its holdings or reported as decommissioned. In Russia's data as of July 1, 2001, the number of decommissioned items in the flank alone was over 40 tanks and almost 170 ACVs – some 10 items of decommissioned ground TLE above what the Treaty allows for Russia in the entire area of application (AoA). The number of improperly excluded tanks dropped slightly, but the number of excluded ACVs remained the same. These same concerns, albeit with slightly different numbers, continued through 2002 and 2003.

Compliance with Flank Limits. According to its own data and notifications, Russian holdings continue to exceed most of the legally binding limits for both the original and revised flank zones. Russian holdings also continue to exceed the future limits for tanks in the flank area of Russia under the Adapted CFE Treaty. According to Russian data as of January 1, 2002, and a related notification, the overages related to the Adapted Treaty had been reduced and ostensibly eliminated by the end of 2001. However, these data and the notification do not incorporate 11 tanks still improperly excluded from accountability at St Petersburg – leaving a continuing overage of at least five tanks. In its data as of January 1, 2001, July 1, 2001, and January 1, 2002, Russia continued to improperly exclude equipment at capital repair facilities that it characterizes as “non-combat capable.”

A notification accompanying the Russian data as of January 1, 2000, voluntarily referenced TLE “temporarily introduced” into the adapted flank from outside the AoA. This information was not provided, however, in subsequent data exchanges and notifications on the amount of TLE temporarily located in the adapted flank. In these latter exchanges and notifications, the Russians only referenced TLE temporarily introduced into the adapted flank with no clarification of how much came from other locations in the AoA or how much came from outside the AoA. Because no information was provided on the peacetime locations of this TLE, it is not possible to determine how much of the total amounts were added to the original flank area.

The amounts of these overages, according to Russian figures, and comparisons among the last three data exchanges and notifications are shown in the charts below. In all cases, Russian data and notifications have been adjusted to also include the items improperly excluded from data, but do not account for excess decommissioned items.

Overages above Adapted Treaty Flank Limits on Russian Territory:

	<u>Tanks</u>	<u>ACV</u>	<u>Artillery</u>
Future limits	1300	2140	1680
Jan 2002 Overages	At least 5	0	0
July 2002 Overages	0	0	0
Jan 2003 Overages	0	0	0
July 2003 Overages	0	0	0
Headroom as of July 2003¹	Over 70	Almost 80	Over 200

Overages above Current Treaty Limits for Active Units in the Revised Flank Zone:²

	<u>Tanks</u>	<u>ACV</u>	<u>Artillery</u>
Current active limits	700	580	1280
Jan 2002 Overages	Over 750	Over 2000	Over 500 ³
July 2002 Overages	Over 650	Almost 2000	Over 460
Jan 2003 Overages	Almost 700	Almost 2050	Close to 500
July 2003 Overages	Close to 700	Over 2000	Almost 450

Overages above Current Treaty Flank Limits for the Original Flank Zone:

	<u>Tanks</u>	<u>ACV</u>	<u>Artillery</u>
Current total limits	1800	3700	2400
Jan 2002 Overages	0	At least some 475	0
July 2002 Overages	0	At least some 700	0
Jan 2003 Overages	0	At least almost 750	0
July 2003 Overages	0	At least almost 600	0
Headroom as of July 2003	Almost 200	N/A	Over 300

¹ Headroom, a term with important meaning in the Adapted Treaty, refers to the difference between the limit for a category of TLE and the number actually present in a State Party's armed forces or in a specified territorial unit or subunit.

² The active-unit overages were significantly increased in late 1999 in part because of the conflict in Chechnya, and in part because the new Russian data declared all flank TLE to be in active units, the limits for which are lower now than under the future limits of an adapted Treaty. In this and other matters, Russia has acted as if the Agreement on Adaptation had already entered into force and modified ("adapted") the Treaty, but the Agreement has not done so, there is no authority to provisionally apply the Agreement in whole or in part and no State Party may unilaterally apply future provisions that are not yet in force.

³ These overage figures do not take into account Russian notifications of temporary deployments in Armenia, Ukraine, and Georgia and on Russian territory in the original flank -- some of which may no longer be entirely valid.

Nevertheless, there are concerns that Russia may not be declaring properly the total number of ACVs in the adapted flank area. First there is the question of APCs that are being used to transport combat infantry squads, but which are claimed improperly to be “ambulances” as discussed earlier. A second concern relates vehicles that are being declared as MT-LBT APC look-alikes but are configured and used as MT-LB APCs. (Physically the only significant and readily visible difference between the MT-LB APC and the MT-LBT APC look-alike is that the inside of the MT-LB contains passenger seats on both sides allowing transport of a full infantry squad, while the MT-LBT contains artillery ammunition racks instead of seats on the left side, and is a towed artillery primemover with seats only for the smaller gun crew. Both versions existed in the Soviet (and Russian) inventory prior to entry into force of the Treaty. According to the POET, for 40 months after entry into force of the Treaty, an MT-LB could be modified into an MT-LBT against reduction obligations by altering the interior of the vehicle through removal of the left-hand combat infantry squad seating and the welding of the ammunition racking to the side and floor at a minimum of six points. To replace seats with ammunition racks, or vice-versa, is a simple procedure that can be easily carried out at the holding unit level.) This practice could lead to declarations of artificially lower holdings of ACVs for the units in question and for the adapted flank area as a whole.

a) During a U.S.-led inspection in February 2002, Russian escorts claimed that some 40 “may have been deployed to Chechnya.” Inspectors observed some 40 ammunition racks of the type used in MT-LBT APC look-alikes stacked in a storage shed.

b) On October 1-2, 2002, a U.S.-led inspection examined more than 60 MT-LBTs that may have returned from Chechnya. The welds of the ammunition racks of all of these MT-LBTs appeared to have been completed only recently, and a few of the vehicles required additional welds to complete the process of modification.

This raises another complex issue. The footnote in the POET that allowed nations to receive credit for “reducing” MT-LB APCs via modification into MT-LBT APC look-alikes had only a 40-month duration – the 40 months of the CFE reduction period, during which the groups of states were required to destroy or otherwise eliminate equipment in excess of agreed ceilings according to methods specified in the Treaty. The MT-LB modification allowed a limited exceptional reduction mechanism in order to reach limits. However, the Treaty is silent on what can or must be done to eliminate TLE from accountability beyond the reduction period of the Treaty, which ended in 1995, nor does it specify how decommissioned items can be disposed of. Accepted practice over the life of the Treaty after the Treaty reduction period offers some answers. Several NATO allies have notified reductions below limits that involved TLE being converted to other non-TLE (or even other non-Treaty-reportable) items that would continue to be used militarily, and no nation has raised an objection in the CFE Joint Consultative Group (JCG), the Treaty’s implementation body. Similarly, during recent Russian conversions of MT-LB vehicles that changed the mix of TLE and TLE look-alikes, no nation has

pursued a formal objection. What does seem clear, however, is that such changes must be reflected in annual CFE data, and, if involving a change of 10 percent or more in a unit's holdings of APCs, they must be formally notified. Russian annual data has regularly reflected such changes, but timely notifications of 10 percent changes have not always been made in these cases.

In its data as of January 1, 2001, through that of January 1, 2004, Russia continued to exclude equipment at capital repair facilities in the flank that it characterizes as "non-combat capable" but which, by the Treaty, must be counted against limits if not declared as decommissioned. Details are provided below.

A notification accompanying the Russian data as of January 1, 2000 voluntarily referenced TLE "temporarily introduced" into the adapted flank from outside the AoA. This information has not been provided in conjunction with subsequent data exchanges and notifications on the amount of TLE temporarily located in the adapted flank. In these subsequent data exchanges and notifications, the Russians only referenced TLE temporarily introduced into the adapted flank, with no clarification of how much came from other locations in the area of application (AoA) or how much came from outside the AoA. Because no information was provided on the peacetime locations of the TLE temporarily introduced, it was not possible to determine how many of the "temporarily introduced vehicles" had been added to the original flank area or Russian territory within the AoA.

Denial of Full Access During Inspections and Improper Site Diagrams. As reported last year, this recurring problem continued in 2001, when this issue occurred at least once. However, in 2002 and 2003, it has apparently not occurred. In the past, this infrequent, but recurring, problem has involved a Russian attempt improperly to define a declared site (and thus inspection access) on the basis of subordination, rather than geography (as the Treaty requires). This Russian practice is an issue that has been discussed in the JCG. The disagreement over the definition of a declared site and the contents of a site diagram has not been resolved. Only Belarus supports the Russian interpretation; the United States believes it to be incorrect.

East of the Urals (EoU) Commitment. As discussed in last year's Report, the Russian EoU commitment, as revised by the 1996 Review Conference, called for the destruction (or conversion into civilian equipment) of 6,000 tanks, 1,500 ACVs, and 7,000 pieces of artillery "by the year 2000." Annex E of the Final Document of the First Conference to Review the CFE Treaty allows Russia to apply ACVs destroyed in excess of the 1,500 commitment to any shortfall of not more than 2,300 in tanks. However, a number of tanks equal to the shortfall must be subsequently eliminated. Although Russia had not destroyed or converted the full 6,000 tanks, as of February 24, 2001, Russia had notified the destruction of a sufficient number of tanks (almost 5,000) and excess ACVs (over 1,500) so as to allow it to claim the EoU commitment "in general to be deemed completed." Since then, Russia has continued to notify the destruction of additional tanks. In late spring, 2003, the United States and NATO concluded that there was

sufficient evidence to support Russia's claim of having fulfilled its entire EoU commitment. See previous Reports for details of the events leading up to this decision.

Violation of Overall Limits for Holdings in Active Units. For several years, Russian data have shown violations of overall limits in ground TLE in active units. Russia's data as of January 1, 2002, showed only an overage above overall active unit limits in artillery of over 100, but these did not include any of the items notified as being temporarily in the adapted flank zone (a few tanks, over 175 ACVs, and over 40 pieces of artillery) that may have come from outside the AoA. Russia's data as of January 1, 2003, showed overages above overall limits for holdings in active units in tanks of over 125 and in artillery of some 270, but did not include any of the items notified as being temporarily in the adapted flank zone (a few tanks, close to 160 ACVs, and over 40 pieces of artillery) that may have come from outside the AoA. One reason for the overage in tanks probably is that Russia no longer declared Buy as a DPSS, thus adding its declared holding of over 190 tanks to its holdings in active units. Russia's data as of January 1, 2004 showed holdings in active units in tanks of over 170 and in artillery of over 220. Russia also appears unilaterally to have applied the Adapted Treaty limits for overall holdings of TLE in active units that are greater than the current Treaty limits for such holdings. However, as noted earlier, Russia has acted as if the Agreement on Adaptation had already entered into force and modified ("adapted") the Treaty, but the Agreement has not done so, there is no authority to provisionally apply the Agreement in whole or in part and no State Party may unilaterally apply future provisions that are not yet in force. On the basis for these future limits, Russia's overall holdings in active units would be below limits.

Improper Exemption of TLE from Accountability. As reported previously, for the past few years Russian data have improperly excluded from accountability a significant number of tanks and ACVs that were present at Kushchevskaya and St. Petersburg. Because these tanks and ACVs were not properly removed from Russia's accountable holdings, they should have been listed as either decommissioned or in service. Proper accounting of these items would have resulted in Russia having (1) declared far more decommissioned items than allowed, and/or (2) increased overages above overall limits in active units and flank limits. Russian data as of January 1, 2002, excluded over 10 tanks and some 250 ACVs at the two capital repair facilities on these same improper grounds. As noted earlier, during the first half of 2002, the "non-combat capable" tanks at St Petersburg were destroyed, but a note in Russia's data as of July 1, 2002, still showed a few tanks and over 250 such ACVs at Kushchevskaya. This same situation was reflected in Russia's data as of January 1, 2003, and Russia's flank data as of July 1, 2003. In the notification on holdings at Kushchevskaya as of October 1, 2003, Russia reported a slight decrease in the number of "non-combat-capable" ACVs. This continued in Russia's data as of January 1, 2004, with only minor changes.

New MT-LB Variants. As previously reported, in a development that had potential compliance ramifications, the Russians deployed limited numbers of two new variants of the MT-LB APC, the Kondor and the Berkut, in Chechnya as of September

24, 2001. Both variants have characteristics of ACVs as defined in Article II of the Treaty, but neither vehicle is listed in the POET, nor had either been notified as entering into service with the Russian armed forces in the AoA. See previous reports for details.

The United States conducted a declared site inspection of a DPSS in October 2002 where the Russians briefed the presence of over 90 MT-LB variants and declared them to be used exclusively for R&D. The inspection team observed over 70 of the MT-LB variants, all of which were canvas covered. The escort team chief declared the remaining MT-LB variants to be in a storage building at the DPSS to which he denied the inspection team access by declaring the building a sensitive point.

However, through November 30, 2003, there had been no notification of Kondors entering into service nor had Russia notified the presence of these vehicles at any unit. In December, 2003, Russia notified the entry into service of the MT-LBMB (Kondor) AIFV and the MT-LBMA (Berkut) APC and included these vehicles at a naval infantry unit in its CFE data exchange on December 15, 2003 (as of January 1, 2004). Given that Russia has interpreted the June 1991 agreement on Naval Infantry/Coastal Defense forces (NI/CD) as somewhat separate from many Treaty rules relating to TLE, earlier absence of notifications may not be surprising. Russia does not normally notify changes of ten percent or more in TLE holdings in NI/CD forces, but such changes are incorporated in holdings declared in the separate Charts on these forces during the annual data exchange.

FINDINGS. Although Russia continues to station forces in both Georgia and Moldova, Russia has committed to the withdrawal of some (Georgia) or all (Moldova) Russian TLE and forces, and has met its commitments in regard to TLE in Georgia and Moldova, but has failed to complete the second part of these commitments in either Georgia or Moldova. Russia continues to refuse to declare MT-LB-U APC look-alikes and IRM AIFV look-alikes in data exchanges and, in some cases, to include them in inspection briefings. Russia may have failed to make Treaty-required notifications of transfers or reassignment of TLE entering Armenia. Russia again has declared excessive numbers of decommissioned ground items. Russia remains far over the current Treaty limits for tanks, ACVs, and artillery in active units in the revised flank and the current limits in ACVs for the original flank zone. Russian data and notifications now portray Russia as being in compliance with flank limits for the Adapted Treaty. Moreover, Russia is over its limits for artillery in active units in the AoA. In 2001, Russia again improperly denied access to part of at least one declared site, but has not done so in 2002 or 2003. As noted above, Russia continues to manipulate its data by unilaterally and improperly excluding some 250 items of TLE as “non-combat capable.” Although Russia failed to complete its CFE-related EoU destruction commitment by the year 2000 as required, Russia did meet most of the terms of that commitment by February 2001 by an allowed substitution of ACV destructions for shortages in tank destructions – leaving only a non-time-limited commitment eventually to destroy additional tanks equal to the numbers for which excess ACV destructions had been substituted. This was completed by Spring 2003. Finally, a new potential compliance issue arose in 2001 in regard to apparently new variants of the MT-LB APC, but was resolved by the end of 2003.

UKRAINE

Active Unit Limits. As noted in previous Reports, Ukrainian data since 1996 have repeatedly indicated that Ukraine was above several of its notified limits for holdings in active units. In its data as of January 1, 2001, Ukraine no longer had any overages above overall active unit limits. Ukraine, however, still had overages above active unit limits in Zone 4.3 of almost 140 tanks and close to 50 artillery pieces. Although there are some internal inconsistencies in Ukraine's data as of January 1, 2002, it appears to show an overage, but only in tanks in active units in Zone 4.3 of some 120. Ukraine's data as of January 1, 2003, shows no overage in tanks in active units in Zone 4.3, but an overage of close to 20 artillery pieces in holdings in active units in Zone 4.3. It also shows an overage of some 50 ACVs in active units in Zone 5.1. Ukraine's data as of January 1, 2004 showed overages in Zone 5.1 of over 100 APCs. The changes in Zone 4.3 appear to be the result of changes in the number of tanks and artillery pieces in DPSS, while the changes in Zone 5.1 appear to be the result of transferring SRF ACVs to the conventional armed forces. (ACVs assigned to the SRF in Russia, Belarus, and Ukraine are limited in number by a Treaty-related commitment, but do not count against TLE limits in the conventional armed forces.)

The overages in Zone 4.3 began following the entry into force of the Flank Document, which removed the Odessa Oblast from the revised flank zone, thereby adding the equipment in that oblast to Zone 4.3.

FINDINGS. Ukraine remains over its limits in active units in Zone 4.3 in tanks.

COLLECTIVE OBLIGATIONS

Naval Infantry/Coastal Defense-related Reductions. Russia and Ukraine shared a legally-binding commitment to declare and to complete Naval Infantry/Coastal Defense-related (NI/CD) reductions equal to those the Soviet Union had committed to carry out. In March 2000, Russia completed its remaining share of the NI/CD-related reduction obligations. Ukraine has not fulfilled its share of the reductions.

There have been no further tangible developments in regard to Ukraine on the issue of the unfulfilled Ukrainian obligation for NI/CD-related reductions (close to 160 tanks, some 370 ACVs, and over 150 pieces of artillery) that Ukraine shared with Russia. Ukraine continues to contend that it should not have to carry out these reductions because it is already in compliance with overall limits.

When this issue was raised with Ukraine in 2001, the Ukrainians responded with a detailed argument against the reduction obligation. This argument ignored some of the precise wording of the NI/CD commitment and, in the final analysis, differs from the conclusions and interpretations held by the United States and (apparently) all other States Parties except Ukraine. A main thrust of the Ukrainian argument continued to be that Ukraine is fully within all of its overall limits when NI/CD holdings are added to

holdings of conventional armed forces (after having conducted very significant CFE reductions outside of any theoretical NI/CD-related reduction obligations).

Declaring and Meeting the Reduction Obligations of the USSR. There have been no changes from what was reported in the October 2, 2000 Report on this issue.

FINDINGS. Ukraine has not yet met its shared NI/CD-related reduction obligation. In addition, the USSR's eight CFE successor states have not fulfilled their collective obligation to declare reduction liabilities and to complete reductions that will, in the aggregate, be no less than what the USSR would have had to declare and to complete. The majority of the shortfall in reduction liabilities can be attributed to Armenia, Azerbaijan, and Belarus. However, even if Armenia and Azerbaijan were to declare and to complete their maximum putative reduction liabilities and Belarus were to increase its reduction obligation to include tanks awaiting export, there would still be shortfalls.

C. THE VIENNA DOCUMENTS OF 1992, 1994, AND 1999

On March 4, 1992, the participating States in the Conference on Security and Cooperation in Europe (CSCE), including all successor states to the Soviet Union, adopted the Vienna Document 1992 (VD-92), which added to and built upon the undertakings in Vienna Document 1990 (VD-90). Subsequently, most of the successor states of the former Yugoslavia also joined VD-92. In November 1994, at the CSCE Summit in Budapest, VD-92 was expanded and incorporated into Vienna Document 1994 (VD-94). At that time, the CSCE also changed its name to the Organization for Security and Cooperation in Europe (OSCE). During 1999, the participating Parties to VD-94 completed discussions to update VD-94. Improved provisions were accepted in the Vienna Document 1999 (VD-99) at the Istanbul Summit in November. The measures contained in Vienna Documents 1992, 1994, and 1999 are politically binding.

The main provisions of the VD include: an exchange of military information, requirements to notify and invite observers to military exercises above certain thresholds in personnel and equipment, airfield visits, provisions for on-site evaluations of military units to confirm the information on them, provisions for inspections of specified areas to determine if an unnotified military activity is going on, and other confidence and security building measures (CSBMs).

In general terms, compliance with the Vienna Document was good in 2002 and 2003. During 2002 and 2003, 209 VD inspections and 145 VD unit evaluations were conducted by the participating States. These included 27 inspections and 52 evaluations conducted according to VD rules under bilateral agreements that offer extra VD quotas to the participants. As in the past, however, some VD signatory nations did not provide Confidence and Security-Building Measures data on time when required in December. For data as of January 1, 2003, these nations included: Andorra, Iceland, Kazakhstan, Kyrgyzstan, San Marino, Tajikistan, Turkmenistan, and Uzbekistan. These data were

supposed to be distributed on December 13th in 2002. None of the participating states that did not provide these data (or nil reports) had corrected the discrepancy by the end of December. Two other participating States, Georgia and Armenia, provided only unofficial automated VD data on time, but promised to provide hard copy data as soon as “technical difficulties” were corrected. For data as of January 1, 2004, these nations included: Bosnia-Herzegovina, Kazakhstan, Kyrgyzstan, Monaco, San Marino, Turkmenistan, and Uzbekistan. These data were supposed to be distributed on December 15, 2003. None of the participating states that did not provide data (or nil reports) had corrected the discrepancy by the end of December. Andorra, Monaco, and San Marino do not have armed forces but should have submitted negative reports. In the past many such states have provided late data in January.

In addition, several states have not hosted an air base visit. These include: Albania, Azerbaijan, Bosnia-Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Turkmenistan, and Uzbekistan. The Vienna Document requires that each participating state with reported air combat units will arrange at least one air base visit during any one five-year period. The current scheduled five-year period began January 1, 2002.

Two more complex concerns, the Nagorno-Karabakh dispute and the nature of Russia’s military operations in Chechnya, continued without significant change. See previous Reports for details.

In addition, there have been other -- mostly minor -- notification, data, and inspection problems similar to those discussed under CFE.

D. THE CHEMICAL WEAPONS CONVENTION (CWC)

As of December 31, 2003, there were 158 States Parties to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, (hereinafter “the CWC”). While the United States has concerns regarding the activities of other countries, this version of the Report only addresses our concerns with China, Iran, Russia and Sudan, as well as the results of our interactions with Libya to assist it to declare and eliminate its CW program.

The United States also has conducted bilateral discussions with other States Parties during this reporting period. These bilateral efforts have been well received and useful in laying the groundwork for judging compliance; as a result, the United States has resolved a number of its CWC compliance concerns.

In this regard, the United States welcomes Albania’s actions upon its discovery of chemical weapons. The actions undertaken by Albania to declare newly discovered chemical weapons, obtain an extension of its CW destruction deadlines, and work transparently and cooperatively to ensure the security and elimination of chemical weapon stocks sets a positive precedent for CWC compliance and deserves recognition.

The United States is working with the Albanians to ensure the security and destruction of this stockpile until it is eliminated in accordance with the CWC.

The CWC imposes a number of basic obligations upon States Parties. Under the “general obligations” provisions of Article I, States Parties undertaken not to develop, produce, otherwise acquire, stockpile, or retain chemical weapons (CW), or to transfer them to anyone, directly or indirectly. Article I also obliges Parties to “never, under any circumstances” to use chemical weapons, undertake “military preparations” for their use, or “assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention.” Additionally, each State Party must destroy all chemical weapons in its possession or control, or that it abandoned in another country, and must destroy all its chemical weapons production facilities. Parties are also obliged not to use riot control agents (RCAs) as a method of warfare.

Article III imposes additional obligations, specifically by requiring the submission of detailed declarations of chemical weapons stockpiles, production facilities, other related facilities (*e.g.*, laboratories and test and evaluation sites), and types of RCAs possessed. Specifically, a State Party is required to declare, *inter alia*, whether it:

- Owns or possesses any chemical weapons, or whether there are any chemical weapons located in any place under its jurisdiction or control;
- Has on its territory old or abandoned chemical weapons or has abandoned chemical weapons on the territory of another State;
- Has or has had any chemical weapons production facility under its ownership or possession, or that is or has been located in any place under its jurisdiction or control at any time since January 1, 1946;
- Has transferred or received directly or indirectly any equipment for the production of chemical weapons since January 1, 1946;
- Has any facility or establishment under its ownership or possession, or located in any place under its jurisdiction or control, that has been designed, constructed or used since January 1, 1946, primarily for the development of chemical weapons; and,
- Holds chemicals for riot control purposes.

Countries that were original States Parties to the CWC were required to submit their initial data declaration not later than 30 days after entry into force. Countries that ratified after the CWC entered into force, or acceded, became States Parties 30 days after the deposit of their instrument of ratification or accession and were required to submit their initial data declaration 30 days after becoming a State Party. Articles IV and V, and the corresponding parts of the Verification Annex provide detailed requirements

governing the implementation of the obligations on the destruction of chemical weapons and production facilities.

Article VI of the CWC makes clear that each State Party has “the right, subject to the provisions of this Convention, to develop, produce, otherwise acquire, retain, transfer and use toxic chemicals and their precursors for purposes not prohibited under this Convention.” It thus makes clear that – even if the formal declaration and verification provisions of the CWC are followed – States Parties have no right to have or to deal in toxic chemicals or their precursors if their purpose in so doing is one that is prohibited under this Convention (*e.g.*, to acquire chemical weapons or in any way to assist, encourage, or induce another to do so). Article VI also imposes specific obligations with respect to controlling specific chemicals listed in Schedules 1, 2, and 3 of the Annex on Chemicals – as well as facilities related to such scheduled chemicals – and subjects these chemicals to verification measures provided in the Convention’s Verification Annex.

The Organization for the Prohibition of Chemical Weapons (OPCW) was established pursuant to the CWC in order, among other things, to “ensure the implementation of its provisions, including those for international verification of compliance with it.” Under Article VIII, the Conference of States Parties is authorized to “review compliance” with the CWC, and is to “[t]ake the necessary measures to ensure compliance with this Convention and to redress and remedy any situation which contravenes the provisions of this Convention, in accordance with Article XII.” Article XII, in turn, provides that the Conference may, *inter alia*, “restrict or suspend” a violator State’s “rights and privileges” under the CWC until compliance resumes. In “cases of particular gravity,” the Conference can bring the issue to the attention of the United Nations Security Council and General Assembly.

For its part, both as a matter of national policy and as a guide to national policy, the United States undertakes its own independent review – based upon the best available information, including intelligence information – of the compliance of CWC States Parties with their obligations under the Convention. The United States believes that States Parties should be held to their obligations under the CWC, and places a high premium upon their compliance both with specific detailed declaration and implementation provisions (*e.g.*, Article III, IV, and V) and with the “general obligations” of Article I.

U.S. compliance assessments under the CWC focus upon the degree to which States Parties fulfil not only their detailed declaration and destruction/conversion obligations under Articles III through V, but also their “general obligations” under Article I. Information tending to show that chemical weapons have actually been used, or that a State Party has helped or encouraged anyone to engage in any activity prohibited to a State Party under this Convention (*e.g.*, by helping another country, or a non-state actor such as an international terrorist entity, acquire chemical weapons) would thus be highly relevant to an Article I compliance finding.

The United States also believes that because of their obligation under subparagraph (1)(d) of Article I which requires States Parties not in any way to assist, encourage, or induce others to acquire chemical weapons, States Parties are under an obligation to exercise due diligence in their trade in precursor chemicals and dual-use equipment that could be employed in the development of chemical weapons. In particular, States Parties should exercise restraint in their dealings with recipient entities, and should not undertake any potentially CW-related transfers of technology or chemicals to any entity about which there is a reasonable suspicion that it is engaged, or seeks to be engaged, in the development, production, stockpiling, or use of chemical weapons in any way that would be prohibited to a State Party to the CWC.

Moreover, under paragraph 5 of Article V of the CWC, a State Party may not “construct any new chemical weapons production facilities or modify any existing facilities for the purpose of chemical weapons production or for any other activity” prohibited by the CWC. This focus upon the *purpose* for which construction or modification occurs indicates that whether or not prohibited quantities of banned or controlled chemicals are actually present, the development and maintenance of a CW mobilization capability would amount to noncompliance with the Convention if it were undertaken with such CW applications in mind. In judging such CW mobilization intent, where more direct evidence is unavailable, a number of factors may be relevant, including: the country’s record of CWC compliance in other respects; the accuracy and completeness of its declarations; its history of CW-related activity; the legitimate economic or commercial need for chemicals the production of which requires the development of processes easily adaptable for CW production; and the degree to which production methods it adopts diverge in otherwise inexplicable ways from industry practice, or are uneconomical or implausibly inefficient in peaceful applications.

Finally, the United States notes that subparagraph 9(b) of Article II expressly permits possession of chemical agents for “[p]rotective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons.” By contrast, subparagraph 1(c) of Article I prohibits engaging in “any military preparations to use chemical weapons.” Part VI, Section (A) of the Verification Annex spells out in more detail which activities are permitted under the CWC, making clear that a State Party may not “produce, acquire, retain, transfer or use” Schedule 1 chemicals unless they are applied to legitimate “research, medical, pharmaceutical or protective purposes,” and possessed only in small quantities “strictly limited to those which can be justified for such purposes” but in no circumstances more than one metric ton. Part VI, Section C of the Verification Annex specifies allowable production quantities at declared and undeclared facilities, but it does not alter the basic rule that *purpose* is the touchstone of compliance with regard to research quantities of chemical agents. Appropriately-scaled research undertaken for legitimate protective purposes *against* chemical weaponry is thus permitted, but research aimed at developing or improving *weapons* applications would constitute noncompliance. It should be noted, moreover, that under subparagraph 1(c) of Article I there is no requirement that “military preparations to use chemical weapons” actually involve chemical agents. Accordingly,

research undertaken for the purpose of facilitating weapons uses rather than for protective purposes would constitute a violation of the CWC whether or not chemical agents were involved. (Research using CW agent simulants or CW munitions development, for example, would thus present noncompliance problems if undertaken for weapons, and not protective, purposes.)

COUNTRY ASSESSMENTS

CHINA

ISSUE. The issue is whether China maintains an active offensive CW research and development (R&D) program, has a CW production mobilization capability, and has made inaccurate declarations regarding its past transfer of chemical weapons and undeclared CW-related facilities.

HISTORY OF COMPLIANCE EVALUATION. The Peoples Republic of China (PRC) submitted its initial declaration to the OPCW on time in 1997 but the United States was not initially given a complete copy of the Chinese declaration upon which to base a compliance judgment. As a result of a comprehensive review of the Chinese declaration, the United States entered into a dialogue with the Chinese in December 1998 highlighting our concerns about anomalies and shortcomings in its declaration. As noted in the CY1999 unclassified version of the NCR, the United States continued unsuccessfully to press China for a response to our concerns, stating that “until the United States received and evaluated the Chinese response, a compliance judgment is not possible.” The finding in the unclassified version of the June 2003 Report stated that:

The United States assesses that China maintains an active offensive R&D CW program, a possible undeclared CW stockpile, and CW-related facilities that were not declared. Such activities are inconsistent with the CWC.

DISCUSSION OF OBLIGATIONS. China is an original State Party to the CWC, and submitted its initial declaration on time. In this initial declaration, China declared that it had eliminated facilities, stockpile and materials relating to CW. However, it said that it maintained a defensive research and development capability in accordance with the Convention. The Chinese chemical industry has the capability to produce many chemicals, some of which have been sought by states trying to develop a chemical warfare capability.

ACTIONS. China continues to conduct CW research and development that has applications for either defensive or offensive purposes. China also has the capability to quickly mobilize its chemical industry to produce a wide variety of chemical agents.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. Since 1998, the United States and China have been in a dialogue regarding CWC compliance issues. The

United States have discussed a number of these issues between experts, in written communiqués, and in the ongoing U.S.–China Security dialogues. As a result of these contacts, we have improved our understanding of the Chinese initial declaration. That said, however, concerns remain and the dialogue continues.

FINDING. The United States judges that China maintains a CW production mobilization capability, although there is insufficient information available to determine whether it maintains an active offensive CW research and development program. Moreover, in violation of its CWC obligations, China has not acknowledged past transfers of chemical weapons and it may not have declared the full extent of its CW-related facilities.

IRAN

ISSUE. The United States is concerned that Iran is retaining and modernizing key elements of its CW infrastructure, to include: offensive research and development; a possible undeclared stockpile; and an offensive production capability.

HISTORY OF COMPLIANCE EVALUATION. The United States assessed Iranian compliance as early as the CY1998 NCR. At that time, the United States was unable to certify Iran to be in compliance with the CWC because of concerns about its initial declaration and the need to assess Iran’s supplemental declaration. Because of continued U.S. concerns about Iran’s declaration, the October 2, 2000 Report made the same compliance judgment. The finding in the unclassified version of the June 2003 Report stated that:

The United States assesses that Iran has not submitted a complete and accurate declaration, and in fact is acting to retain and modernize key elements of its CW program. Some of these elements include an offensive R&D CW program, an undeclared stockpile and an offensive production capability. Such activities are inconsistent with the CWC.

DISCUSSION OF OBLIGATIONS. Iran became a State Party to the CWC on December 3, 1997. The United States received the first part of Iran’s initial declaration from the OPCW in December 1998. Iran’s declaration arrived piecemeal with another submission received by the United States in July 1999.

ACTIONS. In May 1998, during the Conference of the States Parties, Tehran, for the first time, acknowledged the existence of a past chemical weapons program. Iran admitted developing a chemical warfare program during the latter stages of the Iran-Iraq war, as a deterrent against Iraq’s use of chemical agents. Moreover, Tehran claimed that after the 1988 cease-fire, it “terminated” its CW program. Despite this revelation, Iran has not acknowledged actually possessing chemical weapons. The United States believes Iran has manufactured and stockpiled blister, blood, and choking chemical agents, and weaponized some of these agents into artillery shells, mortars, rockets, and aerial bombs.

We continue to believe that Iran has not acknowledged the full extent of its chemical weapons program, that it has indigenously produced several first-generation CW agents (blood, blister, and choking agents), and that it has the capability to produce traditional nerve agents. However, the size and composition of any Iranian stockpile is not known.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. The United States, on the margins of the OPCW Executive Council meeting on June 27-28, 2001, delivered written questions to the Iranian delegation seeking to clarify gaps and inconsistencies in Iran's CWC declaration. The Iranians accepted the U.S. questions with the understanding that they were asked in accordance with Article IX of the CWC.

In February 2002, Iran responded to U.S. questions. Iran also provided its A-2 form to the OPCW Technical Secretariat. This form, however, still did not declare the possession of chemical weapons.

FINDING. The United States judges that Iran is in violation of its CWC obligations because Iran is acting to retain and modernize key elements of its CW infrastructure to include an offensive CW R&D capability and dispersed mobilization facilities.

LIBYA

ISSUE. As of December 31, 2003, Libya was not a State Party to the Chemical Weapons Convention, but we are addressing Libya's chemical weapons activity because of its December 2003 commitment to disband its WMD programs and to accede to the CWC. Libya acceded to the CWC on January 6, 2004, and became a State Party effective February 5, 2004. Libya had been publicly known to have a chemical weapons program.

HISTORY OF COMPLIANCE EVALUATION. This is the first time that Libya has been discussed in the CWC section of this Report.

DISCUSSION OF OBLIGATIONS. On December 19, 2003, Col. Muammar Qadhafi pledged to eliminate material and equipment related to Libya's pursuit of WMD and long-range missile systems. Among other things, he confirmed that Libya would accede to Chemical Weapons Convention. Libya subsequently acceded to the CWC.

ACTIONS. In March 2003, Libya approached the United Kingdom and United States, expressing interest in removing concerns about whether it was pursuing WMD programs. In the course of subsequent discussions and visits, the Libyans made significant disclosures about their chemical weapons programs, as well as other WMD activities. The United States and the United Kingdom conducted a number of exchanges with the Libyans intended to explore the depth and commitment of their initiative. A team of American and British experts traveled to Libya twice – in October and December 2003 to receive detailed presentations on Libya's nuclear, chemical, biological, and

missile activities. In addition to extensive discussion during a total of three weeks of meetings, the experts were shown covert facilities and equipment and were told about years of Libyan efforts to develop chemical weapons capabilities. With regard to chemical issues, Libya showed these initial U.S./UK teams:

- A significant quantity of sulfur mustard chemical agent that was produced at the Pharma 150 plant near Rabta more than a decade previously;
- Aerial bombs that were designed to be filled with mustard agent on short notice;
- Equipment in storage that could be used to outfit a second CW production facility; and
- Dual-use chemical precursors that could be used to produce mustard and nerve agent.

During these visits, Libya reiterated its commitment to complete its accession to the Chemical Weapons Convention, and committed to destroy all its chemical warfare stockpiles and munitions.

In March 2004, Libya destroyed all of its declared unfilled chemical munitions and secured all sensitive CW materials, agents, and equipment pending their elimination under the CWC.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. As 2003 ended, the United States and the United Kingdom prepared to launch an intensive joint effort to verify Libya's compliance with its commitments of December 19, 2003.

The December 2003 commitment led directly to Libya's accession to the CWC on January 6, 2004, and to its agreement to a series of overt visits in 2004 by U.S. and United Kingdom technical experts aimed at ascertaining the nature and scope of Libya's past CW activity and ensuring the termination of its CW program. As a result of this transparent and cooperative process, Libya destroyed all of its declared unfilled chemical munitions in March 2004, and secured all sensitive CW materials, agents, and equipment pending their elimination under the CWC.

FINDING. The United States believes Libya's disclosure regarding its chemical weapons program, and its December 2003 commitment to accede to the CWC and disband such weapons is a significant step toward coming into full compliance, and a model for those countries that remain outside the CWC. The United States will continue to work closely with the Libyans to clarify any remaining concerns both through the OPCW, and the Trilateral Steering Cooperation Committee's Chemical Weapons Sub-Committee.

RUSSIA

ISSUE. The principal issue is whether Russia's CWC declaration is adequate as it relates to CW production and development facilities, chemical agent and weapons stockpiles, and whether Russia has met the CWC-established timelines for submission of plans for destruction and verification of destruction of its CW.

HISTORY OF COMPLIANCE EVALUATION. The United States assessed Russia's CWC compliance as early as the unclassified CY1998 NCR. In that Report, the United States noted a number of issues and concerns with Russia's declaration, and that it could not certify Russia as being in compliance with the CWC. Similarly, in the CY1999 Report, Russia could not be certified as CWC compliant until the U.S. questions and concerns had been addressed and resolved. The finding in the June 2003 Report stated that:

Although the United States continues to engage the Russian Federation on these and other issues with some progress, it is our assessment that the Russian Federation has not divulged the full extent of their chemical agent and weapon inventory. We assess their declaration to be incomplete with respect to CW production, development facilities and chemical agent and weapons stockpiles. Such activities are inconsistent with the CWC.

DISCUSSION OF OBLIGATIONS. The Russian Federation became a State Party to the CWC on December 5, 1997, and submitted its initial declaration on time. The Russian declaration included CW production facilities (CWPFs), CW storage facilities (CWSFs), a development facility, and a stockpile of approximately 40,000 metric tons of CW agent.

ACTIONS. The United States has longstanding concerns about the completeness and accuracy of Russia's CW stockpile declaration. As early as August 1999, the United States sought clarification of certain issues regarding the Russian CW stockpile and raised a variety of other compliance concerns such as CW production, storage, and development facilities. A regular bilateral dialogue on such subjects continues to this day, and U.S. officials continue to stress with their senior Russian counterparts the importance of resolving concerns about the Russian stockpile.

In becoming a State Party to the CWC, Russia accepted legal obligations to destroy its CW stockpile and to forego the development or possession of CW. In May 1997, the Duma passed, and President Yeltsin signed, the Russian Federal Law on Chemical Weapons Destruction, approving implementation of the 1996 destruction plan. The Russians provided additional details on and changes to their destruction plan in June 2002 and 2003. In recent years, Russia has taken steps to strengthen its CW destruction program, and has significantly increased funding for this program, although admittedly from a low starting point. For both financial and bureaucratic reasons, progress toward fulfilling Russia's CWC obligations has been slow, and senior-level Russian policy

statements regarding Russia's general commitment to destroy its CW stocks remain largely unimplemented. As a result, Russia has requested extensions on its CW destruction deadlines from the OPCW. With international assistance, Russia in April 2003 completed the destruction of one percent of its Category 1 CW stockpile three years after the original CWC deadline for completing such destruction.

The United States believes the Russian-proposed extended deadlines remain very optimistic and that it will be difficult for Russia to meet them without a practical plan. The United States further believes that Russia's CWC declaration is incomplete, and that Russia failed fully to declare its CW stockpile and CW-related facilities, including some related to production and development. In addition, Russia may maintain CW mobilization capacities. Moscow television commentary, for instance, related to a July 1998 OPCW inspection of the Khimprom CWPF in Novocheboksarsk noted that, "in line with safety regulations, the so-called mobilization capacities are being maintained. This is costing Khimprom vast sums of money even though this is a matter for the federal government."

The Russian declared chemical warfare agent inventory that is awaiting destruction consists of a comprehensive array of blister, choking, and nerve agents in weaponized and bulk form. In addition, since 1992, Russian scientists familiar with Moscow's chemical warfare development program have been publicizing information on a new generation of agents, sometimes referred to as "Novichoks." These scientists report that these compounds, some of which are binary agents, were designed to circumvent the Chemical Weapons Convention and to defeat Western detection and protection measures. Furthermore, it is believed that their production can be hidden within commercial chemical plants. There is concern that the technology to produce these compounds might be acquired by other countries.

The United States and other States Parties also voiced their opposition to Russia regarding destruction of Russian Category 2 chemical weapons at a facility that was not designated for CW destruction as required by the CWC.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. Since October 2000, the United States and Russia have met at the expert and senior levels on several occasions to discuss Russia's CW stockpile declaration. The consultations have been cordial, but little progress has been made. In February 2002, the United States presented questions on the accountability of Russia's CW stockpile, and proposed a plan that included a series of non-reciprocal, short-notice visits with unimpeded access to undeclared suspect Russian CW sites. To date, Russia has only agreed to site visits at declared CW storage and destruction facilities. We have indicated that our concern is not with declared facilities, but with sites that were not declared under the CWC (but should have been).

In response to U.S. questions, Russia provided some additional information and offered U.S. experts the opportunity to review historical documentation used to prepare

its stockpile declaration. A team of U.S. experts visited Moscow in December 2002 to review such documentation, but Russia knowingly provided only documents already available to the United States and other CWC States Parties through the OPCW. In response, the U.S. team pointed out the potential impact of Russian actions as it relates to U.S. Congressional funding for its CW destruction program, and further noted the seriousness of such uncooperative methods.

During 2002, the United States engaged in numerous exchanges with Russia regarding a number of compliance issues, specifically the conditions imposed by the U.S. Congress that halted Cooperative Threat Reduction (CTR) funding for construction of a chemical weapons destruction facility in Shchuch'ye. During this dialogue, the United States proposed an approach to address and resolve concerns over Russia's CW stockpile. In order to gain a sufficient level of confidence that our concerns with Russia's CW stockpile are adequately addressed, the United States developed a two-fold approach that included: (1) providing specific detailed questions on aspects of Russia's CWC declaration regarding its CW stockpile and (2) requesting a series of short-notice visits to suspect facilities. The practical objective of this initiative was to work with Russia to gain the appropriate information that will affect our confidence level, either positively or negatively, with regard to U.S. concerns regarding Russia's CW stockpile.

To further address these and other concerns, the United States and Russia held consultations in September 2003, during which Russian officials agreed to provide or authorize the OPCW Technical Secretariat to hand over documents, if available, regarding CW demilitarization activities at former CW production facilities, which could help address questions regarding CW stockpiles. To facilitate this process, the United States provided a list of OPCW documents in which references appeared to Russian documents. In June 2004, however, Russia claimed that the referenced documents had already been destroyed pursuant to its document retention policy. Russia also indicated that the United States needed further to justify its proposal for short-notice site visits to undeclared sites and insisted – despite the apparent lack of corresponding concerns about U.S. compliance – that such visits be carried out on a reciprocal basis. Nevertheless, despite these tactics, Russia continues to insist that it does not possess any undeclared chemical weapons stocks.

The United States intends to address these concerns, based on current assessments of the completeness and accuracy of Russia's chemical weapons stockpile declaration, through a combination of gathering corroborating information, encouraging Russian cooperation and transparency, continuing bilateral expert consultations, and, where appropriate, seeking Russian agreement to a U.S. proposal that would allow for short-notice visits, with unimpeded access, to undeclared suspect Russian CW sites.

On CW development facilities, the United States assesses that Russia did not declare all of its development facilities as required under Article III (1)(d) of the Convention, which obligates States Parties to declare any facility or establishment under its ownership or possession, or located in any place under its jurisdiction or control, and

that has been designed, constructed, or used since January 1, 1946 *primarily* for development of chemical weapons. Judged by this standard, the United States judges that Russia did not declare the required number of CW development facilities operational between 1946 and 1960, a time when the majority of development work on CW agents in the Russian declared stockpile likely took place. During bilateral discussions with the United States, and ongoing debate at the OPCW Executive Council meetings concerning this issue, Russia has continued to take the position that until a decision by the Council is agreed on how more specifically to define the term “*primarily for*”, the Russian declaration remains consistent with its treaty obligations.

CW Destruction at an Undeclared Facility. In March 2002, the Director General of the OPCW Technical Secretariat announced that phosgene drained from 3,844 artillery shells at Shchuch’ye and sent to a commercial facility for processing had been completely destroyed under OPCW supervision. However, Russia had never received formal OPCW approval to process the drained phosgene at the commercial site in question, and did not designate that facility as a CW destruction facility as required by the CWC. Despite these failures, however, the processing of the phosgene was done under continuous monitoring by OPCW inspectors.

Notwithstanding the presence of OPCW inspectors, the United States and other States Parties at that time maintained that the phosgene should have been destroyed pursuant to the requirements of Article IV and Part IV(A) of the CWC.

FINDING. The United States judges that Russia is in violation of its CWC obligations because its CWC declaration was incomplete with respect to declaration of production and development facilities, and declaration of chemical agent and weapons stockpiles.

SUDAN

ISSUE. Sudan did not declare any CW-related work or capabilities. The issue is whether Sudan was in the past, and continues to be, involved in CW programs and possible use of CW agents.

HISTORY OF COMPLIANCE EVALUATION. The United States first assessed Sudan’s CWC compliance in the October 2, 2000 Report. In that Report, the United States noted that Sudan has been interested in acquiring a chemical warfare capability since the 1980s, and has sought assistance from a number of countries with chemical warfare programs in order to maintain and advance its CW capabilities. The United States further believed that Sudan might have been pursuing a more advanced chemical warfare capability. Although Sudan is a party to the CWC, there have been allegations of CW use by the Sudanese against rebels in southern Sudan, although these allegations have not been confirmed. The June 2003 Report stated that:

The United States assesses that Sudan has established a CW R&D program with the goal of indigenously producing CW. The United States believes Sudan will continue to seek foreign assistance and technical expertise from a number of countries. Such activities are inconsistent with the CWC.

DISCUSSION OF OBLIGATIONS. Sudan became a State Party on June 23, 1999. Sudan submitted its initial declaration to the OPCW in January 2000, declaring only unspecified riot control agents.

ACTIONS. Numerous unconfirmed reports throughout the 1990s indicated that Sudan was researching, developing, producing, and testing CW agents. Reporting indicates that by the mid-1990s Sudan had established, with foreign assistance a CW research and development and small-scale production effort with the goal of indigenously producing CW. The United States previously assessed that Sudan was maintaining its R&D capability and probably had produced at least small quantities of CW agents. In August 1998, acting on the basis of intelligence information, the United States destroyed a facility, at Al Shifa in Khartoum, that had been suspected of producing nerve agent.

Unconfirmed reports dating back to the early 1990s also suggest the use of CW agents by the Sudanese Government against rebel forces in the south. Although claims continue to surface in press reporting, the information – particularly regarding symptoms and likely chemical use – generally has been contradictory. A series of allegations, appearing in late 1999, was investigated by several organizations and judged to be unsubstantiated. More recently, additional allegations of use of CW agents have surfaced.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. U.S. and Sudanese officials have discussed allegations of Sudanese CW activity, and Sudan has responded to U.S. inquiries.

In August 2003, Khartoum hosted jointly with the OPCW a regional meeting for national authorities of the 32 African Signatories to the CWC and observers from Great Britain, France, and the United States to signal its opposition to weapons of mass destruction.

FINDING. The United States lacks sufficient evidence to determine whether Sudan is in violation of its CWC obligations.

E. THE NUCLEAR NON-PROLIFERATION TREATY (NPT)

This section of the Report updates developments relevant to other nations' compliance with the 1968 Nuclear Non-Proliferation Treaty (NPT) and addresses, in particular, developments in China, Iran, Iraq, Libya, and North Korea (DPRK).

Some 47 countries have not complied with their obligations under Article III of the NPT to conclude with the International Atomic Energy Agency (IAEA) and put into effect a full-scope safeguards agreement within 18 months after joining the NPT. The NPT does not require application of strengthened safeguards pursuant to the IAEA Additional Protocol (AP). Nevertheless, by the end of 2003, there were 79 Additional Protocol signatories and 38 such Protocols had entered into force. The United States will continue to urge all NPT Parties required to do so to conclude a full-scope safeguards agreement with the IAEA, and to urge universal adherence to the Additional Protocol. (The United States has signed the Additional Protocol, and the U.S. Senate gave its advice and consent to the Protocol on March 31, 2004.) The United States has also urged the Nuclear Suppliers Group (NSG) to make agreement to the Additional Protocol a condition of nuclear supply.

During the reporting period, four countries — Iran, North Korea, Libya, and the former regime in Iraq — did not comply with their obligations under Article II of the NPT not to “manufacture or otherwise acquire” nuclear weapons or “seek or receive any assistance” to this end. Of these four, only Libya voluntarily chose to renounce the pursuit of WMD, and is cooperating with the United States, the United Kingdom, and the international community to come into full NPT compliance. The illicit pursuit of nuclear weapons by Iran and the DPRK, however, remain fundamental challenges to the NPT regime, which have yet to be resolved.

AGREEMENT PROVISIONS

Article I

Article I of the NPT requires that Nuclear-Weapon State (NWS) Parties (1) not transfer nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices to “any recipient whatsoever” and (2) “not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.”

The NPT does not define the specific terms of the second obligation (*i.e.*, “assist, encourage, or induce”). Nor does the NPT negotiating record suggest specific criteria for determining whether a NWS has “assisted,” “encouraged,” or “induced” a Non-Nuclear-Weapon State (NNWS) to manufacture or acquire nuclear weapons.

For its part, however, the United States has made clear to the other NWS Parties that it views comprehensive controls over the following categories of items as helping fulfill a State Party’s obligations under Article I: (1) specialized nuclear equipment, nuclear material and certain non-nuclear material covered by paragraph 2 of Article III of the Treaty; (2) nuclear-related dual-use equipment, material and all nuclear-related technology covered by the Guidelines of the Nuclear Suppliers Group (NSG); and (3) equipment, material, and technology with direct relevance to nuclear weapons.

Article II

Under Article II, NNWS Parties undertake four distinct obligations: (1) not to receive a nuclear weapon or other nuclear explosive device; (2) not to exercise control over such weapons or explosive devices directly or indirectly; (3) not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and (4) not to seek or receive any assistance in the manufacture of nuclear weapons or nuclear explosive devices.

In assessing a NNWS Party's compliance with its Article II obligations – not to manufacture, or to seek or receive any assistance in the manufacture of, nuclear weapons – no simple, clear, “bright-line” rule exists. In explaining the term “manufacture” to the U.S. Senate in connection with the NPT ratification process, Arms Control and Disarmament Agency Director William Foster stated that it was not possible to “formulate a comprehensive definition or interpretation,” and he doubted the efficacy of such efforts “unrelated to specific fact situations.” Accordingly, compliance assessments are highly contextual, and no single, comprehensive definition, unrelated to specific factual situations, would be useful. However, the United States has explicitly stated that the prohibition against the “manufacture” of a nuclear weapon, as well as against seeking or receiving any assistance in this regard, reaches more than simply the final assembly of such a device. In addition, Director Foster advised the Senate that “facts indicating that the purpose of a particular activity was the acquisition of a nuclear explosive device would tend to show noncompliance.” Thus, as with Article I, an important factor in Article II compliance analysis is the purpose of a particular activity.

U.S. officials have publicly outlined some of the “warning signs” that may indicate a prohibited nuclear weapons purpose, and thus suggest that a country's ostensibly “peaceful” nuclear program might have violated Article II and should be closely scrutinized. Such indicia can include: (a) the presence of undeclared nuclear facilities; (b) procurement patterns inconsistent with a civil nuclear program (*e.g.*, clandestine procurement networks, possibly including the use of front companies, false end-use information, and fraudulent documentation); (c) security measures beyond what would be appropriate for peaceful, civil nuclear installations; (d) a pattern of Article III safeguards violations suggestive not of mere mistake or incompetence, but of willful violation and/or systematic deception and denial efforts aimed at concealing nuclear activities from the International Atomic Energy Agency (IAEA); (e) a nuclear program with little (or no) coherence for peaceful purposes, but great coherence for weapons purposes (*e.g.*, heavy water production in a country the civil nuclear facilities of which use only light water as a moderator, or pursuit of enrichment facilities when other, cheaper energy-producing resources or an outside source of enriched uranium are available, or the pursuit of a full fuel cycle for a civil reactor program too small to provide economic justification for such an effort). As cited by Director Foster in his testimony to the Senate as relevant to a finding of “manufacture,” activities related to the acquisition or testing of the non-nuclear components of the nuclear explosion are an example of the type of activities that would provide a more direct indicator of a weapons

program. Informed by the analysis of such factors, judgments as to the purpose of a Party's nuclear activities therefore lie at the core of Article II compliance assessments.

In sum, Article II assessments must look at the totality of the facts, including judgments as to the NNWS Party's purpose in undertaking the nuclear activities in question, to determine whether the Party has engaged in efforts to manufacture or otherwise acquire a nuclear weapon or other nuclear explosive device, or has sought or received any assistance in such manufacture. Such compliance assessments are acquiring particular salience given the linkage between Article II compliance and a Party's rights to share in the benefits of nuclear technology pursuant to Article IV (see below).

Article III

To prevent the diversion of nuclear energy from peaceful uses to nuclear weapons, Article III requires that each NNWS Party enter into a safeguards agreement setting out the safeguards procedures to be applied to all source or special fissionable material in all peaceful nuclear activities. Paragraph 1 of Article III requires NNWS Parties "to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency." The same Article specifies that "[p]rocedures for the safeguards required by this article shall be followed with respect to source or special fissionable material whether it is being produced, processed, or used in any principal nuclear facility or is outside any such facility," and goes on to state that "safeguards required by this Article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere."

As required by Paragraph 2 of Article III, each State Party undertakes not to provide source or special fissionable material, or equipment or material especially designed or prepared for processing, use, or production of special fissionable material to any NNWS for peaceful purposes unless it is subject to safeguards in that NNWS. Paragraph 4 specifies that, for States depositing their instruments of ratification or accession later than 180 days after the original entry into force of the Treaty, "negotiation of such agreements shall commence not later than the date of such deposit ... [and] such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations."

The IAEA's strengthened safeguard system was designed to enhance the IAEA's verification capacity with regard to NNWS Parties by: (1) detecting the diversion of declared materials for nuclear weapons purposes, and (2) detecting undeclared activities in those states. In furtherance of these goals, in 1992, a voluntary universal reporting system for transfers of nuclear equipment and specified non-nuclear materials was created, the IAEA's right to conduct special inspections was affirmed, and the Agency was granted permission to use all available information sources, including intelligence. Under Program 93+2, the IAEA began a dedicated program to enhance safeguards in 1993. Under Part 1 of the program, first implemented in 1995, the IAEA began making

enhanced use of existing authorities, in particular of environmental sampling at existing locations of nuclear materials.

IAEA Additional Protocol. In May 1997, the IAEA approved the Model Additional Protocol (AP) under Part 2 of Program 93+2. If a NNWS adheres to the AP, it accepts obligations additional to those of its full-scope safeguards agreement and expands the IAEA's rights with respect to that State. Among the provisions of the Additional Protocol are the following:

- States are required to submit an expanded declaration to the Agency. For example, under the Additional Protocol, all buildings on the site of a nuclear facility must be declared and identified, regardless of use. States are also required to include in their declarations specified nuclear-related activities, such as information regarding public and private nuclear-related fuel cycle R&D not involving nuclear material.
- IAEA inspectors have “complementary access” rights to additional locations, including but not limited to those reported in the expanded declaration, for the purpose of resolving questions about the correctness and completeness of a State's declaration or resolving inconsistencies relating to that information. Such access, which may be conducted upon 24- hours notice or less, may include the collection of environmental samples. The IAEA also has the authority, under certain circumstances, to conduct environmental sampling at undeclared locations.

While most countries with major nuclear activities have signed the AP, it is not universal. President Bush has made clear that achieving universal adherence to the AP as the new minimum standard for strengthened IAEA safeguards is a high U.S. nonproliferation objective, and that such acceptance is vital to the long-term health and effectiveness of the NPT, although failure to adhere to the Additional Protocol is not considered noncompliance in this report. While not a panacea, the AP represents the strongest tool now widely available to the IAEA in its work to detect safeguards violations and assess the presence or absence of undeclared nuclear activities.

As suggested previously, Article III (safeguards) violations can sometimes be the result of mistake, error, or simple incapacity. In other cases, they can represent willful efforts to conceal more serious violations of nonproliferation obligations, such as the existence of a clandestine nuclear weapons program in violation of Article II. There is, therefore, a potential link between Article III compliance and compliance with Articles I and II. Accordingly, recent U. S. public statements have stressed the importance of Article III safeguards compliance, noting the potential connection between Article III violations and Article II noncompliance. These statements have further indicated that nuclear cooperation, as called for in Article IV, may be jeopardized when a Party's Article III problems create concerns that such problems are indicators of a clandestine nuclear weapons program.

IAEA Safeguards Compliance. There is a distinction between IAEA *safeguards* compliance determinations and judgments about compliance with the Nuclear Non-Proliferation Treaty. While safeguards compliance is necessary for Article III compliance, the Treaty Article is slightly broader. The IAEA does not make determinations regarding compliance with the NPT. Such questions are for the States Parties to the Treaty.

With regard to assessing safeguards compliance, it may on occasion occur that an anomaly or question arises with respect to the implementation of a country's IAEA Safeguards Agreement. Some such anomalies or questions may be cleared up easily and quickly. Minor, merely technical errors in the implementation of safeguards are normally resolved between the IAEA Secretariat and the State concerned. Such incidents may raise compliance concerns, but generally do not constitute noncompliance, in and of themselves for purposes of the United Nations reporting requirement of the IAEA Statute.

It may be, however, that more significant issues arise. For instance, information that calls into question the IAEA's ability to verify that nuclear material required to be safeguarded (including material that should have been declared but may not have been) has not been diverted can be information of great significance to the IAEA, to national governments, and to the broader international community. It is the technical objective of the safeguards system to ensure the timely detection of the diversion of significant quantities of material to nuclear weapons or other nuclear explosive devices or to purposes unknown. If the Board of Governors finds that the IAEA is unable to verify such non-diversion, this may be reported to the United Nations pursuant to Paragraph 19 of the IAEA's model for the structure for NPT safeguards agreements (INFCIRC/153). Indeed, the United States believes that such instances *should* be so reported if, for instance, the Agency's inability to verify non-diversion continues for any significant length of time, especially in circumstances that suggest any reason to be concerned about the possibility of access to fissile materials by criminals, terrorists, or others who might have an interest in the acquisition of nuclear materials for non-peaceful or unlawful purposes. (Even if the inability to verify occurred in the past and all materials have subsequently been accounted for, it may be appropriate to communicate with the UN to the extent that the episode reveals flaws in the safeguards system in that country or – more generally – flaws in the international safeguards system of which the UN should be aware.) If the IAEA determines that it is unable to verify a State Party's compliance with its Safeguards Agreement because that state refuses to allow timely access to a facility, then the IAEA should conclude that the state's denial of access constitutes noncompliance. In other words, in certain circumstances, a state's decision not to let the IAEA carry out its safeguards mission should be considered noncompliance.

Information may also come to light indicating that the country in question is or was in noncompliance with its safeguards obligations. This is a slightly different question than that raised by inability to verify non-diversion under Paragraph 19 of INFCIRC/153, though in some circumstances the same information will likely meet both

standards, insofar as some noncompliance may naturally raise questions about the IAEA's ability to verify non-diversion. In any event, a finding by the Board of Governors of noncompliance *must* be reported to the United Nations General Assembly and Security Council – as well as specifically to all IAEA member states – pursuant to Article XII.C of the IAEA Statute. In pertinent part, Article XII.C states:

... The inspectors shall report any noncompliance to the Director General who shall thereupon transmit the report to the Board of Governors. The Board shall call upon the recipient State or States to remedy forthwith any noncompliance which it finds to have occurred. The Board shall report the noncompliance to all members and to the Security Council and General Assembly of the United Nations.⁴

Within the IAEA system, the Board of Governors has final responsibility for a question central to safeguards enforcement – *i.e.*, determining whether or not a matter qualifies as safeguards “noncompliance,” and thus whether that matter falls within the mandatory reporting rule of Article XII.C of the Statute. A finding of noncompliance need not necessarily use the word “noncompliance,” though such clarity is certainly preferable. The United States believes noncompliance judgments by national governments or by the IAEA should be made on the basis of the facts, not based upon political calculation or the mere use (or avoidance) of specific trigger words.

The lapse of time between the occurrence of a violation and its discovery is not a relevant consideration for judging safeguards compliance. In addition, neither a country's lack of intent to violate its agreement nor its close cooperation with the IAEA subsequent to the point at which the violation occurred preclude a finding of noncompliance. Information suggesting that a problem is *deliberate* would certainly support a finding of noncompliance, but some problems remain significant whether or not they are intentional.

Safeguards compliance judgments are necessarily somewhat contextual, and may be affected by a number of factors. Such factors must be carefully considered in light of all the circumstances. Considerations that may be quite relevant in assessing the significance of a safeguards problem include: the nature and quantity of the material involved; the relevance of the activity in question to nuclear weapons development (*e.g.*, enrichment or reprocessing versus civil reactor operations); and the degree to which the problem is part of a pattern of similar or related problems. Thus, it is possible that even the non-declaration of a very small quantity of some materials in one single instance could constitute noncompliance if it occurred in connection with activities that were

⁴ Article III.B.4 of the Statute also provides that the IAEA “shall notify the Security Council, as the organ bearing the main responsibility for the maintenance of international peace and security, if in connection with the activities of the Agency questions arise within the competence of the Security Council.” Although issues of safeguards compliance may lie within the Security Council's competence because of their intrinsic connection to nuclear nonproliferation, Article III.B.4 is broad enough to permit the IAEA to report an issue to the Council even when it is not specifically related to safeguards at all. (U)

closely related to nuclear weapons development. Information suggesting deliberate concealment or other deceptive practices would be highly relevant to a safeguards compliance assessment. Indeed, the presence of such practices could make the difference in distinguishing a mere technical error or mistake in one country from an instance of noncompliance in another – even where the activities in question were otherwise similar. A state’s past record of safeguards compliance, moreover, would also be a relevant factor in how future problems are evaluated; countries that have a history of serious compliance problems should be scrutinized with particular care.

It should also be noted that a state party that withdraws from the NPT after violating the Treaty’s provisions should not escape responsibility for those violations.

Finally, in grappling with safeguards compliance issues, it must be remembered that the technical objective of IAEA safeguards (as stated in paragraph 28 of INFCIRC/153) is to ensure the timely detection of any diversion of nuclear material to nuclear weapons or other nuclear explosive devices, or to purposes unknown. Compliance with safeguards agreements is critical because their role is to give the international community sufficient warning to permit responses before malefactors can capitalize upon such a diversion. In an era of increasing dissemination of proliferation-sensitive nuclear technologies, regional nuclear arms races, illicit nuclear smuggling and acquisition networks, and terrorist networks bent upon the acquisition of weapons of mass destruction, determinations about the significance of safeguards problems must be made in view of their potential consequences in today’s dangerous world. The United States believes that in the event of “close calls,” it is better to err on the side of prudence in formally calling attention to – and notifying the international community of – noncompliance problems.

Article IV

Article IV of the NPT speaks both to the right of States Parties to participate in taking advantage of the benefits of nuclear technology and to their NPT obligation to do so only in ways consistent with the nonproliferation obligations of the Treaty. The first paragraph of Article IV provides that “nothing in this Treaty shall be interpreted as affecting the inalienable right” of States Parties to pursue the use of nuclear energy “for peaceful purposes” and “in conformity with articles I and II of the Treaty.” The second paragraph in Article IV deals with international cooperation in developing nuclear energy. Article IV(2), however, does not compel supplier states to provide any specific nuclear technology to any specific NPT party. Therefore, it is not inconsistent with Article IV for an NPT party to restrict nuclear supply to another NPT party or otherwise exercise discretion in determining the nature of its relationship with other countries. Therefore, nonproliferation efforts such as export control restrictions, Nuclear Suppliers Group technology-transfer guidelines, end-use restrictions, interdiction measures such as the Proliferation Security Initiative, the imposition of national or international sanctions in response to nuclear-related proliferation problems, and efforts to restrict the spread of

proliferation-sensitive enrichment and reprocessing technology are in no way inconsistent with Article IV.

States Parties to the Treaty have accepted the condition that their nuclear activities must be carried out in conformity with Articles I and II of the Treaty. Thus, if a State Party has violated Article I or Article II, that state cannot argue that Article IV protects it from the consequences of breach, including the imposition of measures by other states against its nuclear program.

COUNTRY ASSESSMENTS

CHINA

ISSUE. China's nuclear-related interactions with other countries have raised concerns regarding China's compliance with its NPT Article I obligation "not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons."

HISTORY OF COMPLIANCE EVALUATION. China has joined several international nuclear regimes and has promulgated comprehensive nuclear export controls over the past decade in an effort to bolster its credentials as a responsible international player. Beijing signed the Nonproliferation Treaty in 1992, joined the NPT Exporters ("Zangger") Committee in 1997, and implemented dual-use nuclear export controls based on the Nuclear Suppliers Group (NSG) control list in 1998. Nevertheless, until May 2004, China was the only NPT nuclear weapon state that had declined to join the NSG. It should be noted, however, that NSG membership is not required by the NPT. Since the Zangger Committee only requires item-specific safeguards; as opposed to the more stringent requirement of the NSG, which mandates full-scope safeguards, China was therefore technically in a position to sell controlled nuclear-related items to non-NPT members, as long as the items themselves went to a facility subject to safeguards. This technical difference made it possible for China to provide assistance to safeguarded facilities, in such countries as Pakistan, should it choose to do so. It appears that Chinese policies and nuclear export control systems contain all the necessary elements to enforce China's obligations under Article I of the NPT should China wish to. In the June 2003 Noncompliance Report, the United States concluded that:

While we continue to believe that Beijing is seriously prepared to implement its NPT obligations, and has taken steps to do so, given all the available information, the United States remains concerned about China's compliance with its nuclear nonproliferation commitments.

DISCUSSION OF OBLIGATIONS. In early 1992, China acceded to the NPT. By joining the Treaty as a Nuclear-Weapon State Party, China became obligated under Article I of the Treaty not in any way to assist, encourage, or induce any NNWS to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices.

Under Article III, China also made a commitment to ensure the application of IAEA safeguards on exports to any NNWS of nuclear material and equipment especially designed or prepared for the processing, use, or production of special nuclear material. The NPT exporters' Zangger Committee has defined a "trigger list" of such equipment and material, and members have announced a common understanding on controlling listed items as a guideline for implementing this provision.

While China is a member of the Zangger Committee, until May 2004 it was the only nuclear weapons state that was not also a member of the Nuclear Suppliers Group (NSG), which requires full scope safeguards (*i.e.*, IAEA safeguard on all nuclear material) in a recipient NNWS state as a condition of nuclear exports. At that time, China did, however, have export control laws that mirror the NSG guidelines during the reporting period. In addition, on May 11, 1996, China publicly pledged to the United States that it would not provide assistance to unsafeguarded nuclear facilities. China was accepted into the NSG in May 2004.

In a 1997 letter provided to the United States, the Chinese Vice Premier stated that "China consistently has opposed the proliferation of weapons; does not advocate, encourage or engage in proliferation of nuclear weapons, nor assists other countries in developing nuclear weapons."

ACTIONS. As the United States has monitored China's actions in relation to its obligations under the NPT, China's interactions with two countries, in particular, have raised concerns. Most of the basis for these concerns cannot be discussed here, but it is worth noting that in February 2003, an anti-Iranian opposition group alleged publicly that Chinese experts were continuing to work at Iran's Saghand uranium mine as supervisors.

In 2002 and 2003, foreign entities also continued their efforts to acquire nuclear-related materials and dual-use equipment from Chinese suppliers. Such contacts remain an intense concern of the United States.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. China's compliance with its nuclear nonproliferation obligations has been the subject of considerable scrutiny. In the past, the United States has cited two key factors as being especially relevant to our judgment of China's compliance with the NPT: (1) China's May 11, 1996, public and private commitments not to provide assistance to unsafeguarded nuclear facilities; and (2) the establishment of a comprehensive national nuclear export control system. U.S. officials stressed that China's May 11, 1996, commitments should also prohibit assistance to entities involved in the design or testing of the non-nuclear components of a nuclear device.

In laying out the principal elements of a comprehensive nuclear export control system, U.S. officials stressed a number of factors: that controls should apply to all private and public entities; that the control list should encompass all equipment, material and technology covered by the NSG, including dual-use items; that technology controls

should extend to personnel as well as information; that some type of catch-all control should be part of the system; and that the controls should extend to nuclear weapons information and equipment.

It appears that Chinese policy and nuclear export control systems, adopted in the aftermath of the October 1997 U.S.-China Summit, contain all the elements necessary to permit China to implement its obligations under Article I of the NPT. This conclusion led President Clinton, on January 12, 1998, to send to Congress the certifications necessary to implement the 1985 U.S.-China peaceful nuclear cooperation agreement. Thereafter, members of Congress were briefed in closed session on the details of a few cases. On March 18, 1998, following a review of 30 days of continuous session of Congress, the conditions for the initiation of U.S. peaceful nuclear cooperation with China were met.

Chinese regulations in place cover both trigger list items (*i.e.*, those items relevant to Article III of the NPT) and nuclear dual-use items. China promulgated nuclear dual-use regulations by mid-1998. “Catch-all” control authority exists for Chinese government departments and the government has the authority to control items that may not be on control lists. The controls apply to technology in the form of exchanges of personnel, as well as to the transfer of written information and tangible items.

China’s export control system appears designed to ensure adequate review for those exports that come to the attention of Chinese export control authorities if these authorities choose to exercise this authority.

FINDING. China has joined several international nuclear regimes and has promulgated comprehensive nuclear export controls over the past decade. Nevertheless, based upon all available information, the United States remains concerned about the effectiveness of Chinese nuclear export controls and China’s compliance with its NPT Article I nuclear nonproliferation commitments.

IRAN

ISSUE. The issue is whether Iran is in violation of its obligations as a non-nuclear weapon State Party to the NPT.

HISTORY OF COMPLIANCE EVALUATION. The United States assessed Iran’s compliance with the NPT as early as the January 14, 1993 Report. At that time, the United States concluded that Iran had demonstrated a continuing interest in nuclear weapons and related technology that caused the United States to assess that Iran was in the early stages of developing a nuclear weapons program, with an emphasis on developing centrifuge technology. The Report in 1993 stated that Iran’s “nuclear intentions are suspect despite its NPT adherence.” The Noncompliance Reports from 1994 through 1998 said similarly that Iran’s “NPT nonproliferation credentials” were “highly questionable” or “questionable.” In 1997, 1998, and 1999, the United States

declared that Iran's nuclear intentions were "suspect despite its status as an NPT State Party." In the June 2003 Noncompliance Report, the United States concluded that:

Based on the totality of the available information, the United States assesses that Iran is pursuing a program to develop nuclear weapons. Aspects of this activity are in violation of Iran's NPT commitments.

DISCUSSION OF OBLIGATIONS. Iran signed the NPT in July 1968, and deposited its instrument of ratification in February 1970. Iran's full-scope Safeguards Agreement with the IAEA entered into force in May 1974. The 1992 IAEA Board of Governors called upon all states with NPT type safeguards agreements to revise the timing for advance notification of planned nuclear facilities to provide for earlier notice to the IAEA. (Iran did not agree to this until February 2003 and was the last to do so.) In late 1995, Iran accepted part one of the IAEA Strengthened Safeguards System (developed under Program 93+2) which, among other things, allows the IAEA to conduct environmental sampling at declared facilities, other declared locations, and locations of special inspections. In the 2001 IAEA's Safeguards Implementation Report (SIR), Iran was singled out as the last State that refused to accept the key safeguards-strengthening measure to revise the timing for advance notification of planned nuclear facilities. During the February 21-22, 2003 visit of the IAEA Director General (DG) to Iran, Iran reportedly agreed to adhere to a subsidiary arrangement obligating it to provide the IAEA with design information in advance of construction of nuclear-related facilities. As part of a political agreement in the autumn of 2003, Iran agreed to permit IAEA access as if the AP were in force. In December 2003, Iran signed the Additional Protocol, but has not yet ratified it.

ACTIONS. Iran has continued the indigenous construction of nuclear-related facilities, such as Arak and Nantaz, and attempts to acquire equipment for such facilities from abroad. Iran has obtained considerable quantities of nuclear equipment – including both P-1 designs, components and centrifuges, and more advanced P-2 centrifuge design drawings – from foreign companies, including those associated with the AQ Khan illicit procurement network. As confirmed by the IAEA in 2003, Iran engaged in a secret effort for nearly two decades to acquire uranium enrichment and plutonium production and reprocessing technology.

Iran sought assistance during the reporting period of this Report in mining and ore concentration, as well as uranium recovery process technology from numerous states in central Asia and Europe. These activities reconfirmed that Iran is developing domestic sources of uranium, which could eventually be used in its nuclear weapon development program. Additionally, Iran renewed its efforts to acquire significant quantities of natural uranium from foreign sources. Although Iran claims an economic rationale for its nuclear programs – Iranian use of nuclear power will free up oil for exports – its pursuit of expensive uranium and recovery technology, given the insufficient size of Iran's domestic uranium reserves, does not make economic sense, suggesting an ulterior motive for such expensive activities. Moreover, these activities are particularly suspicious in

view of the contract Iran is negotiating with Russia to supply fuel for the Bushehr reactor for the lifetime of operation.

In 2000, Iran declared the existence of its uranium conversion facility (UCF) to IAEA officials and, in 2001, submitted to the IAEA a design information questionnaire for the UCF. The IAEA, in consultation with experts from the United States and other countries, began in 2002 to develop a robust safeguards approach for the UCF. As part of this effort, IAEA safeguards experts visited the UCF.

Iran has conducted research, in some cases extensively, in several enrichment technologies, including gas centrifuge, and laser isotope separation. In August 2002, an Iranian opposition group revealed the existence of two covert nuclear facilities under construction in Iran – a heavy water production plant at Arak and a “fuel production” plant at Natanz.

As subsequently detailed by the IAEA acting on the basis of the August 2002 revelations, Iran had embarked years before upon a hugely ambitious production-scale centrifuge program. Iran confirmed to the IAEA DG in February 2003 that the Natanz site is intended to be an industrial-scale centrifuge enrichment facility, ostensibly to supply nuclear fuel for three 1,000-MWe nuclear power plants. The DG in February 2003 visited the plant and viewed a pilot-scale centrifuge plant under construction with a number of centrifuges spinning under vacuum and many more in various states of assembly. The IAEA was unable at that time to take samples that would provide specific evidence of the materials that had been introduced into the facility. Prior to the public revelations, Iran had failed to declare this and the Arak facilities to the IAEA, despite public statements by Iranian officials that all their nuclear activities were being undertaken with the supervision of the IAEA. Under Iran’s subsidiary arrangements then in effect with respect to its safeguards agreement, Iran was not required to declare nuclear facilities until six months before nuclear material was introduced. Under the revised subsidiary arrangements adopted in February 2003, Iran is required to provide design information on such facilities at a much earlier stage, during planning, construction and testing.

As outlined in IAEA reports, Iran also engaged in a systematic practice of denial and deception, not only concealing its enrichment work from the Agency for many years, but also responding to IAEA inquiries with a shifting pattern of false or misleading statements as details gradually emerged. Iran, for instance, had declared no uranium centrifuge program to the IAEA at all, but after the Natanz facility was publicly revealed, Iran admitted that it had indeed been developing such a program since 1997. After the IAEA began probing further into the development of this program, Iran changed its story again – admitting that the program had in fact been underway since 1985. Iran first claimed that its centrifuge program had been designed only on the basis of simulations, but after IAEA experts questioned this closely and argued that Iran must have tested with UF₆, Iran admitted that it had actually used foreign design information. This

contradicted Iran's previous claims that it had developed centrifuges entirely indigenously.

When confronted with the IAEA's discovery of highly-enriched uranium (HEU) particles in environmental samples taken at the Natanz facility and two other locations, Iran declared that it had used not only foreign design information, but also foreign centrifuge *components*, which it claimed were the source of the HEU. Iran for some time refused to provide the IAEA with any information about the source of either the foreign design information or the components. When the IAEA asked to see the original foreign designs, Iran also refused – providing only “redrawn” versions for inspection by IAEA experts. It has subsequently become clear that the Iranian design information (as well as a quantity of centrifuge components) in fact came from the A.Q. Khan nuclear supply network – the same network that provided such technology, as well as actual nuclear weapons designs, to Libya.

When suspicions were raised about possible enrichment activity at the Kalaye Electric Company facility in Tehran, Iran first denied it, claiming that the facility was a warehouse or watch factory. Iran subsequently admitted that it *was* a nuclear-related location, but identified Kalaye as merely a centrifuge component facility. Iran then changed its story again, as the IAEA probed more closely, conceding that it had tested centrifuges there for at least five years. Iran refused IAEA requests to conduct environmental sampling at Kalaye for many months, however, during which time it reportedly cleaned and refurbished the interior of the buildings at the facility – activities clearly intended to thwart the IAEA's ability to obtain useful samples. At another facility suspected of conducting laser enrichment activities, Iran similarly denied permission for IAEA sampling and moved equipment out of the building. More recently, Iran has completely razed a building at Lavisan that had been publicly identified by an opposition group as being associated with WMD-related activity. The IAEA's success in obtaining information from environmental sampling appears to have led Tehran to assume that the only safe way to “sanitize” an illicit facility is to demolish it completely.

After years of concealing it from the IAEA, Iran has also admitted that it conducted laboratory-scale uranium conversion work and small-scale laser isotope separation during the 1990s, using uranium compounds not declared by Iran to the IAEA. The failure to report this material was a violation of Iran's safeguards agreement. Iran also conducted undeclared plutonium separation experiments using uranium metal “targets” secretly irradiated in its research reactor, as well as the production of polonium-210 (Po-210), an isotope that is used in many nuclear weapons triggers.

Iran's pursuit of the foregoing capabilities is suspicious for a number of reasons. These capabilities are well suited to the development of a nuclear weapons capability, but they are unnecessary and uneconomic for a civil nuclear program at Iran's level of development. Iran failed to declare these activities and engaged in systematic deception in order to conceal them from the IAEA, and to that end delayed acceptance of strengthened measures including the Additional Protocol. It is suspicious, as well,

because this nuclear program makes little sense in the context of Russia's stated commitment to supply fuel for the lifetime of the Russian-supplied Bushehr reactor and Iran's lack of any serious economic or energy policy justification for such an extensive nuclear fuel-cycle effort. Iran, for instance, wastes more energy in flaring off natural gas in its extensive refinery operations than it would be able to produce even were it able to complete its ambitious nuclear construction program. As noted, according to the Organization for Economic Cooperation and Development's statistics, Iran does not possess sufficient "known reserves" of uranium to supply a civil power program of the size it claims to be pursuing. During the reporting period, Iran continued efforts to develop all aspects of the nuclear fuel cycle and sought foreign assistance, to include training for its nuclear personnel. We believe this effort combines elements of not only the activities declared to the IAEA and ostensibly run by the civilian AEOR, but also undeclared fuel cycle activities that may be run solely by the military. The United States continues to work at all levels to prevent such transfers from occurring.

IAEA inspections throughout 2003 uncovered Iran's covert construction of a large nuclear fuel cycle program and numerous "breaches" of, and "failures" to comply with, Iran's safeguards agreement. The IAEA uncovered, or Iran was forced to admit, design work on a large heavy water research reactor, a uranium enrichment AVLIS facility, reprocessing experimentation, past polonium production, and research and development of a more advanced P-2 centrifuge design (in addition to the P-1 program discovered at Natanz). Moreover, IAEA investigations have uncovered previously undeclared enrichment experiments, plutonium production experiments, and numerous uranium conversion experiments.

At the November 2003 IAEA Board of Governors meeting, and in the wake of a French, British, and German diplomatic mission to Iran, the Board adopted a resolution strongly deploring Iran's past failures and breaches of its obligation to comply with its Safeguards Agreement. While the Board did not report Iran's noncompliance to the Security Council at that point as required by the IAEA Statute, it did formally resolve that "should any further serious Iranian failures come to light, the Board of Governors would meet immediately to consider, in the light of the circumstances and of advice from the Director General, all options at its disposal, in accordance with the IAEA Statute and Iran's Safeguards Agreement." In connection with the diplomatic effort of the so-called EU-3, Iran made a detailed declaration to the IAEA and decided voluntarily to suspend all "uranium enrichment and reprocessing activities as defined by the IAEA." On October 29, the IAEA specified that the enrichment-related activities to be suspended should include assembly of centrifuges and manufacture or import of enrichment equipment, and that Iran should "consider suspending" production or import of feed material. Iran never fully ceased the production of centrifuge components and was discovered to have omitted the more advanced P-2 centrifuge information from its October 2003 declaration. In the summer of 2004, Iran repudiated its February 2004 addendum and its October 2003 suspension pledge and announced that it was resuming full-scale centrifuge production and uranium conversion. Iran re-committed itself to the EU-3 in the November 2004 Paris Agreement to voluntarily and temporarily suspend

specified enrichment-related activities, including “all testing or production at any uranium-conversion installation,” during the period of negotiations on a longer term arrangement. These developments will be detailed in the next NCR.

Iran also continued to pursue uranium mining and ore concentration activities throughout the period of this Report.

Additionally, Iran attempted to obtain laser and other dual-use equipment from Russia that can have applications in atomic vapor laser isotope separation (AVLIS), as an alternative means of uranium enrichment. In the fall of 2000, Russian President Putin indicated that Russia would suspend any AVLIS-related transactions with Iran, at least for the immediate future. MINATOM Minister Aleksandr Rumyantsev reaffirmed this to Under Secretary of State John Bolton in November 2002. Russian export authorities withheld authorization to export two critical AVLIS-related items to Iran, and by 2003 Russia appeared to have withdrawn from the AVLIS cooperation. It is now publicly known that Iran conducted AVLIS enrichment work in violation of its safeguards agreement. Iran declared its AVLIS program to the IAEA only in October 2003, and in May 2004 admitted, contrary to previous claims, that it had achieved enrichment levels – in very small quantities – as high as 15 percent.

In January 1995, Iran signed a contract to purchase from Russia a light water nuclear power reactor (model VVER-1000) to be constructed at Bushehr. In addition to Russia’s continuing construction activities at the site of the first reactor of the Bushehr complex, Russia and Iran have discussed provision of up to five additional reactors. Russian officials have noted publicly that construction of those reactors will not begin until the first unit is complete.

Although the Bushehr project is not a compliance issue, in and of itself, the secondary proliferation potential for Iran to exploit this facility and use it as a cover for weapons-related training and technology acquisition is an enduring NPT concern. Specifically, the United States is concerned that the Bushehr project can be a cover to acquire more sensitive nuclear technologies and provides an ostensibly legitimate reason for Iran to acquire and maintain skills and nuclear expertise applicable to weapons work. In previous years, several countries agreed to pull back from lucrative contracts relating to Bushehr. Even in the face of ongoing revelations of undeclared Iranian activities and deceptions upon the IAEA, however, Russia remains committed to the Bushehr project.

Iran has made persistent efforts to construct a large, heavy water moderated nuclear research reactor, which would be well suited for the production of weapons-grade plutonium. Iran’s ability to produce heavy water and nuclear-grade graphite would materially support its efforts to design and indigenously construct a reactor intended for producing weapons-grade plutonium. This activity is also entirely consistent with Iran’s past undeclared experiments with target irradiation and plutonium separation.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. Iran is aware that many states view its nuclear intentions with suspicion despite its status as an NPT State Party, and that these suspicions have limited its ability to obtain foreign technology, equipment, and facilities. The Iranian announcements and admissions of the development of an indigenous nuclear fuel cycle, in late 2002 and early 2003, have occurred immediately after suspicious activity was revealed and were not undertaken in the spirit of providing the IAEA with the required safeguards information. As detailed above, Iran's long series of progressive admissions to the IAEA followed this same pattern: previously secret activities have usually been admitted only after Iran has been presented with evidence thereof, or been confronted with internal contradictions in the accounts it has given. Admissions have been grudging and piecemeal, and cooperation with the IAEA has been reluctant and accompanied by protests, accusations, and threats. As the United States put it at the November 2003 IAEA Board of Governors meeting, the IAEA's own investigations have "confirmed Iran systematically and deliberately deceived the IAEA and the international community about these issues for year after year after year." The United States believes that the IAEA Director General's reports make it "unequivocally clear that Iran chose – as a matter of government policy sustained for well over a decade – to violate its safeguards obligations in full knowledge that its actions and omissions were violations." Iran concealed its secret nuclear program, the United States has said, "behind a cloud of lies." Even the IAEA Director General has declared that Iran engaged in a longstanding "policy of concealment."

Iran's safeguards agreement is based on the standard NPT safeguards model agreement found in IAEA Information Circular (INFCIRC) 153. Under this agreement, Iran is obligated to provide the IAEA with information about the nuclear compounds it imported so that safeguards could be applied. Iran's safeguards agreement with the IAEA also allows that "nuclear material that would otherwise be subject to safeguards shall be exempted from safeguards at the request of the State" provided that nuclear material does not exceed a certain quantity. Iran should have reported the nuclear material it received in 1991 from a different country when it received that material. (Two of the compounds in question – uranium hexafluoride (UF₆) and uranium oxide (UO₂) – meet the threshold for application of safeguards.) If Iran had done so, it could have sought to obtain an exemption from the application of these safeguards for any quantities that were below the threshold level. Iran, however, did neither; therefore, Iran's actions with regard to the materials received in February 1991 violate Iran's obligations under Article III, paragraph 1 of the NPT. So also do Iran's undeclared experiments with uranium conversion, plutonium separation, and laser isotope separation.

In November 1996, Iranian authorities permitted the IAEA to conduct environmental sampling as provided for under part one of the IAEA Strengthened Safeguards System (SSS). In 2003, the IAEA extensively sampled newly disclosed Iranian facilities as part of its ongoing investigation into Iran's nuclear program. Samples taken by the IAEA at Natanz after the public revelation of that facility in 2002, however – along with samples taken at the Kalaye Electric compound and the Faryand Technique centrifuge workshop – indicated the presence of enriched uranium (and in one instance,

very highly enriched uranium). Iran has claimed that these samples resulted only from foreign contamination on centrifuge components acquired abroad. Through the end of the period of this Report, the IAEA continued to investigate the HEU particles found at Iranian centrifuge facilities.

Iran's failure to ratify and fully abide by the IAEA Additional Protocol – and its continuing efforts to stymie international inspectors through such means as remodeling the interior of the Kalaye Electric facility or razing the building at Lavisan before they could be inspected by the IAEA – underline Iran's lack of good faith in complying with its safeguards agreement and its NPT obligations.

In June 2001, Iranian President Mohammed Khatami was reelected in a landslide election victory. Despite short-lived signs of possible moderation within the Iranian regime, there is no evidence that Iran's nuclear ambitions have changed. More recently, victories by clerically-supported conservatives in the Iranian national legislature – not to mention explicit declarations by some legislators that they will not ratify the Additional Protocol – casts further doubt upon the prospect of Iranian compliance and on Iran's continued commitment to its IAEA and NPT obligations. The United States assesses that Iran has an ongoing program aimed at developing nuclear weapons, and it continues its efforts to expand its nuclear infrastructure to support nuclear weapons development and manufacture.

Because of the U.S. assessment that Iran is intent on developing a nuclear weapons capability, the United States has long had a policy of not engaging in any nuclear cooperation with Iran. We continue to urge other countries to forego any nuclear cooperation with Iran. Moreover, until early in 2000, when trade sanctions were lifted on Iranian pistachio nuts and carpets, the United States had maintained a virtually complete trade and investment embargo against Iran since 1995. In 1996, the Iran and Libya Sanctions Act (ILSA), which provides for the imposition of sanctions against persons making certain investments in the petroleum sectors of Iran and Libya, became law. It provides for sanctions designed in part to deny Iran the ability to fund the acquisition of weapons of mass destruction and missile delivery systems. The United States urges other governments to act rapidly and effectively to apply such pressures on Iran in order to emphasize to its leaders that continued pursuit of nuclear weapons is in the interest neither of the Iranian people nor of Iranian national security.

Iran's nuclear procurement activities and public revelations, including the evidence reported by IAEA DG ElBaradei in his multiple reports to the IAEA Board of Governors, confirm our assessment that Iran has been vigorously pursuing a nuclear weapons capability. This conclusion is based on Iran's documented 18-year record of secret nuclear procurement and development, its systematic deceptions of the IAEA, and the economic implausibility of its expensive and technically over ambitious nuclear fuel cycle program. Iran is attempting to obtain a broad range of foreign nuclear and nuclear-related technology and equipment, most elements of which appear more suited for a weapons program than to meeting Iran's legitimate energy needs. For example, Iran

continues to build a heavy water production plant and to pursue heavy water reactor design, intending to build and operate a heavy water reactor, which is ideally suited for producing weapons-usable plutonium. Iran claims its uranium mining activities are to fuel power reactors, but Iran does not have enough domestic uranium deposits to fuel even one reactor for its lifetime, although those deposits are sufficient for a nuclear weapons program. Iran has acknowledged undertaking experiments involving uranium metal, which has uses in its AVLIS program and is a necessary component to nuclear weapons design. Iran has also acknowledged pursuing uranium enrichment via centrifuges and its AVLIS program. Iran has admitted to conducting undeclared plutonium separation experiments, giving Iran important knowledge in support of weapons intentions. Although Iran pledged in October 2003 to provide full cooperation and transparency to the IAEA, we do not believe Iran has made a strategic decision to abandon its longstanding nuclear weapons ambitions and has not admitted the full scope of its nuclear activity to international authorities.

FINDING. Article II prohibits NNWS from seeking or receiving assistance in the manufacture of nuclear weapons. It also prohibits NNWS from the receipt, manufacture or other acquisition of such weapons. The United States has previously found that Iran is pursuing a nuclear weapons capability. The breadth of Iran's nuclear development efforts, the secrecy and deceptions with which they have been conducted for nearly 20 years, its redundant and surreptitious procurement channels, Iran's persistent failure to comply with its obligations to report to the IAEA and to apply safeguards to such activities, and the lack of a reasonable economic justification for this program leads us to conclude that Iran is pursuing an effort to manufacture nuclear weapons, and has sought and received assistance in this effort in violation of Article II of the NPT. This weapons program combines elements of not only the activities declared to the IAEA and ostensibly run by the civilian Atomic Energy Organization of Iran (AEOI), but also any still undeclared fuel cycle and other activities that may exist, including those that may be run solely by the military.

In addition, Iran's past failure to declare the import of UF₆, failure to provide design information to the IAEA on the existing centrifuge facility prior to the introduction of nuclear material, and its conduct of undeclared laser isotope separation, uranium conversion experiments, and plutonium separation work further reinforce this assessment and also make clear that Iran has violated Article III of the NPT and its IAEA safeguards agreement.

IRAQ

ISSUE. During Iraqi dictator Saddam Hussein's regime prior to 1991, Iraq engaged in activities that raised concerns regarding Iraq's compliance with its NPT Article II and Article III (safeguards) obligations and its adherence to UN Security Council resolutions.

HISTORY OF COMPLIANCE EVALUATION. The United States assessed Iraq's compliance with the NPT as early as the January 14, 1993 Report. At that time, the United States concluded that prior to 1991, Iraq had an active nuclear weapons program that violated its Article II NPT obligations and that its noncompliance with its Safeguards Agreement constituted a violation of Article III. In the July 1, 1996 Report, this finding was expanded to include a determination that Iraq also had been "in violation of its obligation under UN Security Resolutions to declare and destroy its prohibited WMD and long-range missile programs and to cooperate fully with UN and IAEA inspections and monitoring." In subsequent years, our compliance judgment did not change regarding these pre-1991 activities. In the June 2003 Noncompliance Report, the United States concluded that:

Iraq had pursued an active nuclear weapons development program that violated its obligations under its Safeguards Agreement and Articles II and III of the NPT. The United States Government has further determined that Baghdad is in violation of its obligation under UN Security Council resolutions to declare and destroy its prohibited WMD and long-range missile programs and to cooperate fully with UN and IAEA inspections and monitoring.

DISCUSSION OF OBLIGATIONS. Iraq signed the NPT in July 1968 and deposited its instrument of ratification in October 1969. Iraq's full-scope safeguards agreement with the IAEA entered into force in February 1972.

ACTIONS. During Saddam Hussein's regime prior to 1991, Iraq engaged in activities that violated its Article II and III obligations. It secretly irradiated indigenously manufactured target materials and IAEA-exempted fuel elements in a safeguarded research reactor at the Tuwaitha Nuclear Research Center. This irradiated material was used in an undeclared pilot-scale reprocessing experiment using laboratory hot cells. Iraq also conducted undeclared uranium enrichment operations and produced associated feed materials in direct contravention of Iraq's NPT safeguards agreement, and built a facility intended for nuclear weapons development and assembly.

Iraq clandestinely explored virtually every method to enrich uranium in its pre-1991 nuclear weapons program, including Electro-Magnetic Isotope Separation (EMIS), centrifuge, gaseous diffusion, laser isotope separation, and chemical enrichment techniques. Of these, EMIS progressed farthest, with two production-scale facilities having been under development as of 1991. Centrifuge efforts probably were poised to advance past laboratory-scale work with the aim of eventually replacing EMIS as the primary enrichment effort. Laboratory pilot-scale chemical enrichment efforts appear to have been intended to enhance EMIS enrichment.

After the 1991 Gulf War, Iraq endeavored to conceal its nuclear program by removing and concealing telltale equipment, material and documentation; in some cases,

by unilaterally destroying and burying other equipment and materials; and by denying the actual role of key facilities.

In August 1998, in violation of UN Security Council resolutions (UNSCR) and a February 1998 Memorandum of Understanding between the UN Secretary-General and Iraqi Deputy Prime Minister Tariq Aziz, Iraq suspended cooperation with the UN Special Commission (UNSCOM) and the IAEA. Although the IAEA was able to continue limited activities until December 1998, there were no UN-mandated monitoring or inspections activities in Iraq between December 1998 and November 27, 2002, following adoption of UNSCR 1441.

In January and December 2002 as well as June 2003, the IAEA, in accordance with its NPT safeguards agreement with Iraq, conducted a physical inventory verification (PIV) inspection of declared material in Iraq. These inspections were not pursuant to the authority granted the IAEA under Security Council resolutions and thus was limited in scope. They did not satisfy or address Iraq's disarmament obligations. The IAEA's Director-General stated at the time of the January 2002 inspection that the "limited objective" of the PIV was neither sufficient to provide any assurance that Iraq is in full compliance with its safeguards obligations nor a substitute for the Agency's activities under the relevant Security Council resolutions.

On November 8, 2002, UNSCR 1441 incorporated crucial elements sought by the U.S. Government: a clear statement that Iraq was in material breach of its international obligations, enhanced authority for the inspections regime, and a warning of serious consequences should Iraq continue to violate its obligations. Furthermore, the resolution set out a clear timetable for Iraq's submission of an accurate, full and complete declaration of WMD and related programs and for the resumption of inspections, and strengthened the mandate of both UNMOVIC and the IAEA's Iraq Nuclear Verification Office.

Iraq agreed to renewed UN inspections under UNMOVIC in November 2002, and UNMOVIC and IAEA issued daily inspections reports from November 27, 2002 to March 13, 2003.

Prior to Operation Iraqi Freedom (OIF), which took place between March 20 and May 1, 2003, Iraq was legally bound by the NPT, and by a suite of UN Security Council Resolutions obligating it to declare and destroy its WMD stockpiles and capabilities. The passage of UNSCR 1483 in May 2003 reaffirmed that Iraq had to meet these disarmament obligations, and asked the United States and UK to keep the UNSC informed of U.S./UK activities in this regard. In June 2003, the Iraq Survey Group (ISG), composed of largely military experts from coalition countries, assumed responsibility for the WMD/missile effort.

On October 2, 2003, Dr. David Kay submitted an Interim Progress Report on the Activities of the Iraq Survey Group to Senate and House intelligence committees.

Dr. Kay reported that Saddam Hussein had not given up his aspirations and intentions to continue to acquire a nuclear weapons program and intended to resume WMD-related activities whenever external restrictions were removed. Upon the fall of Saddam Hussein's regime as a consequence of Operation Iraqi Freedom, Iraq was for a time not in a position as a sovereign nation to express any intent with regards to the NPT; Iraq's legal obligations with regard to NPT remained the same as before OIF.

Dr. Kay noted dozens of WMD-related program activities but no stockpiles per se. Iraqi scientists and officials admitted to deliberately withholding WMD-related information from UN inspectors. Equipment components, blueprints, and documents from the pre-1991 Iraqi nuclear weapons program were hidden from the United States and IAEA until 2003. While the order was never given, Saddam Hussein intended to rebuild Iraq's nuclear program after UN sanctions were lifted.

In September 2004, Charles Duelfer issued a comprehensive report of the Special Advisor to the Director of Central Intelligence on Iraq's WMD. The report notes that Saddam ended the nuclear program in 1991 following the Gulf War. Although Saddam continued to see the utility of WMD and sought to preserve the ability to reconstitute the Iraqi nuclear program, the report notes that the Iraqi Survey Group found a limited number of post-1995 activities that would have aided the reconstitution of the nuclear weapons program once sanctions were lifted. The activities of the Iraqi Atomic Energy Commission (IAEC) sustained some talent and limited research with potential relevance to a reconstituted nuclear program. Specific projects, with significant developments, such as the efforts to build a rail gun and a copper vapor laser could have been useful in a future effort to restart a nuclear weapons program, but ISG found no indications of such purpose. As funding for the Military Industrial Commission and the IAEC increased after the introduction of the Oil-for-Food program, there was some growth in programs that involved former nuclear weapons scientists and engineers.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. While the 1991 Gulf War and the resulting UN-mandated inspections significantly set back Saddam Hussein's program to develop a nuclear weapon during the 1990s, more than ten years of sanctions and the loss of much of Iraq's physical nuclear infrastructure under IAEA oversight hampered the regime's ability to acquire or develop nuclear weapons but it did not diminish the regime's interest in resuming its nuclear weapons program whenever external restrictions were removed. Iraq's pre-1991 clandestine nuclear weapons program constituted a clear violation of Article II of the NPT. Baghdad's construction of secret facilities, including a facility for nuclear weapons development and assembly, are among the key indicia of this violation. Iraq's failure to apply safeguards to its clandestine program also constituted a violation of Article III, which requires that safeguards be applied to all "source or specialized fissionable material within its jurisdiction." Over the years of inspections, IAEA inspectors noted Iraq withheld important details relevant to its nuclear program, including procurement logs, technical documents, experimental data, accounting of materials, and foreign assistance. It also likely withheld other data about enrichment techniques, foreign procurement, weapons

design and the role of Iraqi security services in concealing its nuclear facilities and activities.

During Saddam Hussein's regime, Baghdad continued to maintain a clandestine procurement network which could be used for procuring nuclear items. Saddam Hussein gave explicit direction to sustain the intellectual capability achieved over so many years and supported key technical groups who continued work on nuclear-relevant dual-use technologies. Virtually no senior Iraqi believed that Saddam had forsaken WMD forever. Evidence suggests that, as resources became available and the constraints of sanctions decayed, there was a direct expansion of activity that would have the effect of supporting WMD reconstitution.

FINDING. The United States finds that Iraq, during the course of the Saddam Hussein regime prior to 1991, pursued an active nuclear weapons development program and that various aspects of this program violated its obligations under Articles II and III of the NPT. The United States has further determined that during this period Baghdad was in violation of its obligation under UN Security Council resolutions to declare and destroy its prohibited WMD and long-range missile programs and to cooperate fully with UN and IAEA inspections and monitoring.

LIBYA

ISSUE. Prior to December 19, 2003, the People's Libyan Arab Jamahiriya (Libya) engaged in activities that raised concerns regarding Libya's compliance with its NPT Article II and Article III obligations, as well as with its IAEA safeguards obligations.

HISTORY OF COMPLIANCE EVALUATION. The United States assessed Libya's compliance with the NPT as early as the January 14, 1993 Report. At that time, the United States concluded that despite Libya's status as an NPT party, Colonel Qadhafi had a well-known and long-standing desire for nuclear weapons and Libya was covertly seeking to acquire technology relevant to nuclear weapons production. The May 30, 1995 Report noted that Libya had demonstrated a continuing interest in the acquisition of enrichment-related equipment, but that its nuclear program had not progressed beyond the early stages of developing nuclear weapons. This finding was modified slightly in the CY1998 Report, to state that Libya's nuclear weapons program had not progressed beyond the early stages of developing an independent nuclear research and fuel-cycle related capability. In the June 2003 Noncompliance Report, the United States concluded that:

The United States has determined that Libya has demonstrated a continuing interest in the acquisition of nuclear weapons. Since UN sanctions were suspended in 1999, Libya has resumed investment in its nuclear infrastructure.

DISCUSSION OF OBLIGATIONS. Libya signed the NPT in July 1968 and ratified it in May 1975. Its full-scope Safeguards Agreement with the IAEA entered into force in July 1980. During most of the period of this Report, Libya did not accept the broader safeguards strengthening measures embodied in the Additional Protocol, which include expanded IAEA rights to visit undeclared and suspected sites. In late December 2003, however, Libya stated its intention to act as if the Protocol were in force as of December 29, 2003, pending its formal entry into force. Libya signed the Additional Protocol on March 10, 2004. Libya signed the African Nuclear Weapon Free Zone Treaty in 1996, but has not ratified it.

ACTIONS. In March 2003, Libya began discussions with the United States and the United Kingdom regarding Libya's WMD and MTCR-class missile programs. This launched nine months of delicate and secret negotiations between Libya, the United States, and the United Kingdom, resulting in Libya's public commitment on December 19, 2003, to reveal and eliminate its WMD programs. On March 2, 2004, Qadhafi publicly explained that during the Cold War, Libya had sought to develop nuclear weapons, but that "now ... if you built a nuclear bomb you would be in big trouble." He said that it was now in Libya's "own interest" to relinquish pursuit of nuclear weapons, because "the nuclear bomb represents a danger to the country which has them."

Since December 19, 2003, the United States, in conjunction with the United Kingdom, has worked to assist Libya in implementing its decision to eliminate its nuclear weapons program. This cooperative activity has included extensive interaction with U.S. and UK officials both in Libya and abroad in connection with the removal of proliferation-sensitive items and material from Libya, as well as U.S./UK efforts to assist Libya in meeting its IAEA safeguards obligations, including under the Additional Protocol. The IAEA has conducted inspections, starting in January 2004, to confirm Libya's revised declarations.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. Prior to Qadhafi's December 19, 2003, decision to eliminate Libya's nuclear weapons program, the United States had urged other countries to refrain from engaging in nuclear cooperation with Libya because of Tripoli's stated interest in acquiring nuclear weapons.

Libya's Russian-assisted efforts in 2000 to restore and upgrade its nuclear infrastructure following the lifting of UN sanctions raised concerns that the program may have been active beyond our previous estimates.

Since October 2003, Libyan officials have revealed the scope of Libya's previously undeclared nuclear activities. These activities included a gas centrifuge program, undeclared laboratory-scale and bench-scale uranium conversion experiments, a uranium conversion facility, and previously undeclared stocks of uranium yellowcake. Libya also bought a supply of uranium hexafluoride (UF₆) which is used as feedstock in gas centrifuges, and had received nuclear weapons design documents from the Khan network.

Libya's longstanding interest in acquiring nuclear weapons, Libya's efforts to obtain and develop the infrastructure for an indigenous nuclear weapons capability, including through acquisition from the A.Q. Khan network, and its receipt of nuclear weapons design documents are clear indications that it sought and received assistance for the expressed purpose of manufacturing nuclear weapons in violation of its obligations under Article II of the NPT. Libya's previous failure to declare to the IAEA certain nuclear material and certain activities involving nuclear material (including experiments involving plutonium production and separation and uranium conversion) constituted a violation of its IAEA safeguards agreement and of the NPT's Article III, which requires that safeguards be applied to all "source or specialized fissionable material within its jurisdiction."

In the IAEA Board of Governors meeting in March 2004, the Director General of the IAEA was requested to report to the Security Council, for information purposes only, Libya's past failure to meet its obligations under its safeguards agreement with the IAEA. On April 22, 2004, the UN Security Council took note of the IAEA resolution, welcomed Libya's decision to abandon its programs for developing WMD and their means of delivery, and encouraged Libya to ensure the verified elimination of all of its WMD programs.

FINDING. The United States finds that prior to its decision to rid itself of its WMD and long-range missile programs, Libya pursued an active nuclear weapons development program, and that various aspects of this program violated Libya's obligations under Articles II and III of the NPT, as well as its IAEA safeguards agreement. Consistent with the IAEA statute, Libya's previous safeguards noncompliance was reported to the UN Security Council.

The United States notes, however, that Libya has worked with the United States and United Kingdom to remove virtually all declared proliferation-sensitive documents, equipment and material directly associated with its previously covert nuclear program, including design documents, UF₆, gas centrifuges, various components, the uranium conversion facility, and dual-use equipment and materials. Libya is also working with the United States and Russia to convert the Tajura reactor to low-enriched uranium (LEU) and permit the removal of its fresh and irradiated HEU. On March 7, 2004, about 17 kilograms of unirradiated, fresh HEU was removed from Tajura and flown to Russia under the Tripartite Russian Research Fuel-Return Program. Preparations for the conversion of the Tajura reactor to LEU have begun, the irradiated HEU will be removed following the conversion.

On April 22, 2004, the UN Security Council welcomed Libya's decision to abandon its programs for developing WMD and their means of delivery.

NORTH KOREA

ISSUE. The Democratic People's Republic of Korea (DPRK) is pursuing an active nuclear weapons development program. The issue is whether this program violated the DPRK's obligations under the NPT, its IAEA safeguards agreement and its political commitments to the United States under the 1994 Agreed Framework and the North-South Joint Declaration on the Denuclearization of the Korean Peninsula.

HISTORY OF COMPLIANCE EVALUATION. The United States assessed North Korea's compliance with the NPT as early as the January 14, 1993 Report. At that time, the United States concluded in the unclassified version of the Report that based upon North Korea's actions since IAEA inspections began, the DPRK was "attempting to hide facilities that may contain evidence indicating a DPRK violation of NPT Articles II or III, or both." The next year, the Report noted that "North Korea's refusal in 1994 to permit the IAEA to conduct routine, ad-hoc, or special inspections constitutes noncompliance with its Article III obligations." It also said that "although conclusive statements cannot yet be made about the extent to which North Korea is concealing evidence that would indicate a violation of its Article II commitments," the United States believes that the DPRK's efforts to prevent the IAEA from learning about past activity "raises serious questions about a potential violation of Article II. In 1995, the United States declared that "North Korea has yet to meet its Article III obligations," and that "[s]erious questions remain regarding the DPRK's intentions and a potential violation of its obligations under Article II of the NPT." A similar finding was made in the three subsequent reports. The June 2003 Report declared that:

... North Korea continues to be in violation of its IAEA safeguards agreement and ... has produced enough plutonium for one or more nuclear weapons. The United States judges that the DPRK is in violation of the NPT and that it has not complied with its international commitments under the Agreed Framework, and the Joint South-North Declaration on the Denuclearization of the Korean Peninsula.

DISCUSSION OF OBLIGATIONS

Agreed Framework. In October 1994, North Korea and the United States signed the Agreed Framework. Pursuant to these commitments, North Korea initially was to freeze and eventually to dismantle its graphite-moderated nuclear reactors and related facilities at Yongbyon and Taechon in exchange for two light-water reactors (LWRs) and interim energy assistance in the form of heavy fuel oil. Under the Agreed Framework, North Korea was required to be in *full* compliance with its safeguards agreement with the IAEA before any key nuclear components for the LWRs could be delivered. In accordance with the Agreed Framework, from 1994 to December 2002, North Korea allowed the IAEA to monitor the freeze on its nuclear reactors and related facilities, and to maintain a continuous presence at Yongbyon. Under the Framework, North Korea also committed to "consistently take steps to implement the North-South Joint

Declaration on the Denuclearization of the Korean Peninsula.” Article III of the Joint Declaration on the Denuclearization calls for North and South Korea not to possess uranium enrichment and nuclear reprocessing facilities.

In October 2002, when confronted by the United States about its clandestine efforts to develop a uranium enrichment capability, North Korea acknowledged possessing a uranium enrichment program for nuclear weapons, though it has since denied this. Furthermore, DPRK officials told the United States that they considered the United States to have effectively nullified the Agreed Framework. The Agreed Framework does not specify a mechanism for termination or withdrawal. However, Secretary of State Colin Powell acknowledged that, in light of the DPRK’s statements about developing an enrichment capability, the DPRK’s actions had effectively nullified the agreement. Prior to that time, however, North Korea failed to meet several important, voluntarily undertaken political commitments to the United States under the Agreed Framework and the North-South Joint Declaration on the Denuclearization of the Korean Peninsula.

NPT. North Korea acceded to the NPT in December 1985, but did not sign its Safeguards Agreement (INFCIRC/403) with the IAEA until January 30, 1992. The Safeguards Agreement was ratified by North Korea on April 9, and brought into force on April 10, 1992. The Safeguards Agreement (INFCIRC/403) requires North Korea to accept IAEA safeguards on all source and special fissionable material in all peaceful nuclear activities within the territory of the DPRK, within its jurisdiction or carried out under its control anywhere.

In 1993, North Korea provided notice of withdrawal from the NPT under Article X. It then “suspended” its withdrawal notice one day short of the three-month period required in Article X of the NPT for a withdrawal to become effective. On January 10, 2003, the DPRK notified the UN Security Council of its decision “to revoke the suspension on the effectuation” of its 1993 withdrawal from the NPT, purportedly making the withdrawal effective the next day. The United States, however, viewed North Korea’s 2003 notice as a new notice of withdrawal under Article X of the NPT – thus triggering a *new* three-month period (after notice to all NPT Parties and the UN Security Council) before withdrawal would be effective. In any case, North Korea continued to be bound by its NPT obligations – and its NPT safeguards agreement with the IAEA – until its 2003 notice of withdrawal became effective.

ACTIONS. On October 21, 1994, the United States and North Korea signed an Agreed Framework, which, if fully implemented, would ultimately have resulted in dismantlement of North Korea’s indigenous plutonium reactor program and associated facilities. Although as an NPT party, North Korea was under a continuing obligation to comply with its IAEA safeguards agreement, the Agreed Framework did not call for the DPRK to come into full compliance with its safeguards agreement until a particular stage of the light-water reactor (LWR) project – specifically, after a significant portion of the LWR program was completed, but before delivery of key nuclear components for the first

LWR. Based on the original 2003 target completion date for the LWR project, this stage might have been reached before 2000, but delays in the project pushed the likely date for the DPRK coming into full compliance many years later. As provided in the Agreed Framework, North Korea froze construction and operations at its graphite-moderated reactors and related facilities at Yongbyon and Taechon.

Between 1994 (after the Agreed Framework was signed) and December 2002 (when North Korea expelled IAEA inspectors from the country), North Korea allowed the IAEA to monitor the freeze on its graphite-moderated nuclear reactors and related facilities, and to maintain a permanent presence at Yongbyon.

Despite North Korea's international obligations and commitments to freeze its nuclear program, we assess that at some point during the freeze on its plutonium program, North Korea had embarked on an effort to develop a centrifuge-based uranium enrichment program. There have been press reports that the A.Q. Khan network provided enrichment technology, including centrifuges and uranium hexafluoride (the feedstock for gas centrifuge uranium enrichment programs) to the North Korean nuclear program.

After the United States gained information about North Korea's covert uranium enrichment program, a U.S. delegation traveled to Pyongyang in October 2002 to convey our grave concerns. Our delegation advised the North Koreans that we had acquired information indicating that they had a program to enrich uranium for nuclear weapons in violation of the Agreed Framework and other agreements. North Korea's First Vice Minister Kang Sok-chu acknowledged that such a program existed, though North Korean officials attempted to accuse the United States of nullifying the Agreed Framework. Following this acknowledgement, the United States determined that it could no longer proceed with the Agreed Framework on a business-as-usual basis. As a result, the members of the Executive Board of the Korean Peninsula Energy Economic Development Organization (KEDO) – the United States, Republic of Korea (ROK), Japan, and the EU – agreed in November 2002 to suspend shipments of heavy fuel oil beginning in December, while calling on North Korea promptly to eliminate its nuclear weapons program in a transparent and verifiable manner. In response to this KEDO action, the DPRK announced its intention to unfreeze the nuclear reactor and reprocessing facilities at Yongbyon.

On December 12, 2002, North Korea announced that it would “immediately resume the operation and construction of its nuclear facilities to generate electricity.” On December 14, the DPRK instructed the IAEA to “remove the seals and cameras – that monitor the nuclear facilities at the Yongbyon nuclear complex – and collect them.” On December 18, start-up preparations began on the steam plant used to provide heat to the reprocessing facility at Yongbyon. On December 27, North Korea wrote the IAEA that “we will soon be prepared for the operation” of the reprocessing plant, “to secure safe storage of the large quantity of spent fuel rods” that would eventually be removed from its graphite-moderated reactors “once these power plants are in operation.”

On December 29, 2002, the DPRK Foreign Ministry issued a statement indicating that North Korea's "special status" in the Non-Proliferation Treaty "is now in peril." On December 31, the DPRK expelled the two IAEA inspectors resident in Yongbyon, prompting IAEA Director General to publicly announce that North Korea was "a country in violation of its international obligations." The DPRK's expulsion of IAEA inspectors, the DG said, "sets a dangerous precedent for the integrity of the non-proliferation regime." The IAEA stated that the departure of the inspectors left it "with virtually no possibility to monitor the DPRK's nuclear activities nor to provide any assurances to the international community that they are not producing a nuclear weapon." On January 6, 2003, the IAEA Board of Governors convened a special meeting on the DPRK and issued a resolution deploring North Korea's unilateral acts to remove and impede the functioning of IAEA containment and surveillance equipment, and calling on it to cooperate fully and urgently with the Agency. On February 12, 2003, the IAEA Board of Governors declared that the DPRK's actions constituted "further noncompliance" with its safeguards obligations and called on the DPRK to remedy that noncompliance. Pursuant to this February 12 IAEA Board of Governors resolution, the Director General transmitted a letter to the UN Security Council informing it about the DPRK's noncompliance.

In between these IAEA Board decisions, on January 10, 2003, North Korea announced that it had ended the suspension of its withdrawal from the NPT, effective January 11, 2003, as previously described.

The United States has publicly assessed that by the early 1990s, North Korea had sufficient plutonium for one or possibly two nuclear weapons. Since that assessment, North Korea has engaged in further nuclear weapons activities, despite the Agreed Framework and the 1992 Joint Declaration.

The North has publicly stated that the plutonium recovered from reprocessing has been used in the direction of increasing its nuclear "deterrent" force, and that it will reprocess more spent fuel when necessary. The DPRK's resumption of work at Yongbyon has permitted, or will permit, the construction of additional plutonium weapons.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. North Korea continued to be bound by its NPT obligations, and its safeguards agreement with the IAEA, as long as North Korea remained a party to the NPT – that is, until its 2003 notice of withdrawal became effective. The DPRK remained subject to its commitments in the Agreed Framework and the 1992 Joint Declaration until its repudiation of these agreements in admitting to its uranium enrichment program in 2002.

NPT. The DPRK's uranium enrichment program – which it admitted privately to the United States during the reporting period, and thereafter publicly in early 2005 – violated the Joint North-South Declaration on the Denuclearization of the Korean Peninsula and the Agreed Framework. The DPRK was in violation of its safeguards

agreement – and therefore NPT Article III – from at least 1993, when the IAEA Board of Governors found it in noncompliance with its safeguards agreement. Subsequent North Korean actions in 2002 and 2003 constituted further noncompliance. The DPRK's actions in December 2002 in removing IAEA seals and cameras, and expelling inspectors, also constituted a violation of Article III – indeed, perhaps the most egregious and blatant violation of IAEA safeguards and of Article III in the Treaty's history. As the IAEA Director-General has noted, North Korea “displayed complete disregard for its obligations under the Safeguards Agreement by cutting all seals and impeding the functioning of surveillance cameras that were in its nuclear facilities.” In fact, North Korea was in “chronic noncompliance” with its safeguards agreement and Article III of the NPT since 1993, and the IAEA remains unable to verify that there has been no diversion of nuclear materials. Indeed, the IAEA's continual attempts to bring North Korea into compliance with its Safeguard Agreement meet with little more than stonewalling.

The obvious and admitted purpose of North Korea's uranium enrichment program – the development of nuclear weapons – also makes it a violation of Article II of the NPT. North Korea's work on plutonium production for nuclear weapons, both before the Agreed Framework and thereafter, was also a violation of Article II. North Korea was thus guilty of multiple, and egregious, violations of the NPT at the time it withdrew from the Treaty.

The North Korean uranium enrichment program, and the DPRK's possession of nuclear weapons, was also a violation of the DPRK's commitments under the Agreed Framework and the Joint Declaration.

The United States has made it clear that a key precondition for improved U.S.-DPRK relations is North Korea's agreement to and implementation of complete, verifiable, and irreversible dismantlement of its nuclear program; one important element of such an outcome must be the DPRK's prompt, verifiable, and full compliance with its obligations under the NPT as a non-nuclear weapons state and its IAEA safeguards agreement.

The United States is working with South Korea, Japan, China, Russia, the EU, and a large number of other like-minded nations, to increase international pressure on and isolation of North Korea until it agrees to the dismantlement of its nuclear program in a permanent, thorough and transparent manner, and subject to effective verification.

Agreed Framework. The Agreed Framework created a process for resolving the North Korean nuclear issue, addressing international concerns about the DPRK's nuclear intentions, and bringing it into compliance with its NPT commitments. However, North Korea's uranium program was inconsistent with paragraph 2 of Article III of the Agreed Framework, under which the DPRK was to consistently take steps to implement the 1992 North-South Joint Declaration on the Denuclearization of the Korean Peninsula, which prohibited uranium enrichment facilities. As the IAEA Director General has also noted,

“[s]ince 1994, the DPRK has sought shelter behind the U.S.-DPRK Agreed Framework, claiming a legally untenable ‘unique status’ under the NPT to circumvent compliance with its nonproliferation obligations.”

FINDING. Notwithstanding its 2003 notice of withdrawal from the NPT, North Korea was obligated through much of the reporting period to comply with the Treaty and with its NPT safeguards agreement. North Korea’s refusal to permit the IAEA to verify the completeness and correctness of its initial nuclear material declaration, as well as its continuing refusal to permit IAEA safeguards to be applied to its nuclear activities as required by its NPT Safeguards Agreement, constituted longstanding and continuous violations of its safeguards agreement. The United States judges that North Korea was in noncompliance with its safeguards obligations since 1993. North Korean actions in 2002 and 2003 constituted further violations of its safeguards obligations and its obligations under Article III of the NPT. (U)

Based on the information available, including the DPRK’s own statements, North Korea possessed nuclear weapons, manufactured nuclear weapons, and has sought and received assistance in this effort, all in violation of Article II of the NPT.

North Korea also violated its political commitments to the United States under Article III of the Joint Declaration on the Denuclearization of the Korean Peninsula and therefore paragraph 2 of Article III of the Agreed Framework by developing a clandestine uranium enrichment program and by breaking the freeze on its plutonium production facilities.

F. THE TREATY ON OPEN SKIES

The Treaty on Open Skies was signed at Helsinki on March 24, 1992, by 26 States encompassing NATO and the Former Warsaw Pact: Belarus, Belgium, Bulgaria, Canada, former Czechoslovakia, Denmark, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Kyrgyzstan, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Russia, Spain, Turkey, United Kingdom, Ukraine, and the United States. The United States and most other signatories had ratified the Open Skies Treaty by the end of 1993. However, the Treaty did not enter into force until January 1, 2002, following the requisite deposit of 20 instruments of ratification, including those of the Depositaries and of States Parties with eight or more passive quotas. The Treaty on Open Skies is of unlimited duration.

Kyrgyzstan is the only original signatory that has not yet ratified the Treaty. Prior to entry into force (EIF), the Czechoslovak Socialist Federated Republic (CSFR), split into two separate independent states, the Czech Republic and the Slovak Republic; both of these new states accepted the rights and obligations of the former CSFR and deposited instruments of ratification to the Treaty. Before EIF, the Treaty was opened for signature by the former Soviet republics. Any of these States that did not sign the Treaty prior to EIF may accede to the Treaty at any time. The remaining members of the Organization

for Security and Cooperation in Europe (OSCE) were able to apply for accession during the first six months after EIF. Six months after EIF, the Treaty opened to request for accession by any State that, in the judgment of the Open Skies Consultative Commission (OSCC), is able and willing to contribute to the objectives of the Treaty. By the end of 2003, Bosnia and Herzegovina, Finland, Latvia, and Sweden had become States Parties to the Treaty, bringing the total number to 30 States Parties.

The Treaty on Open Skies established a regime for the conduct of unarmed observation flights by States Parties over the territories of other States Parties. The Treaty contains twelve Annexes, which are integral parts of the Treaty. The OSCC is the Treaty-established diplomatic organization comprised of representatives of all States.

Due to the timing of the delivery of the final required instruments of ratification by Russia and Ukraine, the Treaty's first quota year of implementation covered calendar years 2002 and 2003, meaning each State Party had two calendar years in which to execute one Treaty year's quota of observation missions. States Parties spent the first six months following EIF completing the certification of aircraft and sensors for use on observation missions, in accordance with Treaty provisions and OSCC Decisions.

In August 2002, Russia conducted the first Open Skies observation mission over the territory of the United Kingdom. By December 31, 2003, seventeen States Parties had executed 67 observation missions over the territories of seventeen other States Parties. During 2002-2003 the United States planned and attempted to conduct nine missions as allocated at Treaty signature: eight over the Russia/Belarus Group of States Parties and one over Ukraine (a mission shared with Canada). Ultimately, however, the United States completed only eight: seven over Russia/Belarus and one over Ukraine. The United States employed its OC-135B aircraft for seven missions and a leased Ukrainian An-30 for the two remaining (one of which ultimately was cancelled due to a landing incident and adverse weather conditions at the Russian Point of Entry/Exit [POE]). (The cancelled mission is discussed in more detail below.) The United States requested copies of imagery collected during eight observation missions conducted by six other States Parties (Benelux, Canada, France, Germany, Norway and Turkey). Two States Parties (France and Germany) requested and received copies of portions the imagery collected during seven United States observation missions.

As of December 31, 2003, no State Party had conducted an observation mission over the territory of the United States. Russia conducted the first Open Skies mission over the United States in June 2004.

Because Treaty EIF occurred in January 2002, this is the first time compliance with the treaty has been assessed in a Noncompliance Report. Because the Treaty is lengthy and contains portions that are technically detailed, there were several issues that arose during the first two years of Treaty operations. Issues that have initially raised compliance concerns are implementation-oriented, and can largely be attributed to different interpretations and understandings of various Treaty provisions by the different

States Parties as new (and often unanticipated) situations were encountered during the nascent stages of Treaty implementation. In all cases, the United States has quickly engaged other Parties, either bilaterally or in the OSCC, to address these concerns, preserve our Treaty rights, and ensure States Parties remain in compliance with the Treaty. We have been largely successful in this approach.

The issue of altering maximum flight distances (MFD) remained under discussion in Vienna at the close of 2003. MFD is the maximum distance an Open Skies aircraft may fly over the territory of the observed party from the airfield at which the observation flight commences. During the period of provisional application of the Treaty (the period between signature and EIF), many States Parties, including the United States, changed the airfields they originally designated at Treaty signature pursuant to Treaty provisions. However, Russia and Ukraine notified States Parties that, in addition to changing certain designated airfields, they were also reducing the MFDs associated with the originally designated airfields. Although there are Treaty provisions for changing airfields, there are no provisions for changing the associated MFDs.

The United States and other States Parties objected to MFD changes made by Russia and Ukraine. Russia's and Ukraine's new MFDs reduced the amount of territory available for observation during a mission and also increased the number of observation flights needed to cover the same amount of territory than originally agreed at Treaty signature. Russia and Ukraine both provided interim solutions for their MFDs that allowed other States Parties to conduct missions while seeking a final solution to the overall issue. The United States is actively engaged in negotiating an OSCC Decision to establish procedures for changing MFDs that preserve Treaty rights for observation. The OSCC adopted a Decision in March 2004 that resolved this issue, preserving Treaty rights and eliminating the compliance concern.

COUNTRY ASSESSMENTS

RUSSIA

ISSUE. The issue is whether Russia's failure to provide Treaty-required airfield and airspace information in a timely manner, delaying U.S Treaty missions over Russia was inconsistent with its obligations under the Open Skies Treaty.

A second issue is whether Russia's attempt to refuse a notified U.S. Treaty mission over Russia for which the United States held a valid quota was inconsistent with its obligations under the Open Skies Treaty.

HISTORY OF COMPLIANCE EVALUATION. This is the first time that Russian compliance with the Treaty on Open Skies has been assessed.

DISCUSSION OF OBLIGATIONS. Annex I, an integral part of the Open Skies Treaty, has three key provisions to which States Parties must adhere in providing the

necessary information on airspace operating procedures, including hazardous airspace. The first provision is that no later than 90 days after EIF, each State Party was required to notify all other States Parties of the source of their airspace information. The second requires that no earlier than 90 days after EIF, at the request of any other State Party, a State Party must provide no later than 30 days after the receipt of such a request, airspace information in accordance with International Civil Aviation Organization (ICAO) provisions. Lastly, States Parties are required to notify other State Parties that have requested this information of any changes to the information provided. The second provision requires a State Party to provide information on: A) its airspace structure, as published in the Aeronautical Information Publication (AIP) series; B) detailed information on all hazardous airspace; and C) airfield information and arrival and departure procedures for each of its POEs, Open Skies airfields, alternate airfields and refueling airfields for its points of entry, points of exit, and Open Skies airfields. The United States interprets this to mean that the information provided must satisfy the information requirements contained in Annex 15 to the Convention on International Civil Aviation.

Under the Open Skies Treaty, observing States Parties are required to announce their intent to conduct an observation mission no less than 72 hours prior to the estimated time of arrival of the mission at the point of entry. The observed State Party is required to acknowledge, within 24 hours, receipt of the notice of intent to conduct an observation flight. There is no right to refuse an announced observation mission prior to its arrival for any reason. For no less than 24 hours after an observation mission arrives at the point, the sides will negotiate a mission plan and prepare to conduct the mission. If the observing State Party fails to arrive within 24 hours of the estimated time of arrival the observed State Party may refuse the mission.

ACTIONS. When the Open Skies Treaty was signed, the Republic of Belarus and the Russian Federation group of State Parties identified four Open Skies airfields, including two POEs. By September 2002, this list had been modified to include 10 Open Skies airfields and 15 refueling airfields. In January 2003, Russia notified all States Parties that one POE would be deleted and replaced with another.

Just prior to the April 1, 2002 deadline for providing the source of its Annex I information, Russia announced that it was reorganizing portions of its national airspace and that Treaty-required information and its source would not be available until a later date. In July and August 2002, the United States requested Annex I information from Russia through several channels. Information was provided by Russia in September 2002, though it was not complete.

In January 2003, the United States again approached Russia/Belarus seeking further information. In response, Russia/Belarus invited experts to Moscow to seek resolution of this issue. The United States accepted this offer and in June 2003 a delegation went to Moscow, clearly outlining what information would be needed to

satisfy Annex I requirements. During these discussions and throughout the remainder of the summer, Russia provided further detailed information on some of its airfields.

During this period, the United States postponed two Open Skies missions it had planned over Russia, awaiting satisfactory resolution of Annex I requirements. By July 2003, the United States had obtained sufficient information, and resumed missions over Russia/Belarus. By the end of 2003, there were two remaining refueling airfields for which the United States did not have information to satisfy the requirements of Annex I. In 2004 the United States obtained the remaining Treaty-required information and additional requested information that allowed us to exercise our Treaty rights and operate within U.S. safety standards.

In July 2003, when the United States announced its intent to conduct its first mission since resuming operations over Russia/Belarus and the first into Russia's western POE (Klin), Russia refused to accept the mission as announced. Their stated reason for rejecting the mission was that they were not sure the U.S. OC-135 could safely operate at the announced airfield. This appeared to be a spurious objection, however, because the required aircraft information had been previously provided. Additionally, both sides had just made a breakthrough after nearly a year of negotiations obtaining airfield information to ensure the U.S. OC-135 could operate safely from Russia's airfields. Unofficially, the Russians also objected that the announced mission would have extended into the weekend. (This appears to have been the real motive, as it appears Russia was logistically unable to host the United States at the airbase over the weekend.) As noted, however, there is no right to refuse an announced observation mission for any reason. The United States delayed the announced mission, and formally objected to Russia's actions at the OSCC. After a brief exchange of further information and diplomatic notes, flights resumed with the mutual understanding that, per the Treaty, missions can be conducted on any date or time, but that where possible, the sides would seek to avoid conducting missions over weekends and holidays.

In December 2003, the last U.S. active mission over Russia/Belarus was scheduled using a leased Ukrainian aircraft. The aircraft ran off the end of the runway while arriving at the POE to begin the mission. No aircrew or ground personnel were injured and no damage occurred to the aircraft or runway. The U.S. inspectors and Ukrainian flight crew were prepared to continue with the announced mission the next day. After the incident, the Russians agreed to the observation flight plan proposed by the U.S. team. At the same time, the Russians insisted on their right to conduct an incident investigation as provided by Article VIII of the Treaty. Despite having grounded the aircraft to conduct the investigation, Russia argued that because a flight plan had been agreed to by both parties, the 96-hour rule for conducting the observation mission was applicable to the mission. The Russians concluded their investigation just in time for the aircraft to depart the POE near the end of that period. The United States argued that the 96-hour period should have been suspended while the investigation was ongoing. Unfortunately, adverse weather made it impractical for the U.S. team to press this Treaty point by submitting a flight plan that extended beyond the original 96-hour period. In

2004, the United States formally objected to Russia's actions during the event at the OSCC.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. The U.S.-Russian dialogue on required airfield data has been a long, complex, and iterative one. Each time we have asked for information, the Russians have provided only some of that information, and sometimes not in the most useable format. Our response has always been further to refine and clarify our request, to which the Russians have eventually presented the required information. In some cases, the United States has requested additional information beyond the ICAO requirements. Some of this information was provided when it was available. The trip to Moscow in June 2003 was successful in encouraging more useful information and seemed to be the tipping point, when their experts and ours were able to communicate face-to-face, and Russia now appears to understand the requirements as we do and now does provide Treaty-required information when we request it (albeit not as rapidly as we would prefer). The United States is still awaiting some information.

The Russian refusal to accept the U.S. mission as announced at Klin airbase appears to have been driven by their inability to put together the logistics of hosting our aircraft and inspection team at Klin over the weekend upon 72 hours notice. When the United States formally raised the issue in Vienna, the issue of flying over the weekend quickly became the focus of Russia's argument. U.S. insistence that there was no right of refusal under the Treaty held the day however, and, thereafter, no violation of this type occurred. As part of the discussion, an agreement was reached whereby, if possible, the sides would seek to avoid conducting missions over weekends and holidays. However, the United States has made clear that it reserves the right to fly missions on weekends and holidays when it sees fit. No State Party has yet tested this principle, however.

FINDING. Although the Republic of Belarus and the Russian Federation group of States Parties have taken steps to resolve the issue, the airspace and airfield information provided to date has not satisfied the requirements of Annex I of the Open Skies Treaty.

UKRAINE

ISSUE. The issue is whether Ukraine's attempt to prohibit observation of a portion of its territory, claiming that the proposed Open Skies mission would occur within hazardous airspace, was inconsistent with its obligations under the Open Skies Treaty.

HISTORY OF COMPLIANCE EVALUATION. This is the first time that Ukrainian compliance with the Treaty on Open Skies has been assessed.

DISCUSSION OF OBLIGATIONS. The Treaty on Open Skies provides an observing State Party with the right to observe any point on the entire territory of the

observed State Party, including areas designated as hazardous. It further obligates States Parties to give observation missions priority over any regular air traffic.

ACTIONS. The United States and Canada conducted their shared active quota mission over the territory of Ukraine in November 2003. When the joint team presented their mission plan, however, the Ukrainian representatives stated that part of the planned mission route was within a hazardous area and therefore the mission could not overfly that area. As the maximum allowed period for negotiating a flight plan approached, Ukrainian representatives relented, allowing for a “one-time” overflight of the area, but said that they did not consider this waiver as setting a precedent for future overflights. The Ukrainian representative stated that Ukraine considered that there should be no difference in the handling of Open Skies missions and commercial flights with respect to hazardous areas.

The United States approached the Ukrainians at the OSCC to clarify the Ukrainian position. The Ukrainian representative at the OSCC reiterated the statement made by the Ukrainian representative during the flight plan negotiations as representing the Ukrainian position, but promised to take the issue back to Kiev for review. In 2004, following bilateral U.S. diplomatic action at the OSCC, Ukraine has adopted the U.S. understanding of this Treaty point. Subsequent missions over the Ukraine have been free of controversy.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. During the mission plan negotiation, the U.S. team was insistent on the United States’ right to observe any point of territory pursuant to the Treaty. This mission was one of the first Open Skies missions over Ukraine, and it soon became clear the problem was the lack of a complete understanding of the treaty provisions (from an implementation perspective) with respect to the special air-traffic control handling required for Open Skies missions. As the time-period for negotiating the mission plan neared expiration, the U.S./Canadian team refused to yield on the point of this Treaty right. Ukraine partially relented, allowing the abovementioned “one-time” overflight and giving Ukraine the time to re-examine the issue.

The U.S.-Ukrainian dialogue in these regards has been cordial, with Ukrainian representatives expressing a desire to fully understand the issue and resolve it. We expect resolution of the issue, consistent with the U.S. interpretation of the Treaty.

FINDING. Ukraine would not have been in compliance with Article VI of the Open Skies Treaty had Ukraine not permitted the “one-time” overflight or had it persisted with its refusal to allow the observation of any point on its territory by subjecting Open Skies observation missions to commercial air traffic restrictions. However, because the issue was successfully resolved, the United States judges that Ukraine did not fail to comply with its Open Skies Treaty obligations.

VII. COMPLIANCE OF OTHER NATIONS (INCLUDING SUCCESSORS TO THE SOVIET UNION) WITH THEIR INTERNATIONAL COMMITMENTS

A. MISSILE NONPROLIFERATION COMMITMENTS

The United States employs a range of tools to impede the proliferation of missile systems capable of delivering weapons of mass destruction (WMD). Multilateral nonproliferation regimes and bilateral diplomacy are among the primary tools used to dissuade supplier states from assisting the missile programs of proliferant states and to induce proliferant states to end their missile programs. The Missile Technology Control Regime (MTCR) and the Hague Code of Conduct against Ballistic Missile Proliferation (HCOB), also known as the International Code of Conduct (ICOC), are the main multilateral mechanisms that address the proliferation of missiles and missile-related technology. The United States also uses every opportunity to hold bilateral discussions with other countries on nonproliferation, with a particular focus on those that are not members of multilateral regimes. In several instances, the United States has sought and received separate political nonproliferation commitments from nations like China to limit their missile proliferation activities or to implement controls on their missiles and related technologies. The United States expects these countries to fulfill their commitments.

Some nations that are significant proliferators of ballistic missile technology, such as North Korea and increasingly Iran, are not members of the MTCR or HCOB and have not made separate political nonproliferation commitments to the United States to halt their proliferation activities. Through our participation in multilateral regimes and in bilateral discussions with our allies and other like-minded states, the United States has attempted with little success to dissuade these states from their missile-proliferation activities. In response to continuing proliferation activities, in 2002 the United States imposed sanctions for missile-related transfers on entities in North Korea and Moldova for their missile-related transfers. In 2003, the United States imposed sanctions for missile-related transfers on entities in China, Iran, North Korea, Moldova and Macedonia. In addition, missile proliferation sanctions were waived against an Yemeni entity in August 2002 for national security reasons.

This Annex discusses the compliance of other nations with their Missile Technology Control Regime commitments and the compliance of other nations with separate political nonproliferation commitments they have made to the United States.

MISSILE TECHNOLOGY CONTROL REGIME. The Missile Technology Control Regime, created in 1987, is the centerpiece of international efforts to curb the spread of missiles capable of delivering weapons of mass destruction.

The MTCR is not a treaty, but a voluntary arrangement among member countries sharing a common interest in controlling missile proliferation. While the MTCR does not impose any legally binding obligations on participating countries, the Regime rests on

adherence to common export policy guidelines (the MTCR Guidelines) applied to an integral common list of controlled items (the MTCR Equipment, Software and Technology Annex). The Guidelines and Annex are implemented according to each country's national legislation and regulations.

The Regime implements the missile controls in two categories. Category I items are complete rocket systems (including ballistic missile systems, space launch vehicles, and sounding rockets) and unmanned air vehicles (including cruise missile systems, target drones and reconnaissance drones) capable of delivering at least a 500 kg payload to a range of at least 300 km, the major subsystems that could be used on these systems, and their production facilities. Category II items are other less sensitive and dual-use missile-related components that could be used to develop a Category I system, and complete missiles and major subsystems of missiles capable of delivering a payload of any size to a range of 300 km.

Specifically, the MTCR Partners undertake the following commitments:

A. General Restraint and Case-by-Case Consideration. The MTCR Guidelines provide that “restraint will be exercised in the consideration of all transfers of items within the Annex and all such transfers will be considered on a case-by-case basis.” In evaluating transfer applications for Annex items, Governments undertake to take into account the following factors: (a) concerns about the proliferation of weapons of mass destruction; (b) the capabilities and objectives of the missile and space programs of the recipient state; (c) the significance of the transfer in terms of the potential development of delivery systems (other than manned aircraft) for weapons of mass destruction; (d) the assessment of the end-use of the transfers, including the relevant assurances of the recipient states regarding end use, replication, and retransfer; (e) the applicability of relevant multilateral agreements; and, since May 15, 2003, (f) the risk of controlled items falling into the hands of terrorist groups and individuals. (U)

B. No Transfer of Category I Production Facilities. The MTCR Guidelines contain a commitment specifying that “the transfer of Category I production facilities will not be authorized.” The MTCR defines production facilities as “equipment and specially designed ‘software’ therefore integrated into installations for ‘development’ or for one or more phases of ‘production.’”

C. Category I Transfer Requests: Strong Presumption of Denial. Pursuant to the MTCR Guidelines, “particular restraint will be exercised in the consideration of Category I transfers, regardless of their purpose, and there will be a *strong presumption to deny* such transfers.” The Guidelines further provide that the transfer of Category I items “will be authorized only on rare occasions and where the Government (a) obtains binding government-to-government undertakings embodying the assurances from the recipient government called for in paragraph 5 [regarding end-use, replication and retransfer] and (b) assumes responsibility for taking all steps necessary to ensure that the item is put only to its stated end-use.”

D. Category II Transfer Requests. Category II transfers are subject to “restraint” and “case-by-case” consideration, taking into account the required factors, as described in A above. In addition, “particular restraint will also be exercised in the consideration of transfers of any items in the Annex, or of any missiles (whether or not in the Annex), if the Government judges, on the basis of all available, persuasive information, evaluated according to factors including those in paragraph 3 [see A above], that they are intended to be used for the delivery of weapons of mass destruction, and there will be a strong presumption to deny such transfers.”

E. Transfers of Design and Production Technology. The Guidelines provide that “the transfer of design and production technology directly associated with any items in the Annex will be subject to as great a degree of scrutiny and control as will the equipment itself, to the extent permitted by national legislation.”

These MTCR export controls are not bans, but regulatory efforts by individual Partners to prevent transfers of items that could contribute to delivery systems for WMD. Controlling such exports through licensing is consistent with the MTCR’s objective of curbing the flow of missile equipment and technology worldwide. It also helps suppliers have confidence that they can provide access to sensitive items without fear of these items being diverted to programs of concern.

The MTCR Partners do not make export licensing decisions as a group. Rather, each individual Partner implements the MTCR Guidelines and Annex in accordance with national legislation and practice and the Guidelines specify that “the decision to transfer remains the sole and sovereign judgment of the Government.” In addition, there are no provisions in the Regime to review the individual licensing decisions by Partner nations for conformity with the Guidelines, and there are no inherent penalties if some members believe another member has made a “wrong” decision. Instead, Partners regularly exchange information on relevant licensing matters in order to ensure consistency with the Regime’s overall nonproliferation objectives, and when questions arise, concerned Partners consult bilaterally to promote a common understanding of the issue and a consistent approach to the Regime’s overarching nonproliferation objectives.

Over the course of the MTCR’s history, the Regime has made some important strides in slowing missile proliferation worldwide. The MTCR Partners’ efforts have: induced most major suppliers to control their missile-related exports responsibly, reduced the number of countries with MTCR-class missile programs, and added countries with significant economic and political potential to the MTCR to increase its influence and capabilities. The MTCR Partners also have cooperated to halt numerous shipments of proliferation concern and have established the MTCR Guidelines and Annex as the international standard for responsible missile-related export behavior. In addition, they have established a broad outreach program to non-members, in order to increase awareness of the global missile proliferation threat and to urge countries that have engaged in missile proliferation to desist. In recent years, the MTCR Partners also have

focused increasingly on new ideas for addressing ongoing global missile proliferation challenges and the demand-side issues posed by non-MTCR members.

Membership in the MTCR has grown steadily since the Regime's creation in 1987. In 2001, the Republic of Korea joined the Regime, bringing the total number of MTCR Partners by the end of the reporting period to 33: Argentina, Australia, Austria, Belgium, Brazil, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, the Republic of Korea, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, Russia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, and the United States.

The MTCR Guidelines and Annex are open to all nations to implement unilaterally, and the United States and its MTCR partners encourage all governments to do so. Several countries have declared unilateral adherence to the MTCR Guidelines and have implemented export controls consistent with the MTCR Guidelines and Annex. These states include Bulgaria, Israel, Romania, and the Slovak Republic. China has committed to the original 1987 Guidelines of the MTCR but not the Annex. The United States and several other MTCR Partner countries maintain an active nonproliferation dialogue with these countries. However, these countries do not participate as Partners in the Regime, e.g., they do not participate in the decision-making process regarding the activities and future orientation of the MTCR.

HAGUE CODE OF CONDUCT AGAINST BALLISTIC MISSILE PROLIFERATION. On November 25, 2002, the International Code of Conduct (ICOC) was launched in The Hague, Netherlands. Now known as the Hague Code of Conduct (HCOG), it is intended to create a widely subscribed international predisposition against ballistic missile proliferation. It consists of a set of broad principles, general commitments, and modest confidence-building measures. It is a voluntary political commitment, not a treaty, and is open for subscription by all countries. The Code is intended to supplement, not supplant, the Missile Technology Control Regime.

States subscribing to the HCOG “resolve to implement” the following General Measures: (a) ratify, accede or otherwise abide by three space-related international agreements — the Outer Space Treaty; the Convention on International Liability for Damage Caused by Space Objects; and the Convention on Registration of Objects Launched into Outer Space; (b) “curb and prevent the proliferation” of WMD-capable ballistic missiles; (c) “exercise maximum possible restraint” in the development, testing, and deployment of WMD-capable ballistic missiles; (d) “exercise the necessary vigilance in the consideration of assistance to space launch vehicle programs in any other country” so as to prevent contributing to WMD-capable delivery systems and (e) “not to contribute to, support or assist any Ballistic Missile program in countries which might be developing or acquiring weapons of mass destruction in contravention of norms established by, and of those countries’ obligations under, international disarmament and nonproliferation treaties.”

In addition, the HCOC subscribing states “resolve to implement” the following transparency measures: (1) annual declarations outlining the nation’s ballistic missile policies and information on the numbers and generic class of ballistic missiles launched during the preceding year as declared under the HCOC’s pre-launch notification mechanism; (2) annual declarations outlining the nation’s space launch vehicle policies and information on the number and generic class of space launch vehicles launched during the preceding year as declared under the HCOC’s pre-launch notification mechanism; and (3) exchanges of pre-launch notifications on their ballistic missile and space launch vehicle launches and test flights.

As of December 2003, 111 states had subscribed to the ICOC including Russia and Libya. Other states, including China, North Korea, India, Pakistan, Yemen and Iran have not subscribed. Iraq was not originally invited to subscribe, but would be able to subscribe if it chose to do so.

CHINESE NONPROLIFERATION COMMITMENTS. Intensive bilateral dialogue and high-level political efforts augmented by trade sanctions imposed in 1991-92, 1993-94, and since September 2001 have resulted in a variety of Chinese missile nonproliferation commitments.

China is not an MTCR partner. However, as described below, it has committed over the course of a number of years to abide by various missile nonproliferation commitments.

Noncompliance concerns emerged soon after China issued its first missile nonproliferation commitment in March 1992. Previously in June 1991, the United States imposed sanctions on two Chinese entities-- China Great Wall Industry Corporation (CGWIC) and the China Precision Machinery Import/Export Corporation (CPMIEC)-- in connection with the sale of M-11 missile-related equipment to Pakistan. In return for ending sanctions on these two entities, China provided a written commitment in March 1992 to then Secretary of State James Baker that it would abide by the original “guidelines and parameters” of the MTCR, which the United States publicly stated were applicable to both the M-9 (CSS-6) and M-11 (CSS-7) missiles. After issuing this commitment, Chinese entities transferred M-11 missiles to Pakistan. In response to U.S. complaints, China indicated that the M-11 missile was not covered by the MTCR and that it was fully complying with its 1992 pledge. In 1993, the United States imposed Category II sanctions on the Chinese Ministry of Aerospace Industry and the Pakistani Ministry of Defense for their roles in the transfer. Some of the divisions of the Ministry of Aerospace Industry that were affected by the sanctions included: the China Precision Machinery Import-Export Corporation (CPMIEC), China Great Wall Industrial Corporation (CGWIC), China Aerospace Corporation (CASC), and the Chinese Academy of Space Technology (CAST).

In return for the lifting of the sanctions imposed in 1993, China pledged in October 1994 in a Joint Statement with the United States that it would not transfer

ground-to-ground missiles “inherently capable of reaching a range of at least 300 km with a payload of at least 500 kilograms.” In the years following this commitment, Chinese entities continued to provide missile-related items and assistance to countries, including Iran and Pakistan. China declared in October 1996 that its previous commitments did not cover items contained on the MTCR Annex. However, following additional negotiations, in June 1998, China in a Joint Statement reaffirmed that its policy was “to prevent the export of equipment, materials, or technology that could in any way assist programs in India or Pakistan, for nuclear weapons or for ballistic missiles capable of delivering such weapons.” Nevertheless, despite these Chinese assurances, the United States continued to detect evidence of Chinese missile-related transfers.

In return for the waiving of sanctions on several companies, China in November 2000 issued a stronger commitment to missile nonproliferation, stating it would not assist “in any way, any country in the development of ballistic missiles that can be used to deliver nuclear weapons (*i.e.*, missiles capable of delivering a payload of at least 500 kilograms to a distance of at least 300 kilometers).” The Chinese, however, continued to make no mention of preventing or restricting the proliferation of Category II missiles in their commitment. In addition, China agreed to enact and publish comprehensive missile-related export controls “at an early date.” China’s unilateral political commitment and the related discussions with the United States have been referred to as “the November 2000 Arrangement.”

Since China’s first commitment in March 1992 and until these negotiations stopped in November 2000, these successive cycles of bilateral compliance diplomacy have fallen into a common pattern. When U.S. intelligence detects evidence of missile-related transfers by Chinese entities to proliferant countries, China first either denies such transfers occurred or asserts that the transfers in question did not violate its commitments to the United States. Then, after protracted bilateral consultations, China issues another nonproliferation pledge and the United States waives sanctions, only to begin the cycle again.

Despite the November 2000 Arrangement, the United States continues to have similar concerns about Chinese compliance with and implementation of its missile nonproliferation commitments. Transfers that assist in the development of Category I missile programs in Iran and Pakistan continue. The continued proliferation of missile-related technology led the United States to impose sanctions in September 2001 on the China Metallurgical Equipment Corporation (CMEC/MECC). Since then, and as detailed in this report, numerous Chinese entities have continued to provide missile-related technology to nuclear-capable Category I ballistic missile programs.

In addition, China has interpreted and implemented its November 2000 political commitments in ways that have fallen short of establishing an effective missile nonproliferation system.

OTHER NONPROLIFERATION COMMITMENTS. As part of its bilateral diplomatic consultations, the United States has sought nonproliferation commitments from both missile technology supplier states and recipient nations that are not members of the MTCR or the HCOC. Some countries have agreed to support common nonproliferation objectives by making a commitment to the United States not to acquire WMD-capable delivery systems for their military.

COUNTRY ASSESSMENTS

CHINA

ISSUE. Proliferation of missile-related technology by Chinese entities continues and calls into question China's stated commitment to controlling missile proliferation.

HISTORY OF ADHERENCE EVALUATION. Chinese compliance with its missile nonproliferation commitments was first assessed in the June 2003 (CY2001) NCR. In that Report, the United States concluded that:

[China's] actions call into serious question China's stated commitment to controlling missile proliferation. Chinese state-owned corporations have engaged in transfer activities with Pakistan, Iran, North Korea, and Libya that are clearly contrary to China's commitments to the United States.

COMMITMENTS UNDERTAKEN. In return for the waiving of a number of sanctions required by U.S. law for past serious transfers by Chinese entities to the Iranian and Pakistani missile programs, including the transfer of a missile production facility to Pakistan, China in November 2000 issued a stronger commitment to missile nonproliferation stating it would not assist "in any way, any country in the development of ballistic missiles that can be used to deliver nuclear weapons (i.e., missiles capable of delivering a payload of at least 500 kilograms to a distance of at least 300 kilometers)." In addition, China agreed to enact and publish comprehensive missile-related export controls "at an early date." China's unilateral political commitment and the related discussions with the United States have been referred to as "the November 2000 Arrangement."

ACTIONS. Despite China's November 2000 Arrangement and the promulgation of export control regulations, China's proliferation of missile-related technology continues and calls into question China's stated commitment to controlling missile proliferation. These missile-related transfers continued in 2002 and 2003 to ballistic missile programs in Iran, Iraq, Libya, Pakistan, and North Korea. The United States has sanctioned several of the companies transferring these technologies.

Chinese entities continued to transfer missile-related goods and technical knowledge to countries such as Pakistan, Iran, Libya, and North Korea. These transfers continue to contribute the development of MTCR Category I ballistic missiles in these

countries. In addition, Chinese entities provided dual-use missile-related items, raw materials, and assistance to Iran, Libya, and North Korea.

China's implementation and enforcement of the missile export control regulations remain problematic. The Chinese Government has not established a system of end-use verification checks to ensure that items approved for transfer are not diverted. China must also ensure that "catch-all" controls are effectively implemented within China. Finally, China needs clearly to signal to all Chinese entities that it intends vigorously to enforce its export controls. Beijing has also not taken adequate steps under these new regulations to prevent sensitive transfers or prosecute violations, and China needs to publicize its efforts to enforce its export control regulations.

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. Despite its November 2000 pledge, Chinese companies in 2002 and 2003 continued to supply technology and assistance to missile programs in various countries; this technology and assistance was of direct use to these programs. The United States has gone to considerable lengths to inform the Chinese Government about the proliferation activities of these entities. However, despite these efforts, the Chinese Government almost invariably denies that such activities are occurring, and Chinese entities and persons continue to proliferate missile technology.

FINDING. The United States finds that items transferred by Chinese entities contributed to Category I missile programs contrary to the Chinese Government's November 2000 missile nonproliferation commitments. The United States remains concerned and will continue to monitor this situation closely.

RUSSIA

ISSUE. During the period of this Report, Russian entities continued to supply missile-applicable technologies to missile programs of proliferation concern in China, India, Iran, and other countries.

HISTORY OF COMPLIANCE EVALUATION. Russian compliance with its MTCR commitments was first assessed in the June 2003 (CY2001) NCR. In that Report the United States concluded that:

Russian commercial and governmental entities have engaged in transfers that are contrary to the nonproliferation criteria outlined in the MTCR Guidelines. To date, Russia's efforts to prevent further transfers have been inadequate.

COMMITMENTS UNDERTAKEN. Russia became an MTCR Partner on August 8, 1995. Since then, the Russian Government has enacted a number of laws and presidential decrees that implement controls on missile technology. The current Russian law governing the export of complete missile systems is the September 6, 1999, edict by

President Yeltsin, “On Measures to Increase the Efficiency of Russian Federal Military-Technical Cooperation with Foreign States.” This edict makes the Ministry of Trade responsible for processing general licenses that allow enterprises to export arms independently and for granting individual equipment or technology export license for specific contracts. The Ministry is also responsible for determining the legal competence of a foreign partner to receive Russian military equipment, including verifying the end-user certificate. This edict was replaced by Edict No. 1953, December 1, 2000, “Issues Concerning the Russian Federation’s Military – Technical cooperation with Foreign States.”

The current law governing the export of dual-use exports is the Federal Law on Export Control, which the Russian Government enacted on July 18, 1999. Article 20 of this law also includes “catch all” provisions. Government Resolution No. 296 “Governing Foreign Trade Control over Equipment, Materials and Technologies Which Can be Used to Make Missile Weapons,” enacted on April 16, 2001 and subsequently updated in October 2001 and October 2002, creates the procedures by which the trade of missile technology in the Russian Federation is to occur. The Federal Law created the Department of Export Control (DEK) which was responsible for conducting license determinations at the request of exporters, for processing and issuing export licenses, for developing and maintaining commodity classification lists, and for drafting regulations designed to ensure continued implementation of nonproliferation export controls.

The March 2003 government reshuffling transferred export control oversight to the Ministry of Defense (MOD). As a result, the Federal Service for Technical and Export Controls under the MOD assumed responsibilities for export controls from Ministry of Economic Development and Trade (MEDT) DEK.

The current limitations of Russia’s export control system are hindering the Russian Government’s ability to implement its MTCR commitment to review all Annex item transfers on a case-by-case basis, which in turn undermines its ability to “exercise restraint” in considering such transfers and effectively halt them.

ACTIONS. While some progress has been made, Russian entities continued during the reporting period to supply sensitive missile-applicable items, technology, and expertise to missile programs in India, Iran, and China, indicating that in many cases Russia’s export control system has been ineffective in assuring case-by-case review of Annex item transfers that would halt problematic missile-related transfers. Based on all available information, the continuing pattern of missile-related transfers by Russian entities calls into serious question Russia’s ability to control missile proliferation

COMPLIANCE-RELATED DIALOGUE AND ANALYSIS. Transfers by entities under Russia’s jurisdiction still call into question the Russian Government’s ability to conduct case-by-case review or its willingness to exercise restraint with respect to MTCR-controlled technologies to ballistic missile programs of concern. Although

such transfers are not directly barred by the MTCR, Russia's actions do not accord with the MTCR implementation policies of the United States and other MTCR members.

The United States has raised its concerns about these transfers at all levels of the Russian Government. If this assistance is authorized by the Russian Government, this assistance is not directly precluded by Russia's commitments under the MTCR Guidelines. To the extent these transfers are not authorized by the Russian Government, they raise concerns regarding its ability to implement controls on missile-related technologies.

FINDING. Russian entities have engaged in transfers that, although not directly precluded by Russia's commitments under the MTCR Guidelines, raise serious missile proliferation concerns and call into question Russia's ability to implement controls on missile-related technologies. To date, Russia's efforts to prevent further transfers have been inadequate.

