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## CAPABILITY OF THE UNITED STATES TO MONITOR COMPLIANCE WITH THE START TREATY

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Mr. BOREN, from the Committee on Intelligence,  
submitted the following

### REPORT

#### BACKGROUND

On July 31, 1991, after nine years of negotiations, the United States and the Soviet Union signed the Treaty on the Reduction and Limitation of Strategic Offensive Arms (START), with associated annexes, protocols, a Memorandum of Understanding, and related agreements. On May 23, 1992, the republic of the former Soviet Union with nuclear weapons on their territory—Russia, Belarus, Kazakhstan and Ukraine—signed the Lisbon Protocol to the START Treaty, in which the new countries jointly assumed the obligations of the old Soviet Union.

The key features of the START Treaty are a numerical limit of 6,000 warheads on 1,600 deployed intercontinental ballistic missile (ICBM), submarine-launched ballistic missile (SLBM) and heavy bomber delivery vehicles; a sublimit of 1,540 warheads on 154 heavy ICBMs; a limit of 1,100 mobile ICBM warheads; and an overall throw-weight limit of 3,600 metric tons. The Treaty provides for extensive on-site inspection and other cooperative means of verification, and requires the transmission and exchange of unencrypted telemetry for all ICBM and SLBM flight tests.

#### THE SCOPE OF THE COMMITTEE'S EFFORT

The Senate Foreign Relations Committee has formal responsibility for reviewing all treaties before they are acted upon by the full Senate. The Senate Select Committee on Intelligence has prepared its report to support this process by providing both the Foreign Relations Committee and the Senate as a whole with its assessment of the monitoring and counterintelligence issues raised by this Treaty.

This Report is the culmination of the Committee's work over the last nine years monitoring the progress of START. The Committee has routinely reviewed START progress and addressed START monitoring capabilities in its annual Intelligence Authorization Acts, and has expressed its views on verification issues to the negotiators and other senior level officials both formally and informally.

In preparation for the Senate vote on advice and consent to ratification of the Treaty, Committee staff held three on-the-record staff briefings; reviewed several hundred documents, including both a National Intelligence Estimate on U.S. capabilities to monitor compliance with START provisions and written statements from the Director and Deputy Director of Central Intelligence; and received answers to over a hundred formal questions for the record. Committee staff also inspected relevant U.S. monitoring operations to gain a more detailed, first-hand knowledge of how the Intelligence Community collects, and how its analysts use, information bearing upon other countries' compliance with arms control agreements signed by the United States.

On July 22, 1992, the Committee held a closed hearing on the START Treaty, its implementation and its counterintelligence and security implications. Testimony was taken at this hearing from the Honorable Linton Brooks, U.S. Negotiator for Strategic Offensive Arms; the Honorable Manfred Eimer, Assistant Director for Verification and Intelligence, U.S. Arms Control and Disarmament Agency; Mr. Douglas MacEachin, Special Assistant to the Director of Central Intelligence for Arms Control; Ms. Nina Stewart, Deputy Assistant Secretary of Defense for Counterintelligence and Security Countermeasures; Mr. Lee Minichiello, Deputy Director for Strategic Arms Control and Compliance, Department of Defense; and Mr. Frank LoTurco, Deputy Director for Counterintelligence, the On-Site Inspection Agency, Department of Defense.

On July 29, 1992, the Committee held a closed hearing on U.S. monitoring capabilities and the risks and implications of violations by the other Parties to the Treaty. At this hearing the Committee took testimony from Mr. MacEachin; Dr. Larry Gershwin, National Intelligence Officer for Strategic Programs; and Major General Gary L. Curtin, USAF, Deputy Director for Strategic Plans and Policy (Deputy J-5) for International Negotiations, the Joint Staff.

The Committee also received responses to numerous questions for the record that were submitted to the Executive branch after its July hearings.

Throughout the Committee's efforts, experts in the United States Intelligence Community have provided generously their time and insight. Their National Intelligence Estimate on U.S. capabilities to monitor the START Treaty is a detailed and honest analysis of the strengths and limitations of U.S. monitoring capabilities. The Committee was especially pleased to find in that Estimate a straightforward discussion of differences between agencies on some major issues.

The culmination of the Committee's effort is a classified report of over 160 pages, which addressed in detail the verification protocols, U.S. collection and analytical capabilities, cooperative measures,

evasion scenarios, incentives/disincentives to evade compliance, counterintelligence issues, and implementation concerns.

The following are key unclassified findings from the classified Report.

#### INTELLIGENCE SUPPORT TO THE NEGOTIATIONS

The Intelligence Community played a significant role in all stages of the START negotiations, probably a greater role than it has in any prior arms treaty negotiation. Intelligence Community personnel provided the negotiators with background and Community views on key issues, and helped develop the verification measures included in the Treaty—including the provisions regarding telemetry from ballistic missile flight-tests.

#### OVERALL MONITORING JUDGMENTS

The Committee concurs in the judgment of the Director of Central Intelligence and other Intelligence Community officials that, “[w]hile there are *some* areas that will be problematic, we are confident that we can monitor *most* aspects of the Treaty well.” [Emphasis added.] Members of the Senate should understand, however, that U.S. intelligence will have less than high confidence in its monitoring of such areas as non-deployed mobile ICBMs, the number of RVs actually carried by some ICBMs and SLBMs, and some provisions relating to cruise missiles and the heavy bombers that carry them.

The chief U.S. Start negotiator and other policy officials assured the Committee that despite these limitations on U.S. monitoring capabilities, “[t]he Administration remains convinced that \* \* \* the START treaty as a whole remains effectively verifiable.” A major reason for Executive branch officials’ confidence is that they do not see Russia as either capable of cheating or motivated to do so. As the Director of Central Intelligence stated:

On the whole, we strongly doubt that the CIS states will be able in the near term—or perhaps during the life of the Treaty—to initiate and successfully execute sophisticated cheating programs, given the extent of social, political, and economic disruption, the reduced influence of military and defense-industrial leaders, and the advent of more aggressive press and legislative oversight activities. Although we cannot exclude the possibility, we judge it unlikely that one or more of the newly independent state, local, or military authorities will attempt to circumvent the Treaty in order to preserve some strategic military capability. [Senate Intelligence Committee statement, July 29, 1992, p. 7.]

Policy makers have also been influenced by the Joint Staff’s repeated conclusion that the military significance of the risk to U.S. security associated with the Intelligence Community’s monitoring uncertainties is low.

In the Committee’s view, START reflects the greatly diminished hostility between the United States and the USSR that characterized the last years of the Gorbachev regime. This is apparent in

both the achievements and the limitations of START regarding monitoring and verification. Thus, the provisions regarding telemetry, technical exhibitions and on-site inspection call for a level of openness that was all but unimaginable in the 1980s. The United States was willing to accede to both U.S. military and Soviet concerns regarding security and flexibility for bomber, naval and cruise missile forces, rather than making monitoring and verification its first priority in all cases. This reflected not only the importance of those competing priorities, but also the accurate sense that the Soviet Union is no longer the military threat that it was in the past.

The START Treaty is not perfectly monitorable. There are both residual uncertainties regarding Soviet/CIS data on non-deployed missiles and also cheating scenarios—which may be difficult to implement and offer only small advantages to the perpetrator, but do appear feasible if CIS or Russian forces and the industrial facilities that support them were sufficiently determined.

But the USSR is gone. Strategic arms logistic chains that once crossed Soviet Republic boundaries now must cross the borders of independent states. Economic decline and reform in the former Soviet Union have combined with the rise of these new states to make major arms development programs increasingly difficult to pursue. It appears unlikely, moreover, that even an aggressive, nationalistic regime in Russia could restore the old order to the degree necessary to significantly increase the prospects for successful cheating on the scale necessary to affect the strategic balance.

The Executive branch acknowledges the Soviet Union's past record of exploiting or violating arms control agreements, but now looks forward to a new era, as stated in response to a question for the record:

Regardless of the motives of the former Soviet regime, we have every reason to believe that the policies of the former Soviet Union are not representative of the policies of the states which have replaced it. President Yeltsin and his counterparts in other former Soviet Republics have renounced confrontation and the quest for military domination and have expressed their support for the rule of law in international relations. \* \* \* Even though not all of our previous concerns have been fully resolved, we expect that the demise of the Soviet Union will lead to a new era of compliance with arms control agreements.

The Senate Intelligence Committee has closely watched U.S. efforts to ensure that Russia will live up to arms control obligations of the former Soviet Union, including the CFE Treaty that recently entered into force. The Committee considers Russian cooperation on this issue and on measures to guard against the export of sensitive nuclear and missile materials and technology to be important indicators of that country's reliability as an arms control partner.

This Committee remains deeply concerned, moreover, that Russia's former—and perhaps continuing—biological weapons program may indicate that the CIS/Russian military is capable of mounting or continuing a START violation, either in contravention of the wishes of Russia's civilian authorities or with the knowledge or

support of at least part of that leadership. The recent joint U.S.-British-Russian statement regarding exchanges of information and visits to biological sites, including non-military sites in Russia, is a positive development.

The dramatically, and perhaps permanently decreased threat posed by the USSR's successor states is thus critical to the Committee's general confidence in U.S. START monitoring capabilities. Were the Soviet Union still the united, aggressive and militarily effective force that it often was in the past, then the current and future limitations of U.S. monitoring capabilities and the existence of plausible cheating scenarios would prompt much more concern.

#### U.S. MONITORING SYSTEMS

The United States will rely on a combination of capabilities—including imagery, signals intelligence, human intelligence, open-source information and cooperative measures—to monitor compliance with the provisions of the START agreement. U.S. monitoring will be aided substantially by START's verification provisions, and especially by those that require each side to transmit unencrypted telemetry, to provide telemetry tapes and interpretive data, and to permit the visual inspection and measurement of each type and variant of missile.

While important improvements are planned in some intelligence programs, declining budgets will cause difficulties in others. START's verification provisions, if they are obeyed, may permit cost savings in U.S. intelligence systems. But the Committee's FY 1993 intelligence budget authorization actions reflect its concern that U.S. intelligence capabilities remain fully capable of monitoring compliance with START and other arms control treaties.

#### READILY-MONITORED START PROVISIONS

(1) U.S. Intelligence can monitor the overall number of deployed silo-based ICBMs, SLBMs and heavy bombers with virtual certainty under current practices. The Intelligence Community also believes it can adequately monitor the number of deployed rail and road-mobile ICBMs.

(2) The Intelligence Community has high confidence in its monitoring capabilities with respect to many, but not all, START-limited ballistic missile characteristics. Its capabilities to detect and correctly interpret efforts to misrepresent those technical characteristics are judged to be excellent.

(3) The Intelligence Community can monitor with high confidence the number of RVs that should be credited to ballistic missiles (as a result of flight-tests and/or the attributions for existing types of missiles provided in the START Memorandum of Understanding) and, therefore, the aggregate number of RVs on SLBMs and at least silo-based ICBMs. The START provisions on telemetry play a large role in ensuring that RV releases and simulated RV releases can be monitored confidently.

(4) The Intelligence Community should be able to fulfill with high confidence all the monitoring tasks involving the counting of aircraft.

(5) The Intelligence Community has high monitoring confidence regarding conversion or elimination of ICBMs, SLBM launchers and heavy bombers. U.S. capabilities to detect and correctly interpret efforts to illegally restore converted or eliminated launchers are also judged to be high.

#### PROBLEMS IN MONITORING MOBILE MISSILES

Monitoring non-deployed mobile missiles is a significant task, due to their potential use in force augmentation and refire operations. The Intelligence Community's overall ability to monitor non-deployed mobile ICBMs is questionable.

During the START talks, U.S. negotiators pressed strongly for the right to engage in perimeter portal continuous monitoring (PPCM) at solid rocket motor production plants and to require an accounting for all such rocket motors. The Soviets resisted this approach and the United States eventually relented in return for concessions on the B-1 and B-2 bombers.

The merits of this trade-off are beyond the Committee's purview, but the lack of solid rocket motor monitoring will clearly limit, to some degree, U.S. capability to verify compliance with START's mobile missile provisions. The chief U.S. negotiator acknowledged this to the Committee, as follows:

As compared to the pre-December 1990 U.S. proposal, the ultimate START Treaty \* \* \* provides less confidence that excess mobile ICBMs or their solid rocket motors are not being produced stored, or assembled at undeclared facilities. [Senate Intelligence Committee statement, July 22, 1992, p. 23.]

The Director of Central Intelligence has stated that "we can neither confirm nor refute the Soviet-supplied data on total nondeployed missile inventories" and that "it is possible that some undeclared missiles have been stored at unidentified facilities." Putting an upper bound on the covert missile risk, the Director stated that "we judge that the Soviets did not maintain a large-scale program to store several hundred or more undeclared, nondeployed strategic ballistic missiles." [Senate Foreign Relations Committee statement, June 30, 1992, p. 5.]

The Joint Chiefs of Staff believe that the military significance of the Intelligence Community scenarios would be minimal, but have declined to state how many covertly deployed missiles would be militarily significant, saying instead that "there is little military incentive for them to resort to cheating." The Committee would have preferred an analytic process in which the JCS specified both types and levels of cheating that would be militarily significant, preferably before the Intelligence Community had published its feasible Soviet/CIS cheating scenarios.

The Intelligence Committee shares the Director's view that cheating scenarios involving the possible covert production and deployment of mobile ICBMs and their launchers are particularly worrisome. The Committee believes that the possible existence of covert, non-deployed mobile missiles must remain an important U.S. intelligence target.

#### PROBLEMS IN MONITORING THE NUMBER OF RVs ON A MISSILE

U.S. intelligence alone cannot reliably monitor the number of re-entry vehicles actually on a deployed missile. This is illustrated by the Director of Central Intelligence's acknowledgement that the Intelligence Community could not determine the accuracy or inaccuracy of the Soviet declaration of September, 1990, that all deployed SS-N-18 SLBMs carried only three RVs. But the right to conduct ten RV on-site inspections per year will help U.S. intelligence to judge, over time, at least whether silo-based ICBMs are being illegally uploaded.

Some of the Intelligence Community's CIS cheating scenarios involved ballistic missiles that had previously been "downloaded" (i.e., declared to carry fewer RVs than would normally be attributed to them under START counting rules, as the Soviets did with the SS-N-18 SLBM) and might then be "uploaded" to carry more RVs than the declared number. These scenarios varied in feasibility, in marginal benefit to a perpetrator, and in likelihood of detection.

The Joint Staff assured the Committee that the Joint Chiefs of Staff had evaluated the military significance of these scenarios and had concluded that, given U.S. military capabilities, there would be little marginal benefit to CIS forces—and, therefore, little reason for such schemes to be attempted. The Committee notes, however, that there is always some risk that a country will engage in arms control treaty violations for reasons that have little to do with rational military planning from a U.S. perspective.

#### PROBLEMS IN MONITORING HEAVY BOMBERS AND CRUISE MISSILES

While heavy bombers can be readily counted, compliance with START provisions involving their technical characteristics or weapon loadings is more difficult to monitor. Provisions regarding ALCMs are also more difficult to monitor. Some of these difficulties stem from the decision not to apply the Treaty's telemetry provisions to heavy bombers or cruise missiles.

Executive branch officials see no cause for alarm. As they indicated to the Committee in response to a question for the record on this point:

These difficulties have long been recognized. In part, they result from our longstanding view that, because heavy bombers are inherently stabilizing, and because they play a more important role in the U.S. strategic force structure than in the Russian, we should give greater weight to avoiding intrusiveness and preserving operational flexibility for such bombers than to improvements in the verification regime.

Thus, as General Curtin informed the Committee, the Joint Staff believes cheating scenarios "that involve heavy bombers and ALCMs \* \* \* generally pose little risk of militarily significant violations. Heavy bombers and ALCMs are slow flyers which offer little potential for a surprise attack."

The JCS view on monitoring compliance with the political agreement on sea-launched cruise missiles was similar in its recognition of monitoring difficulties:

\* \* \* The Chairman and the Joint Staff have little military concern about SLCM monitoring. The U.S. has an advantage in SLCM and ALCM technology which the START negotiators effectively protected. The U.S. position throughout the START negotiations was consistent; SLCMs are not strategic weapons and therefore should not be limited by the START Treaty. Further, the United States was unable to identify any verifiable restrictions on SLCMs. From a military perspective, the need to preserve U.S. sea-launched cruise missile capability, especially the non-nuclear capability demonstrated in the Persian Gulf, outweighed any concern about a counterpart threat from the Russians. Thus, while we acknowledge the monitoring challenge brought about by the SLCM agreement, the Chairman and the Joint Staff strongly support the balance struck in the START Treaty. [Senate Intelligence Committee statement, July 29, 1992, p. 12.]

#### TRADE-OFFS BETWEEN VERIFICATION AND OTHER U.S. PRIORITIES

In a number of areas, verification concerns were sacrificed in order to provide greater security or flexibility for U.S. military programs.

(1) The United States acceded to the Soviet refusal to allow perimeter portal continuous monitoring of solid rocket motor plants. Such monitoring might have greatly improved U.S. monitoring confidence regarding undeclared mobile missiles. Instead, under START such monitoring is limited to mobile ICBM final assembly plants.

(2) The United States accepted relatively low levels of monitoring confidence with respect to the range and arming of air-launched cruise missiles (ALCMs), as well as the number of ALCMs actually carried by a heavy bomber.

(3) Although START obligates the parties to broadcast telemetric data from missile flight tests and to exchange tapes of such broadcasts, and for the most part prohibits the parties from interfering with the monitoring of such broadcasts, the United States obtained some encryption exemptions and agreed to the Soviet desire for some encapsulation exemptions. The Committee is satisfied that these exemptions will not create major problems for Treaty monitoring.

(4) The United States insisted that limitations on sea-launched cruise missiles (SLCMs) should not be contained in START or, therefore, be subject to START's verification provisions. The Soviet Union took a similar stand regarding the Backfire bomber, the limitations on which were also kept out of the formal Treaty and thus beyond the reach of START's verification provisions.

#### COMPLIANCE ISSUES RAISED BY THE TEXT

The Committee believes that while the START Treaty was drafted with attention to detail and awareness of potential hazards,



there may still be a few areas in which the text could lead to compliance disputes. Problems of treaty language interpretation are not unique to START, however, and the Committee believes that there are no START Treaty text problems that are so serious as to require immediate adjustment.

(1) The START provision on penetration aids does not specify the criteria for distinguishing a simulated penetration aid release from a simulated re-entry vehicle (RV) release. This ambiguity could lead to disputes regarding the number of RVs to be accredited to a missile in a given flight-test.

(2) START's ban on "concealment measures" does not apply to "cover or concealment practices at ICBM bases and deployment areas, or to the use of environmental shelters for strategic offensive arms." Neither "concealment measures" nor "concealment practices" is defined, so it is not clear precisely what activities are to be permitted.

(3) Although START includes an Agreed Statement limiting mobile space launchers, it does not specify the extent to which stages for space launch vehicles must differ from first stages of ICBMs or SLCMs in order to avoid being subject to START limits. A compliance issue could arise if a Party developed a space-launch vehicle with a first stage similar to a ballistic missile first stage.

#### U.S. COUNTERINTELLIGENCE AND SECURITY READINESS

Despite the changes that have taken place in the former Soviet Union, there is a continuing need to guard against Russian or other Parties' use of START inspection rights as a cover for illegal intelligence activity. The Department of Defense On-Site Inspection Agency (OSIA) and the counterintelligence and security arms of the U.S. armed forces bear the major share of this responsibility.

The Deputy Assistant Secretary of Defense for Counterintelligence and Security Countermeasures assured the Committee that the results of lessons learned under the INF Treaty for monitoring and countering counterintelligence threats will be applied during START inspections. Examples include: counterintelligence training for U.S. escorts and personnel involved in the START process; strict control of the Russian START teams' contacts and movements; examination of Russian equipment and personal baggage brought into the United States; and the conduct of mock inspections of sensitive facilities to help identify what equipment and information may and should be protected.

The Air Force Office of Special Investigations (OSI) will have a wide variety of START-related counterintelligence responsibilities, many of which it has for other treaties as well. The Naval Investigative Service (NIS) does not have the extensive experience that OSIA and Air Force OSI have gained under prior arms control treaties. The Committee expects OSIA and the Department of Defense to ensure that NIS meets its counterintelligence responsibilities under START.

The DoD Under Secretary for Acquisition has assigned to the relevant DoD Services and Agencies the responsibility to develop inspection and information protection plans for each Service's or Agency's facilities that are subject to on-site inspection. The De-

fense Department has also developed a Defense Treaty Inspection Readiness Program (DTIRP) to provide recommendations regarding security needs or issues at those sites.

More than 60 mock inspections and Staff Assistance Visits have been conducted by OSIA, with Air Force and Navy participation, at installations subject to START inspections. In addition, the DTIRP is assisting the government and contractor community in providing counterintelligence and security countermeasures support for START. The DTIRP has also assisted contractor facilities in limiting security countermeasures to information that truly requires protection, thus helping to reduce security costs.

The Committee inquired specifically about security for U.S. industrial facilities where proprietary as well as classified information may be at risk. The key element in minimizing costs and loss of sensitive information due to Special Access Visits, which can be requested at any U.S. facility, will be utilization of the flexibility built into the START provision—which allows for a Party to take sufficient time, before granting a request, to make adequate site preparations; for the Parties to define the visit's scope and limitations on a case-by-case basis; for the proposal of alternative means to resolve a Treaty concern, and, if necessary for refusal of a request.

The Under Secretary of Defense for Acquisition has issued DoD guidance on the process to be utilized in evaluating requests for Special Access Visits at DoD facilities and DoD contractors. The primary emphasis is to ensure that the Defense Department can quickly identify and assess any sensitive activities at the challenged site and that security concerns are addressed prior to a U.S. Government decision on whether to grant the Special Access Visit request. By the time the Treaty enters into force, all Services and Defense Agencies will have incorporated this guidance into their START implementation plans.

In response to Committee concerns regarding procedures for handling requests for Special Access Visit at private facilities not involved in DoD contracts, the Executive branch stated:

If a Party to START were to make such a request, the United States would expect to consult closely with the private firm involved and, *consistent with Constitutional protections, if the government and private firm were to agree to such a visit*, procedures would be worked out with the facility and the Party to START on a case-by-case basis, depending on the nature of the facility. Given the nature of the START Treaty and its verification regime, we do not expect the situation suggested by your question to arrive. *[Emphasis added.]*

The Committee urged the Administration to develop policy and procedures for handling such cases, and was pleased by the assurance that “[w]e fully share your view that START should not put the proprietary secrets of U.S. companies in jeopardy.” The Department of State response added:

Under the direction of the National Security Council staff, the Administration will prepare internal procedures

for dealing with special access visits. These procedures will be part of our formal procedures for START implementation. We anticipate they will be issued prior to START's entry into force. The system we envision will assign specific responsibilities to appropriate government agencies for reviewing requests for special access visits at government facilities, government contractors, and private facilities. We will explicitly consider proprietary interests as well as security in our deliberations on requests for special access visits. [Letter from Assistant Secretary of State Mullins to Senators Boren and Murkowski, August 18, 1992.]

The Department of Defense expects to meet its counterintelligence and security obligations for START by re-prioritizing missions and reprogramming resources. There is uncertainty, however, with regard to security costs that may be incurred in anticipation of possible Special Access Visits. Each DoD Agency and Service is to plan for potential requests for Special Access Visits at its facilities "to the degree it believes prudent." Further policy guidance may be necessary to ensure that facilities do not take unnecessary and costly security measures because of the potential for Security Access Visits.

#### U.S. READINESS TO IMPLEMENT START MONITORING AND VERIFICATION

The Committee found that OSIA is well prepared to implement on-site inspection in the former Soviet Union and escorting of other Parties' inspectors in the United States, due to its experience with other arms control treaties and the long time that it has had to locate and train personnel.

The Committee is pleased that OSIA has secured the services of some of the U.S. Government's finest Russian linguists. It is also pleased with the successful creation of gateway facilities in Frankfurt, Germany, and Yokota, Japan, and with the cooperation of other U.S. agencies in providing transportation and other support to OSIA's mission. OSIA informed the committee that all its manpower requirements, funding and logistical support to execute this mission have been identified.

Ukraine and Russia may elect not to establish a perimeter portal continuous monitoring (PPCM) presence in the United States at the Thiokol Peacekeeper First Stage Final Assembly Facility in Promontory, Utah. The U.S. Government intends to exercise its right, however, to establish PPCM at the Pavlograd Machine Plant in Ukraine and at any new mobile ICBM final assembly facilities that might be established.

The Special Assistant to the DCI for Arms Control described to the Committee the types of analytic product that the Intelligence Community will produce to assist policy makers who must determine whether START is being obeyed. These products will parallel those produced on the implementation of other arms control treaties.

Byelarus, Kazakhstan, Russia and Ukraine are all facing severe financial problems, but the Executive branch believes that each of the Parties is capable of paying the costs of complying with START. In response to an informal suggestion from Ukraine to

alter cost allocation provisions, the United States reminded Ukraine that it is the obligation of the four states that are successors to the former Soviet Union to work together on a formula for allocating costs. As there has been no formal proposal from Ukraine to modify the provisions of the Treaty, the Administration declined to speculate on what the U.S. Government reaction to such a proposal might be. The Administration is considering, however, a request for technical and financial assistance in the dismantlement of certain ICBM silos.

#### IMPLEMENTATION CONCERNS REGARDING THE OTHER PARTIES

In the Lisbon Protocol of May 23, 1992, Russia, Belarus, Kazakhstan and Ukraine agreed to assume jointly the rights and responsibilities that would have belonged to the Soviet Union under the START Treaty. Due to frictions between some of those republics and to the current state of political and economic flux in the former Soviet Union, the Committee considers it likely that some problems will occur in implementing the Treaty. The problems most likely to arise would result not from cheating schemes, but from economic or political difficulties within or among the former Soviet Parties to the Treaty.

Some of the costs associated with START Treaty compliance could be onerous, particularly for the non-Russian republics. For example, Ukraine will be responsible for destroying hundreds of ICBMs (unless it sends the missiles back to Russia) and missile silos, and also for hosting U.S. inspectors and portal monitors. Ukraine has indicated that it may have difficulty meeting its obligations on schedule and has asked the United States for financial and technical assistance. The deteriorating situation in Russian shipyards due to lack of funding could produce similar delays in the dismantlement of ballistic missile submarines.

Economic difficulties could prompt defense conversion activities that might raise START monitoring or compliance problems. Russia and Ukraine have both expressed interest in converting ICBMs to space launch vehicles. Attempts to use mobile missiles or launchers as the basis for space launch vehicles could cause monitoring difficulties for the Intelligence Community—and raise compliance issues as well, if the space launch vehicles were not clearly different from the missiles or launchers on which they were based (as required in START). The chief U.S. negotiator commented at one Committee hearing that “the Treaty is not perhaps as clear as you might like it on that point.”

U.S. INF inspection teams have suffered delays on two occasions as a result of either friction or inadequate coordination among the new former-Soviet states. The Executive branch does not anticipate any similar incidents in START implementation, but the Committee believes that trouble-free implementation of START may depend upon the former Soviet Parties' ability to maintain cordial relations and to resolve disputes over issues unrelated to START.

There is still no formal arrangement among the former Soviet Parties for observing and implementing the START obligations of the former Soviet Union. The four states must also decide how to

allocate the costs of START implementation and of representation on the Joint Compliance and Inspection Commission (JCIC).

Similarly, the Executive branch is still discussing with the other four Parties to the Treaty procedures for conducting work and reaching agreements within the framework of the JCIC. It is not clear whether all four former Soviet Parties will have to approve each JCIC decision, or only those immediately affected by each decision.

Significant implementation problems may well result from tensions among the new states. In Ukraine, nationalistic impulses are already making implementation more difficult. Thus, while Ukraine could transfer ICBMs to the Russian Federation for destruction, it has indicated that it wants to destroy these missiles on its own territory—which will be costly and time-consuming, and could create an environmental hazard. Ukraine has also sought a veto over the use of nuclear weapons based on its soil, which is complicating and may delay an agreement with Russia regarding the destruction of such systems.

If Ukraine asserts increasing control over CIS military assets on its territory, compliance issues may arise regarding either START or the NPT. There are indications, for example, that Ukraine may seek control over the CIS heavy bombers based on its territory. If Ukraine intends to convert these bombers for use in conventional roles, this would raise issues regarding compliance with President Kravchuk's letter associated with the Lisbon Protocol.

In the longer run, compliance with START could help to mitigate the prospects for strife among the larger states that have succeeded the Soviet Union. The Treaty, the Lisbon Protocol and associated documents commit the signatories to dramatic reductions in deployed strategic weapons in Russia, and to complete elimination of such weapons in Ukraine, Belarus and Kazakhstan. The Lisbon Protocol also commits the non-Russian Parties to adhere to the Nuclear Non-Proliferation Treaty—thereby addressing one of the greatest concerns arising from the breakup of the former Soviet Union. Finally, due to the importance Western nations attach to arms control, the START Treaty provides an arena in which the four Soviet successor states can cooperate with each other and with the United States.

The Executive branch was hopeful that an agreement among the former Soviet republics regarding START implementation could be reached likely before the Senate acts on the Treaty. The Committee urges the Acting Secretary of State to give this matter his personal attention and to impress upon the other Parties to START the high priority that the Senate and the U.S. Government as a whole put upon achieving agreement regarding implementation of the START Treaty, the Lisbon Protocol and its associated letters.

#### IMPLICATIONS OF THE BUSH-YELTSIN JOINT UNDERSTANDING

In addition to calling for deeper U.S. and Russian arms reductions during and after the START seven-year arms reduction period, the Bush-Yeltsin Joint Understanding of June 17, 1992, and an associated Baker-Kozyrev agreement incorporate several divergences from START counting rules and destruction/conversion re-

quirements. According to the Executive branch, the treaty to be signed pursuant to the terms of the Joint Understanding is not to replace or to be merged with START, but rather to coexist alongside of START. Once both treaties have entered into force, the United States and the Russian Federation will be obligated to be in compliance with both treaties.

The Committee reserves judgment on the question of whether the overall START verification regime, which the Executive branch anticipates the new treaty will for the most part adopt, will prove sufficient to monitor Russian compliance with the limits of the new treaty. Once the new treaty is signed and submitted for advice and consent to ratification, the Senate will have to judge it on its own merits.

One element of possible concern is the relaxation of the rules for missile RV downloading. Not only are the overall START ceilings on downloading inapplicable to reductions under the Joint Understanding, but the START requirement that RV platforms be destroyed and replaced when downloading more than two RVs per missile will not be applied to reductions under the Joint Understanding.

While the U.S. Government has viewed the RV platform provision as little more than a confidence building measure, the deletion of that provision in the follow-on treaty may lessen U.S. confidence that downloaded missiles cannot be rapidly "uploaded" in a cheating or breakout scenario. Given the lack of limits on the amount of downloading that may be used in the first-stage arms reductions, such confidence could be more important under the follow-on treaty than under START. Eventual compliance with the Joint Understanding's ban on MIRVed ICBMs would, however, make this concern moot.

A second possible concern is the relaxation of heavy bomber weapon counting and conversion rules. Under START, there is no requirement for counting the number of nuclear weapons for which heavy bombers are equipped (other than long-range ALCMs). Under the Joint Understanding, however, the actual number of nuclear weapons for which each heavy bomber is equipped is to be counted against the overall warhead ceilings, and would therefore have to be monitored.

The other change in treatment of bombers under the Joint Understanding is the elimination, for up to 100 heavy bombers that were never equipped for long-range nuclear ALCMs, of the requirement that these bombers be physically altered before they can be removed from START accountability. In place of conversion, the Joint Understanding imposes basing and training limitations to keep these bombers out of the nuclear weapons force. Monitoring compliance with these rules could prove difficult.