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Report to Congressional Committees

October 2002

NONPROLIFERATION

Strategy Needed to Strengthen Multilateral Export Control Regimes

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Highlights

Highlights of GAO-03-43, a report to Congressional Committees

NONPROLIFERATION

Strategy Needed to Strengthen Multilateral Export Control Regimes

Why GAO Did This Study

Multilateral export control regimes are consensus-based, voluntary arrangements of supplier countries that produce technologies useful in developing weapons of mass destruction or conventional weapons. The regimes aim to restrict trade in these technologies to keep them from proliferating states or terrorists. The United States seeks to improve the effectiveness of these regimes. GAO was asked to (1) assess weaknesses of the four regimes and (2) identify obstacles faced in trying to strengthen them.

What GAO Recommends

The Secretary of State should establish a strategy to strengthen these regimes. This strategy should include ways for regime members to

- improve information sharing,
- implement regime changes to export controls more consistently, and
- identify organizational changes that could help reform regime activities.

Commerce and State concurred with these recommendations, which will be considered in a new review of the regimes ordered by the President. Defense and Energy did not comment.

www.gao.gov/cgi-bin/getrpt?GAO-03-43.

To view the full report, including the scope and methodology, click on the link above. For more information, contact Joseph Christoff (202 512-8979) or christoffj@gao.gov.

What GAO Found

GAO found weaknesses that impede the ability of the multilateral export control regimes to achieve their nonproliferation goals. A key function of each regime is to share information related to proliferation. Yet the regimes often lack even basic information that would allow them to assess whether their actions are having their intended results. The regimes cannot effectively limit or monitor efforts by countries of concern to acquire sensitive technology without more complete and timely reporting of licensing information and without information on when and how members adopt and implement agreed-upon export controls. For example, GAO confirmed that at least one member, the United States, has not reported its denial of 27 export licenses for items controlled by the Australia Group.

Several obstacles limit the options available to the United States in strengthening the effectiveness of multilateral export control regimes. The requirement to achieve consensus in each regime allows even one member to block action in adopting needed reforms. Because the regimes are voluntary in nature, they cannot enforce members' compliance with regime commitments. For example, Russia exported nuclear fuel to India in a clear violation of its commitments, threatening the viability of one regime.

The regimes have adapted to changing threats in the past. Their continued ability to do so will determine whether they remain viable in curbing proliferation in the future.

Multilateral export control regimes seek to prevent the proliferation of nuclear, chemical, biological, and conventional weapons.

Sources: Defense Image Digest and GAO.

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Abbreviations

MTCR	Missile Technology Control Regime
WMD	weapons of mass destruction

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United States General Accounting Office
Washington, DC 20548

October 25, 2002

The Honorable Jesse Helms
Ranking Minority Member
Committee on Foreign Relations
United States Senate

The Honorable Fred Thompson
Ranking Minority Member
Committee on Governmental Affairs
United States Senate

The advent of global terrorism has heightened concerns about the long-standing threat of proliferation of weapons of mass destruction. The Under Secretary of State for Arms Control and International Security stated recently that preventing the next wave of terrorist acts requires, above all, effective use, improvement, and enforcement of the multilateral tools at U.S. disposal, including export control regimes. Multilateral export control regimes[1] are voluntary, nonbinding arrangements among like-minded supplier countries that aim to restrict trade in sensitive technologies to peaceful purposes. Regime members agree to restrict such trade through their national laws and regulations, which set up systems to license the exports of sensitive items.

The four principal regimes are the Australia Group, which focuses on trade in chemical and biological items; the Missile Technology Control Regime (MTCR); the Nuclear Suppliers Group; and the Wassenaar Arrangement, which focuses on trade in conventional weapons and related items with both civilian and military (dual-use) applications. The United States is a member of all four regimes. Regime members conduct a number of activities in support of the regimes, including (1) sharing information about each others' export licensing decisions, including certain export denials and, in some cases, approvals; (2) adopting common export control practices and control lists of sensitive equipment and technology into national laws or regulations.

[1]Multilateral export control regimes are referred to as either "regimes" or "arrangements," and the countries invited to participate in them are variously referred to as "members," "participants," or "participating states." In this report, we use the term "regimes" and refer to participating countries as "members."

Because of your interest in efforts to strengthen the multilateral export control regimes, this report (1) describes their accomplishments, (2) assesses their weaknesses, and (3) identifies obstacles that the United States faces in trying to strengthen them. To address these issues, we reviewed analyses prepared by the Departments of State, Commerce, Defense, and the intelligence community, and studies prepared by nonproliferation specialists in academia. We also reviewed regime documentation, including export denial and approval information, and met with regime representatives in Paris, France (MTCR); Vienna, Austria (the Nuclear Suppliers Group and the Wassenaar Arrangement); and Canberra, Australia (the Australia Group). We also interviewed officials of the governments of Australia, Austria, Canada, France, Japan, the Netherlands, New Zealand, and the United Kingdom, and received written responses to questions we provided to the governments of Canada, Japan, Germany, Russia, and Hong Kong.

Results in Brief

Nonproliferation experts credit the Australia Group, the MTCR, the Nuclear Suppliers Group, and the Wassenaar Arrangement with several accomplishments. The regimes have helped set international standards for limiting exports of sensitive items and helped stem proliferation in particular countries of concern. For example, the Nuclear Suppliers Group established new controls for items with both nuclear and nonnuclear uses in the aftermath of the Persian Gulf War and revelations of Iraq's nuclear weapons development program. The Australia Group has helped raise the costs of attaining a chemical weapons capability by cutting off sources of supply and forcing proliferators to use less efficient means to produce chemical weapons. The MTCR helped stop or delay development of missile programs in Argentina, Brazil, and Egypt. However, because national governments use a variety of other policy tools to combat proliferation, it is not possible to attribute these accomplishments exclusively to the regimes.

We identified several weaknesses in regime activities that could hinder their goal of curbing proliferation of sensitive items and technologies. First, not all regime members share complete and timely information on their export licensing decisions, including denials and approvals of exports. For example, the United States did not report any of 27 export denials to the Australia Group between 1996 and 2001, as expected under regime procedures. Also, about half of the members of the Wassenaar Arrangement—the only regime with reporting time frames—did not submit their export denials on time. Second, several factors complicate the regime goal of applying export controls consistently. It takes some

members as much as 1 year to adopt agreed-upon changes to control lists into their national laws or regulations. This lapse of time might allow proliferators seeking sensitive items to exploit disparities in regime members' control lists. In addition, we found significant differences in how regime members implement agreed-upon controls, such as those for high performance computers. Finally, export controls cannot be applied consistently until countries joining regimes have effective export control systems in place. According to the U.S. government, at least three countries—Argentina, Belarus, and Russia—did not have effective control systems in place when they became members of certain regimes.

The U.S. government faces a number of interrelated obstacles in trying to strengthen the effectiveness of multilateral export control regimes. First, the difficult process of making consensus-based decisions limits options for reforming the regimes. Under the current process, a single member can block regime decisionmaking. Second, the voluntary and nonbinding character of the regimes means they have no explicit tools to enforce members' compliance with their nonproliferation commitments. For example, the Nuclear Suppliers Group had no direct means to impede Russia's export of nuclear fuel to India, an act that the U.S. government said violated Russia's commitment to that regime. Third, the rapid pace of technological change in a globalized economy makes it difficult to keep control lists current because these lists need to be updated more frequently. Fourth, "secondary proliferation," the growing capability of nonmember countries to develop technologies used for weapons of mass destruction and trade them with other countries of concern, undermines the regimes' ability to prevent proliferation. For example, North Korea has exported significant ballistic missile-related equipment, components, materials, and technical expertise to countries of concern, including Iran. Finally, the U.S. government has no specified or agreed-upon criteria for assessing the regimes' effectiveness, despite the stated goal of strengthening their effectiveness.

We are recommending that the Secretary of State, as the lead U.S. policy representative to the multilateral export control regimes, take steps to establish a strategy to strengthen these regimes. As part of this effort, the Secretary should work with other regime members to increase information sharing, improve the consistent adoption and implementation of export controls, and assess ways to overcome organizational obstacles to reaching decisions and enforcing members' compliance with their regime commitments. We are also recommending that the Secretary (1) report U.S. denials of all export licenses for items controlled by a multilateral

export control regime and (2) establish criteria for assessing the effectiveness of the regimes.

In commenting on our draft report, the Department of Commerce agreed with our findings, conclusions, and recommendations. In its written comments, the Department of Energy indicated that it had no comments on the report. The Department of Defense declined to provide written comments. The Department of State said that it will give due regard to our recommendation to establish a strategy for enhancing the effectiveness of the multilateral export control regimes as part of a recently announced review of the regimes ordered by the President. However, State asserted that our report overall did not reveal any shortcomings of nonproliferation significance. In fact, our report highlighted the inability of the regimes to enforce Russia's compliance with its regime commitments, a matter of major nonproliferation significance. We also identified several key weaknesses in regime processes that undermine regime effectiveness.

Background

Multilateral export control regimes are a key policy instrument in the overall U.S. strategy to combat the proliferation of weapons of mass destruction and conventional weapons. Current U.S. policy calls for enhanced multilateral cooperation of all key policy instruments—international treaties, multilateral export control regimes, export controls, and security assistance to other countries—in the war against terrorism and the proliferation of weapons of mass destruction.[2]

The multilateral export control regimes are voluntary, nonbinding arrangements among like-minded supplier countries that aim to prevent the spread of WMD and missile technology and equipment by restricting trade in sensitive technologies to peaceful purposes. While countries make no legally binding commitments in joining them, participating countries undertake a political commitment to abide by the goals and principles of the regime. The regimes operate on the basis of consensus of all members and decisions on how to implement and interpret regime decisions are left to the national discretion of each member. The Australia Group, the

[2]This position was advanced by the Under Secretary for Export Administration, Department of Commerce, Bureau of Industry and Security (September 18, 2001, and February 26, 2002) and by the Under Secretary of State for International Security and Arms Control (May 6, 2002). See U.S. General Accounting Office *Weapons of Mass Destruction: Assessing U.S. Policy Tools for Combating Proliferation*, GAO-02-226T (Washington, D.C.: Nov. 7, 2001) for a description of these other policy tools.

MTCR, and the Nuclear Suppliers Group focus on trade related to WMD and their delivery systems and are referred to as WMD regimes; the Wassenaar Arrangement focuses on trade in conventional weapons and related dual-use items.

Specifically, the Nuclear Suppliers Group and the Australia Group seek to ensure that trade in controlled items does not contribute to nuclear or to chemical or biological weapons proliferation (see table 1). The MTCR seeks to limit the spread of missile-related equipment and technology. The Wassenaar Arrangement aims to contribute to international security and stability by promoting greater responsibility and transparency in arms and sensitive dual-use goods and technology transfers. None of the regimes identify specific countries as targets. Collectively, however, the regimes strive to stop, slow, or increase the cost and risk of detection efforts by countries' of concern to acquire sensitive technologies and capabilities.

Table 1: Purposes of the Multilateral Export Control Regimes

Regime	Year established	Purpose	Precipitating event	Number of members
Nuclear Suppliers Group	1975	To ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or explosive devices while not hindering such trade.	India's 1974 nuclear explosion	40
Australia Group	1985	To ensure that the industries of the participating countries do not assist, either purposefully or inadvertently, states seeking to acquire a chemical and biological weapons capability.	Iraqi use of chemical weapons against Iran	33
MTCR	1987	To limit the risks of proliferation of weapons of mass destruction (i.e., nuclear, chemical, and biological weapons), by controlling transfers that could make a contribution to delivery systems (other than manned aircraft) for such weapons.	Missile developments in the late 1970s and early 1980s	33
Wassenaar Arrangement	1996	To contribute to regional and international security and stability, by promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies, thus preventing destabilizing accumulations.	Dissolution of the Coordinating Committee for Multilateral Strategic Export Controls	33

Sources: Australia Group, Nuclear Suppliers Group, MTCR, and Wassenaar Arrangement.

As highlighted in table 1, three of the regimes were created in response to major proliferation events. The Nuclear Suppliers Group was established in 1975 after India—a nonnuclear weapons state—tested a nuclear explosive device in 1974 and was strengthened after the1991 Gulf War and

revelations of Iraq's efforts to develop weapons of mass destruction. The Australia Group was established in 1985 as a response to the use of chemical weapons in the Iran-Iraq War, and the MTCR was established in 1987 in response to missile developments in the 1970s and 1980s. The Wassenaar Arrangement, in contrast, was created in 1996 after the dissolution of its Cold War predecessor[3] to include conventional technologies not covered by the other regimes.

The regimes also share overlapping memberships of between 33 to 40 states that are generally suppliers of sensitive technologies. All regimes except the Wassenaar Arrangement have added new members in recent years. Specifically, 28 states are members of all 4 regimes. Although China is a major supplier, it is not a member of any of these regimes but has declared its commitment to abide by the original 1987 guidelines and parameters of the MTCR. In addition, China has joined a multilateral nuclear export control group called the Zangger Committee.[4] See appendix II for a list of the members of each regime.

All the regimes have discussed ways to address terrorism since September 11, 2001, and are still considering what more to do. For example, the Australia Group added counterrorism as an official purpose of the regime and added a number of items to its control list in an effort to control the types of items that terrorists, rather than states, would seek to develop chemical or biological weapons. These items included toxins, biological equipment, and the transfer of knowledge. The Wassenaar Arrangement amended its guidelines to add language exhorting its members to continue to prevent the acquisition of conventional arms and technologies by terrorists. The Nuclear Suppliers Group is considering proposals to provide more guidance to governments for reviewing export licenses for terrorism-related concerns. MTCR members in September 2002 announced

[3]The Coordinating Committee for Multilateral Strategic Export Controls was created in 1949 to control the transfer of militarily useful technology to the Warsaw Pact countries. The end of the Cold War in 1989 and the collapse of the Soviet Union in 1992 ended the rationale for the Coordinating Committee control regime. In 1993, the Coordinating Committee members agreed to abolish the organization and establish a new multilateral regime. In 1996, representatives of the 33 founding member nations agreed to the Initial Elements of the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies.

[4]The Zangger Committee, established in 1971 to consider the provisions of article III.2 of the Nuclear Nonproliferation Treaty, maintains a list of nuclear items that is similar to the Nuclear Suppliers Group's part 1 guidelines. We did not review the activities of the Zangger Committee, except as they relate to the Nuclear Suppliers Group.

that they will further study how possible changes to the MTCR guidelines and control list may contribute to limiting the risk of controlled items and their technology falling into the hands of terrorists.

Multilateral Export Control Regimes Have Helped Set Standards and Stem Proliferation

Nonproliferation experts credit the Australia Group, the MTCR, the Nuclear Suppliers Group, and the Wassenaar Arrangement with several accomplishments. These include helping set international standards for limiting exports of sensitive items and helping stem proliferation in particular countries of concern. Because the multilateral export control regimes are only one of several policy tools that national governments use to combat the proliferation of weapons of mass destruction and advanced conventional weapons, it is difficult to attribute accomplishments exclusively to the regimes.

Setting International Standards for Exports of Sensitive Items

Each regime has helped set international standards for how countries should control exports of sensitive technology.

- In 1978, the Nuclear Suppliers Group published the first guidelines governing exports of nuclear materials and equipment. These guidelines established several requirements for the members to apply, including the application of International Atomic Energy Agency safeguards at facilities using controlled nuclear-related items. Subsequently, in 1992, the Nuclear Suppliers Group broadened its guidelines by requiring that members insist on full-scope safeguards as a condition of supply for their nuclear exports. Full-scope safeguards require a country to have an agreement with the International Atomic Energy Agency to apply inspection and monitoring procedures for all nuclear facilities in a country, not only those receiving a particular nuclear item from a supplier. The Nuclear Suppliers Group, in the aftermath of the Persian Gulf War and revelations of Iraq's nuclear weapons development program, also created a dual-use control regime, which established new controls for items with nuclear and nonnuclear uses that do not trigger a requirement for international safeguards when exported.[5]

[5]Previously, the Nuclear Suppliers Group control list included nuclear equipment and material, the export of which would trigger a requirement that International Atomic Energy Agency safeguards apply to the recipient facility.

- In 1985, the Australia Group convened its first meeting to begin coordinating national policies aimed at restricting the proliferation of chemical weapons and related dual-use items. In addition, in June 2002, the Australia Group adopted a provision in its new guidelines for licensing sensitive chemical and biological items that made it the only regime to require its members to adopt "catch-all" controls. "Catch-all" controls authorize a government to require an export license for items that are not on control lists but that could contribute to a WMD proliferation program if exported. Furthermore, the Australia Group added controls on technology associated with dual-use biological equipment, as well as controls on the intangible transfer of information and knowledge that could be used for chemical and biological weapons purposes.

- In 1987, the MTCR established guidelines and a control list of items as the first international standard for responsible missile-related exports, according to Department of State officials. In addition, from 1999 to 2001, MTCR developed an International Code of Conduct intended to create a voluntary political commitment, open to all countries, against ballistic missile proliferation. The code—scheduled to be launched by the Netherlands on behalf of the European Union—is to consist of a set of broad principles, general commitments, and modest confidence-building measures and is intended to supplement the MTCR.

- In 1996, the Wassenaar Arrangement was successfully established to succeed the Coordinating Committee for Multilateral Strategic Export Controls despite the opposition of some countries, according to nonproliferation specialists. One notable accomplishment of the Wassenaar Arrangement is the successful development of an agreement among its members for guidelines on shoulder-fired missiles, such as the Stinger, according to State Department officials. Although the former head of the Wassenaar Secretariat stated that the achievements of the Wassenaar Arrangement are limited and that "there have been no spectacular results," he stated that the situation would be worse without the Arrangement.

Stemming Proliferation in Countries of Concern

The export control regimes have helped stop, slow, or raise costs to countries of concern of WMD, according to nonproliferation experts. For example, the MTCR helped reduce the number of countries with ballistic missile programs, according to Department of State officials. Specifically, the MTCR contributed to ending sensitive ballistic missile programs in a number of countries, including Argentina, Brazil, Egypt, South Africa, and Taiwan. The MTCR also may have helped slow missile development in India, Iran, Israel, North Korea, and Pakistan, whose missile programs

might have been further along or more advanced in the absence of the regimes, according to nonproliferation experts. Similarly, the Nuclear Suppliers Group helped convince Argentina and Brazil to accept full-scope safeguards on their nuclear programs and end nuclear activities without safeguards in exchange for expanded access to international cooperation for peaceful nuclear purposes.[6]

Regimes generally have helped raise the costs to proliferators of acquiring sensitive technologies, according to nonproliferation experts. They have induced most major suppliers to responsibly control their exports and have significantly reduced the availability of technology and equipment available to programs of concern, according to a Department of State official. Moreover, regime members have made it more difficult, more costly, and more time consuming for proliferators to obtain the expertise and material needed to advance their programs. The regimes' efforts have caused delays, forced proliferators to use elaborate procurement networks, and forced them to rely on older, less effective technology, according to the official. For example, the Australia Group may have raised the cost of attaining an offensive chemical weapons capability by eliminating some sources of supply, according to nonproliferation experts and regime public statements. They noted that, as a result, some countries of concern have stopped pursuing the acquisition of chemical weapons.

Weaknesses Could Limit Regimes' Effectiveness

We identified several significant weaknesses in the activities of the regimes that could limit their ability to curb proliferation. Specifically, we found that regime members do not (1) share complete and timely export licensing information or (2) harmonize their export controls promptly to accord with regime decisions.

Members Do Not Report Complete and Timely Information to Regimes

We found deficiencies in the sharing of export licensing information between regime members.[7] These deficiencies could hamper the ability of regime members to factor key information about potential proliferators into their export licensing decisions. For example, we found that regime

[6]Full-scope safeguards are International Atomic Energy Agency safeguards on all facilities in a country that receive controlled nuclear material and equipment.

[7]We recognize that regimes also share information on trends in proliferation, trends in proliferator procurement, the use of front companies and brokers, and end users of concern. Such exchanges sensitize regime members to proliferation issues of concern and provide the "big picture" about weapons procurement, according to the Department of State.

members may not always share complete information in reporting export denials to the regimes. In addition, reporting information on export denials for Wassenaar Regime members is generally slow. Other regimes have not set deadlines for their members to report such information and cannot determine how long it takes members to report. Furthermore, three regimes do not collect export information that would enable members to consult with each other before approving licenses for exports that other members have denied. Members lack such information because most regimes do not expect members to report approvals of export licenses. Finally, only two regimes use electronic data sharing systems to post and retrieve data. As a result, we found significant delays in regime members' ability to access information quickly for those regimes lacking this capability.

Members May Not Always Share Complete Information

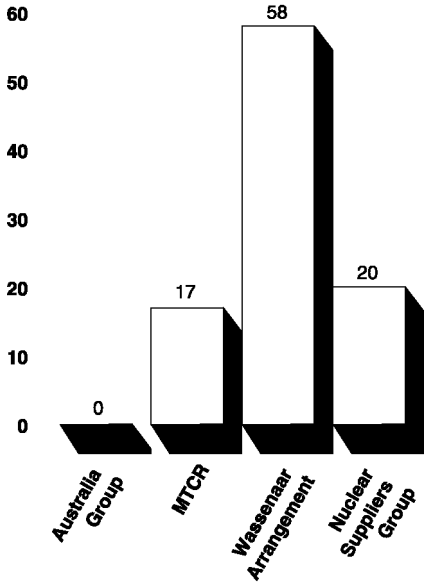
All four regimes expect members to report denials of export licenses for controlled dual-use items. By sharing information about the licenses it has denied, a regime member helps other members avoid inadvertently undercutting its export licensing decisions and provides regime members with more complete information for reviewing questionable export license applications.[8] Appendix III describes the export denial reporting procedures for each regime.

Despite the expectation to report export denials, the United States did not notify the Australia Group between 1996 and 2002 that the U.S. government denied 27 licenses to export Australia Group-controlled items to such countries as China, India, and Syria. Fifteen of these licenses involved chemicals that could be used for precursors for toxic chemical agents and the remaining licenses involved other chemical or biological equipment and technology. In contrast, the United States reported multiple denials to each of the other regimes in the same period (see fig. 1). The Department of State said that the United States was not required to report these denials to the Australia Group because the U.S. government denied them for reasons other than chemical and biological weapons

[8]As part of their "no undercut" policy, three regimes specifically oblige their members to consult with members who have denied a license before approving a similar export. The Wassenaar Arrangement does not include this type of "no-undercut" policy. Thus, members have no obligation to consult before exporting items denied by other members, but are expected to inform members after they undercut another's denial.

nonproliferation purposes.[9] However, officials of the Australia Group Secretariat disagreed with this assertion. They stated that Australia Group members should notify the Australia Group Chair whenever they deny licenses to export Australia Group-controlled items, including those controlled under another regime. Reporting such denials, they stated, would help the Australia Group maintain its effectiveness, ensure that other members' denials are not undercut, monitor and analyze export trends, and promote compliance with regime commitments. Furthermore, in its technical comments on this report, the Department of State agreed that sharing information about export licenses is a valuable element of information-sharing efforts, but State could not explain why it did not share these 27 denials under the regime's broader information exchange activities.

Figure 1: U.S. Export Denials Reported to Regimes Since 1996



Source: GAO analysis of Department of State data.

[9]State Department officials indicated that 5 of the 27 export denials concerned the same end users in previous notifications to the Australia Group. The officials provided written documentation for an additional 13 denials showing that they were reviewed for chemical and biological weapons proliferation concerns. However, they could not explain why these denials were not reported to the regime.

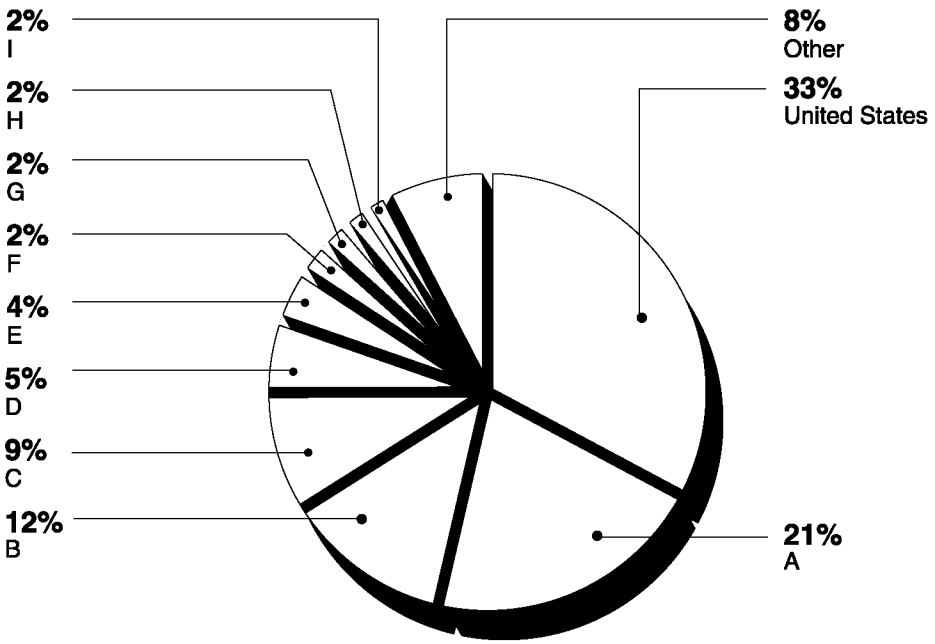
We found that member states may not be providing complete information regarding their export denials. We were unable to definitively establish the reasons why other nations have not reported denials because we do not have access to their export licensing data. However, our analysis of the denial reporting data available to us also reveals that a significant percentage of each regime's membership has never reported any denials. We found that the percentage of members in each regime that have never reported export denials ranged from 45 percent in one regime to 65 percent in another.

U.S. and foreign officials could not explain why some regime members have never reported any denials. Although a 2000 analysis of one regime's denial reporting recommended an evaluation to determine why members were submitting few denial notifications, we saw no evidence that the regime had conducted such an analysis. They speculated that some members do not do so because they (1) do not receive many export license applications for controlled items or (2) have not denied any applications. Also, several countries, including Australia, France, and Japan, informally discourage exporters from applying for licenses that those governments believe they likely would deny, according to U.S., foreign government, and regime officials. Because such "informal denials" are not reported to the regimes, they do not alert other regime members that a potential country of concern may be seeking an item.

When denial notifications are aggregated for all regimes, three countries accounted for 66 percent of all denial notifications. The United States, relative to other regime members, has reported a large percentage of export denials to each of the regimes. Figure 2 shows the percentage of denial notifications by country aggregated for all the regimes.[10]

[10]Data cover different time periods because regimes began reporting denial notifications at different times. Members also report denials under "catch-all" authority—which allows governments to require licenses for items not on control lists that might contribute to WMD proliferation if exported—but this activity is only voluntary.

Figure 2: Denial Notifications for All Regimes, by Country (Total Denials: 951)[a]



[a]References to particular country names, other than the United States, are omitted for reasons of classification.

Source: GAO analysis of Department of State data.

Denial Reporting Is Slow for Many Wassenaar Members, but Timeliness Cannot Be Assessed for Other Regimes

All four regimes generally expect members to report denials of export licenses for controlled dual-use items in a timely fashion.[11] Prompt export denial reporting can help ensure that a country of concern cannot "shop around" after being denied a license by a regime member. According to the chair of one regime, even a month's delay in sharing such information would provide a country of concern with more than enough time to shop around for another source of a sensitive item.

The Wassenaar Arrangement is the only regime to have set deadlines for its members' denial reporting (see app. III), but reporting by members is slow. Members are expected to report denials of the more sensitive dual-

[11]For example, the Nuclear Suppliers Group expects members to report denials of items on its Dual-Use Control List. Nuclear Suppliers Group guidance states governments should provide "prompt" notification to other governments of decisions not to authorize a transfer of equipment, material, or related technology identified in the guidance.

use items on its control lists no later than 60 days after the date of the denial; denial notices for less sensitive items—over 75 percent of dual-use items on Wassenaar control lists—are expected to be reported in an aggregated format every 6 months. We found that the Wassenaar Arrangement's members submit these denial notifications on schedule only about 36 percent of the time.[12] However, the Wassenaaar Arrangement Secretariat stated that a valid picture of denial or other notifications can be gained only when all the notifications are entered into the database, an action that is still in process. The Secretariat noted that any analysis done on the notifications before this milestone has been achieved would be flawed and open to later revision once the data is entered into the database correctly in early 2003.

U.S. government officials said that one reason that U.S. denial reporting to regimes may not be timely is because the U.S. government does not report export denials until after an exporter completes or foregoes an appeal of the denial. In response to our enquiries, the officials from the Department of Commerce's Bureau of Industry and Security recommended to the Department of State in August 2002 that the United States report all denials to the appropriate regime at the time that the exporter is first officially notified of the intent to deny the license application. In comments on a draft of this report, the Department of State said that it proposed to the Department of Commerce that it either should seek the exporter's agreement to forego appeals or that the U.S. government should circulate a "denial on inquiry" notification to the regime until the export application is final.

Other regimes have not set deadlines for reporting and, furthermore, cannot determine the amount of time that elapses between the date a government makes a denial and reports it to the regime, thus undermining the value of the reporting system. We could not determine the time it takes for Australia Group or Nuclear Suppliers Group members to report export denials because their members do not report dates of export denials uniformly. For example, a Nuclear Suppliers Group member may report its denial "notification date" as either (1) the actual date that it denied the export or (2) the date it transmitted the denial to the regime. Similarly, we could not determine precise MTCR denial reporting times because the MTCR export denial data maintained by the Department of State records

[12]The reporting data that we reviewed covers a period from 1997 through 2001, before a new electronic information-sharing system became operational for most members.

only the month of the denial. U.S. and foreign government officials agreed that denial reporting for the regimes needs to be more timely to improve regime effectiveness.

Not Sharing Information on Approved Exports Hampers Regimes

Access to information on a member's decisions to approve exports to nonmembers would help other regime members identify possible proliferation patterns and determine whether specific exports had undercut any of their license denials. However, only one regime, the Wassenaar Arrangement, expects its members to share information on approved export licenses. Because the Wassenaar Arrangement aims to prevent destabilizing accumulations of weapons and sensitive dual-use technologies in regions around the world, it gathers information about approved dual-use exports for items on its more sensitive control lists and about transfers of conventional weapons. However, according to U.S. officials, the Wassenaar Arrangement gathers this information only once every 6 months and aggregates it to a degree that it cannot be used constructively to identify (1) undercuts of license denials, (2) items approved and transferred, and (3) recipients of the items. Consistent with this theme, we reported in April 2002 that approval reporting of certain semiconductor manufacturing equipment lacks enough detail to reveal the equipment's capabilities or intended end use and is of little practical use for determining the semiconductor manufacturing capability of the country to which the equipment is exported.[13]

The Australia Group, the MTCR, and the Nuclear Suppliers Group each have a formal "no undercut" policy. This policy sets an expectation that whenever a member reports an export denial to a regime, no other member will export a similar item without first consulting with the member who denied it. However, these regimes do not share information on the licenses that they approve, making it difficult to assess whether the "no undercut" expectation is being met. To address this weakness, the United States proposed in May 2002 that the Nuclear Suppliers Group require its members to begin reporting approval information. Department of State officials said members discussed the feasibility of this proposal in September 2002, but could not say if or when this proposal would be implemented because of members' concerns about reporting proprietary information. One Department of State official said that the regimes do not

[13]U.S. General Accounting Office, *Export Controls: Rapid Advances in China's Semiconductor Industry Underscore Need for Fundamental U.S. Policy Review*, GAO-02-260 (Washington, D.C.: April 19, 2002).

need to share this information to identify undercuts because the members are "self-policing" and their adherence to the "no undercut" policy is based on trust.

Only Two Regimes Use Electronic Data Systems to Send and Retrieve Information on Denied Exports

Two regimes, the Nuclear Suppliers Group and the Wassenaar Arrangement, have established electronic information systems for nearly instant, world-wide communications that can help to improve the timeliness and quality of information sharing, especially export denial reporting. The Nuclear Suppliers Group Information Sharing System (NISS) was originally set up around 1993, according to a Los Alamos National Laboratory official. The Wassenaar Arrangement Information System (WAIS), operational for most members since January 2002, allows participating countries to post export denial notices almost as soon as the participating government issues the denial.[14] The Australia Group has investigated setting up its own system and, in 2001, inquired about the NISS. However, it has not made a commitment to move to an electronic information and document management system. Department of Commerce officials stated that the U.S. government has some concerns about the security of information on an electronic system for this regime and the MTCR since much of the data to be shared would be classified.

As shown in table 2, the average time for regimes to distribute export denials, once received from their members, ranges from as little as 2 days for the Nuclear Suppliers Group to as much as 30 days for the MTCR. The members of both the Nuclear Suppliers Group and Wassenaar Arrangement have the capability to post their denial notices as soon as member governments officially issue the denials.

[14]We did not independently assess the operations and effectiveness of either the NISS or WAIS systems. Department of State officials told us that the WAIS is experiencing certain limitations, but that these will be addressed in subsequent modifications to the system.

Table 2: Denial Reporting Distribution Times and Procedures for Each Regime

Regime	Frequency regimes report denied exports to members	Media for regimes to report denied exports
Australia Group	Weekly	Paper (physically delivered)
MTCR	Monthly	Paper (physically delivered)
Nuclear Suppliers Group	2 days (average)	Electronic E-mail system
Wassenaar Arrangement	Not available[a]	Electronic E-mail system

[a]Frequency could not be determined because of data limitations noted by the Wassenaaar Arrangement Secretariat.

Source: GAO analysis of Department of State data.

We observed significant differences in timeliness of report distribution to memberships and data retrieval among the regimes using electronic information systems and those not using them. State Department officials retrieved documents and export denial notifications that we requested from the NISS and the WAIS electronic systems in minutes. In contrast, State officials provided us with the same type of information for the MTCR and the Australia Group 6 months after we requested it. State officials said that this took so long because they had to manually search drawers of paper files and that new staff could not readily find documents filed by staff who were on leave. In addition, Department of State and Energy officials showed us how they could search the NISS in various ways to identify patterns of proliferators and evidence of countries of concern shopping for controlled items among several regime members.

The electronic information systems also provide more uniform data. Before the WAIS, the use of paper systems meant that denial reports arrived at the Wassenaar Arrangement Secretariat in a variety of formats, with individual data fields often presented in noncomparable ways among members, according to government and Secretariat officials. Member countries are more likely to provide uniform and comparable data that can be more easily analyzed because the electronic forms have reporting fields that must be filled in correctly before submission.

Differences in How Members Implement Export Controls Can Undermine the Regime Goal of Harmonization

Harmonization, a goal shared by each regime, refers to efforts by regime members to review and agree upon common control lists of sensitive items and technologies and approaches to control them. (See app. IV for a description of the control lists developed by each regime and examples of the items on each list.) However, several factors undermine this goal.

First, regime members may control an item differently because some members take significantly longer than others to adopt agreed-upon regime changes into their national laws or regulations. In addition, only one regime tracks whether its members have adopted regime control list changes; none of the regimes tracks when these changes are implemented. Second, in some cases, there are significant differences in how members implement the same export controls that may reduce the effectiveness of common nonproliferation efforts. Finally, export controls cannot be applied consistently until countries joining regimes have effective export control systems in place. According to the U.S. government, at least three countries—Argentina, Belarus, and Russia—did not have effective control systems in place when they became members of certain regimes.

Some Members Take Longer Than Others to Adopt Agreed-upon Changes

Each regime member is expected to adopt and implement control list changes consistently, subject to its national discretion. If agreed-upon changes to control lists are not adopted at the same time, proliferators could exploit these time lags to obtain sensitive technologies by focusing on regime members that are slowest to incorporate the changes. Only the Australia Group attempts to identify if members adopted the most recently agreed-upon controls in their domestic regulations and laws, although it does not track the dates that members do so. Based on our analysis, we found some significant differences among members in the time taken to adopt agreed-upon control list changes into their national laws or regulations. In the case of the Wassenaar Arrangement, the European Union adopted December 2000 plenary changes within 3 months, whereas the United States did not adopt all these changes into export regulations until 15 months later (March 2002.)[15] In comparison, the European Union[16] adopted Nuclear Suppliers Group plenary changes within a year of the Nuclear Suppliers Group plenary, and Japan adopted regulations for all regime changes within 6 months. Department of Commerce officials explained that the U.S. regulatory process is more comprehensive and thorough than that of some other regime members, thus requiring a longer time for the United States to adopt regime changes. Other regime members adopt the texts of regime control changes verbatim, while the United

[15]The European Union adopted December 2000 Wassenaar Arrangement changes in March 2001 and the United States adopted these changes in the following phases: (1) revisions on microprocessors, graphic accelerators, and external interconnects adopted April 9, 2001; (2) revisions on eight categories of items adopted January 3, 2002; (3) revisions on computers adopted March 8, 2002.

[16]As of September 2002, the European Union had 15 member states.

States also explains in its regulations the purpose behind the regulatory change and how it will affect the exporter, according to the officials.

Significant Differences Found in Members' Implementation of Controls

Once regime members have adopted similar changes to export control lists or practices, these changes can be undermined by variations in how member states implement them. The Assistant Secretary of Commerce for Export Administration emphasized the importance of minimizing these differences when he said in October 2001 that member countries implement agreed-upon control lists differently with a substantial degree of national discretion. For example, the United States has said that its export controls on high-performance computers, which use a measure of computer performance to indicate when an export license is required, are consistent with those of Wassenaar Arrangement controls. Both the U.S. and Wassenaar Arrangement control thresholds are set at 28,000 millions of theoretical operations per second (MTOPS); computers above this level would require a license for export.[17] However, the United States also maintains a "license exception" to this threshold. In January 2002, the President announced that this control threshold would increase from 85,000 MTOPS to 190,000 MTOPS; only computers above this higher threshold to be exported to countries such as China, India, and Russia would require a license. As a result of this practice and of U.S. resistance to members' efforts to remove or revise the current performance measure for computers, several Wassenaar members have accused the United States of unilateral action at odds with regime harmonization goals. Department of State officials expressed concern that continued U.S. resistance without adequate justification would cause some countries to unilaterally remove items from their national control lists.[18] According to the Department of Commerce, the United States and the other Wassenaar Arrangement members agreed to raise computer control levels from 28,000 to 190,000 MTOPS at a September 2002 Wassenaar meeting, 8 months after the United States had changed its license exception control level.

Differences in how members implement agreed-upon export controls may become an issue for the Australia Group as well. The Australia Group's June 2002 Plenary agreed to require its members to adopt "catch-all"

[17]Computer exports to countries that are state sponsors or terrorism require a license for computers above 6 MTOPS.

[18]See U.S. General Accounting Office, *Export Controls: More Thorough Analysis Needed to Justify Changes to High Performance Computer Controls*, GAO-02-892 (Washington, D.C.: August 2, 2002).

controls—controls that authorize a government to require an export license for items that are not on control lists but that could contribute to a WMD proliferation program if exported—and to make this requirement an attachment to its new guidelines. The United States has encouraged countries to adopt catch-all controls as a way of strengthening nonproliferation efforts.[19] However, while most members of the WMD regimes have adopted catch-all controls, significant differences over how members implement them raise questions about their effectiveness in stopping proliferation. For example, under some countries' catch-all controls, the government must show that an exporter had absolute knowledge that an export would support a WMD proliferation activity to require a license or to prosecute a violation of law. Under other countries' catch-all controls, such as those of the United States, the government needs to show only that an exporter knew or suspected that an export would support a WMD proliferation activity. A 2001 Department of Commerce report affirmed that different countries' standards complicate law enforcement cooperation, and Commerce noted that even the United States faces challenges in enforcing catch-all controls on dual-use goods because it is difficult to detect, investigate, and prosecute cases under the U.S. catch-all provision standard.[20]

Lack of Effective Export Control Systems Weakens Harmonization Efforts

Regimes consider the implementation of an effective national export control system a criterion for a country's membership eligibility but in three cases have admitted members that did not meet this criterion. (See app. V for some factors to consider when evaluating a prospective member to each regime.) Without an effective export control system, members cannot ensure that they are implementing agreed-upon controls consistently. While regime bodies, such as the chair or secretariat, do not evaluate the export control systems of prospective members, individual members, including the United States, have done so for each prospective member.

[19]In 1998, 21 of 29 respondents to a U.S. survey distributed to the then-35 Nuclear Suppliers Group members indicated that they had "catch-all" controls in place. The report noted that at least three of the six members that did not respond also had "catch-all" controls. In 1999, 22 of the 29 respondents to a U.S. survey distributed to the then-32 MTCR members noted that they had "catch-all" controls in place.

[20]Foreign Policy Report, 2001 (U.S. Department of Commerce, Washington, D.C.)

Russia, Argentina, and Belarus did not have effective export control systems in place at the time of their admission to regimes, according to U.S. government officials and documents.

- Russia does not yet have an effective export control system in place, according to U.S. government officials, even though it is a member of three regimes. The Soviet Union, Russia's predecessor, was a founding member of the Nuclear Suppliers Group. Russia also joined the Wassenaar Arrangement when it was established in 1996. In June 2002, the Assistant Secretary of State for Nonproliferation stated that Russia's implementation and enforcement of its export controls remain a cause of concern. An unclassified January 2002 report by the Director of Central Intelligence stated that passing export control legislation will have little impact on key weaknesses of the Russian export control system, such as weak enforcement and insufficient penalties for violations.[21] According to some U.S. and foreign government officials, it is better to have certain countries such as Russia in the regimes in order to influence their export controls and behavior or for other foreign policy reasons.

- Argentina did not have in place an effective export control system when it joined the Wassenaar Arrangement in 1996. Recognizing that Argentina did not have export controls over dual-use items and had not adopted the Wassenaar Arrangement control list as late as 1999, the United States urged Argentina to pass appropriate legislation. Argentina eventually passed legislation to adopt dual-use export controls, which went into effect in June 2000.

- Belarus had export controls in place but was not adequately enforcing them when it became a member of the Nuclear Suppliers Group in fiscal year 2000, according to the Department State. However, the Department of State noted that at the time Belarus joined that regime, State still had concerns that Belarus was not adequately enforcing certain conventional arms-related controls. Regime members sometimes accept or reject a

[21] *Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January through 30 June 2001* (Washington, D.C.). The report noted that, during 1998 to 1999, the Russian government stated that it had obtained convictions for unauthorized technology transfers in three cases. The report referred to Russian press accounts of cases in which advanced equipment was described erroneously in export documentation and exported, and cases in which enterprises sometimes falsely declared goods to avoid taxes.

particular country's membership for political reasons, according to U.S. and foreign government officials.

Obstacles to Strengthening Export Control Regimes

The U.S. government faces a number of interrelated obstacles in trying to strengthen the multilateral export control regimes. First, and most significant, efforts to strengthen the regimes have been hampered by a requirement to reach consensus among all members about every decision made and by the inability to enforce compliance with commitments in arrangements that are voluntary and nonbinding. Second, the rapid pace of technological change and the growing trade of sensitive items among WMD proliferators complicates efforts to harmonize export controls and keep control lists current. Third, the U.S. government has no specified or agreed-upon criteria for assessing regimes' effectiveness.

Need for Consensus and Voluntary Nature of Regimes Limit Prospects for Change

U.S. and foreign government officials and nonproliferation experts all stressed that the regimes are consensus-based organizations and depend on the like-mindedness or cohesion of their members to be effective. However, regimes have found it especially difficult to reach consensus on such issues as making changes to procedures and control lists and identifying countries to be targets of the regimes. In addition, many U.S. and foreign government officials said that members' compliance with regime commitments cannot be enforced because the multilateral export control regimes are voluntary, nonbinding groups.

Consensus Process Makes Decision-Making Difficult

A single member's objection can stalemate a regime decision. For example, Russia has impeded consensus on several issues in the three regimes to which it belongs—MTCR, Nuclear Suppliers Group, and the Wassenaar Arrangement—according to several nonproliferation experts. These issues included broadening information in denial notifications and obtaining greater transparency into deliveries of small arms and light weapons. One government stated that it is easier to reach consensus in the Australia Group because Russia is not a member. On the other hand, State and Commerce Department officials said that the need for consensus-based decision-making can work to the U.S. advantage because it prevents a regime from adopting proposals that the United States might oppose.

The regimes also have found it difficult to reach consensus on designating countries that could be targets of the regimes and, therefore, would not receive exports listed on the regimes' control lists. Some members support the idea of designating target countries and have proposed countries to be named, while other members disagree. For example, repeated efforts by

Wassenaar Arrangement members to identify specific countries of concern or even regions of unrest have failed because of a lack of consensus. Instead, each regime member determines which countries are of concern to it when implementing its national export controls. Nonetheless, according to the Department of State, there is broad agreement that states whose behavior is a cause for serious concern—Iran, Iraq, Libya, and North Korea—will be dealt with firmly by Wassenaar members.

As an alternative to designating regime targets, the Nuclear Suppliers Group has established conditions for supply of nuclear and nuclear-related, dual-use items. For example, members of the regime have agreed to supply nuclear equipment and material only to countries that have in place a full scope safeguards agreement with the International Atomic Energy Agency for all facilities in the country and only upon assurances that adequate physical protection will be maintained on the supplied items. Thus, countries that do not meet these conditions in effect become targets of the regime.

Regimes Lack Means to Enforce Compliance with Commitments

The Under Secretary of State for Arms Control and International Security stated in May 2002 that U.S. nonproliferation policy goals are to stop the development of WMD and ensure compliance with existing arms control and nonproliferation treaties and commitments. Noncompliance can undermine the efficacy and legitimacy of these regimes, according to the Under Secretary.

However, the regimes do not have their own means to monitor and enforce members' adherence to regime commitments. Instead, they rely on diplomatic pressure to influence compliance or the occasional intelligence information from member states to identify activities that might be inconsistent with regime commitments. According to the Department of State, in the most clear and serious example of a violation of regime nonproliferation commitments, Russia shipped nuclear fuel to the Tarapur power reactors in India in January 2001. As a Nuclear Suppliers Group member, Russia is committed to refraining from nuclear cooperation with any country that lacks comprehensive International Atomic Energy Agency safeguards on all its nuclear facilities. India, which has a nuclear weapons program, does not have such safeguards on all its facilities, although it does have safeguards on the Tarapur reactors. Although Russia justified the fuel supply to Tarapur based on a safety exemption to this commitment, 32 of 34 Nuclear Suppliers Group members declared at a special meeting in December 2000 that this shipment would be inconsistent with Russia's commitments to the Nuclear Suppliers Group. The fuel transfer occurred, nonetheless. Several countries and the

European Union sent demarches (diplomatic notes) to Russia protesting the sale. The Department of State issued a February 2001 public statement that "condemned Russia's disregard of its Nuclear Supplier Group commitments and urged Russia to live up to its nonproliferation obligations."

Based on publicly available information, we found examples of other questionable exports by Russia involving nuclear exports to Iran and missile technology exports to Iran, India, China, and Libya. While these cases were more ambiguous than the Tarapur case, they also raise concerns over Russia's compliance with its commitments. In addition, the Department of State has provided at least 34 demarches to 11 other members of the regimes from 1998 to 2002, questioning whether their proposed exports were consistent with regime commitments.

Several U.S. and foreign government officials said that members' compliance with regime commitments cannot be enforced for several reasons. First, according to the Department of State, it is difficult to apply the concept of enforcement to informal political commitments, such as the export control regimes. Second, members' commitments to the regimes are sometimes vague or left to the interpretation of each member state. Third, officials of several governments stated that it is difficult to identify when a foreign government is not complying with its commitments because knowing whether an illicit technology transfer occurred with or without prior government knowledge is sometimes impossible. Fourth, it is difficult to encourage countries to comply with their regime commitments because there is disagreement over which states are countries of concern, according to some foreign government officials.

Technological Change and Growing Supply of Sensitive Items from Proliferators Complicates Efforts to Harmonize Export Controls

The rapid pace of technological change in a globalized world economy complicates efforts to keep control lists current because these lists need to be updated more frequently. The current world economy is characterized by rapid technological innovation, globalization of business, and the internationalization of the industrial base, according to a 2001 study.[22] The globalization of defense and commercial production activities has made advanced military capabilities and related commercial goods and technologies more widely available to many countries or subnational

[22] *Study Group on Enhancing Multilateral Export Controls For US National Security: Final Report*, April 2001 (The Henry L. Stimson Center, Washington, D.C.).

groups. This has narrowed the technology gap between the United States and other nations.[23]

Rapidly evolving technologies have particularly impacted such areas as high-performance computers, semiconductor manufacturing, and information technologies. Several industry representatives and U.S. and foreign government officials said that legislative or regulatory changes modifying or removing items from control lists that no longer can be effectively controlled cannot keep pace with rapid technology changes. As a result, the Wassenaar Arrangement, which seeks to control items in these technologies, has experienced prolonged discussion and disagreements over how or even whether to maintain such items as high performance computers on its control lists. In addition, MTCR members have disagreed on revising parameters of items to control, such as cruise missiles and unmanned aerial vehicles, allowing some members to seek controversial cruise missile sales to nonmembers.

In addition, the trade of controlled items among nonmember countries with indigenous WMD programs undermines regime efforts to effectively restrict the exports of sensitive goods and technology. Government officials of each of the regimes expressed their concern over "secondary proliferation," the growing capability of proliferators to develop WMD technologies and trade them with other countries of concern. Traditional recipients of WMD and missile technology such as India, Pakistan, North Korea, and Iran could emerge as new suppliers of technology and expertise to countries of concern, according to an unclassified 2002 report by the Director of Central Intelligence. They are not members of multilateral export control regimes and do not adhere to their standards. For example, North Korea has exported significant ballistic missile-related equipment, components, materials, and technical expertise to countries in South Asia, North Africa, and the Middle East, including Iran. In August 2002, the Under Secretary of State for Arms Control and International Security called North Korea "the world's foremost peddler of ballistic missile-related equipment, components, materials, and technical expertise." To counter this trend, officials of some regime member states expressed a desire to have all supplier countries join the regimes to encourage them to conform to regime standards and limit the proliferation

[23]We reported on this phenomenon in our report, U.S. General Accounting Office, *Export Controls: Rapid Advances in China's Semiconductor Industry Underscore Need for Fundamental U.S. Policy Review*, GAO-02-260 (Washington, D.C.: April 19, 2002).

of sensitive technologies. Other officials recognized, however, that such countries would not satisfy membership criteria and would run the risk that the cohesiveness of like-minded memberships would be eroded.

Lack of Explicit Criteria Poses Obstacles to Strengthening Regimes

Neither the U.S. government, member governments in the regimes whom we contacted, nor the regimes have established explicit criteria for assessing the regimes' effectiveness. Nonetheless, the U.S. government has an established policy of strengthening the effectiveness of the multilateral export control regimes.[24] Various U.S. government officials, including the President and the under secretaries and assistant secretaries of State and Commerce have stated the policy in public speeches or in written testimony before Congress. Furthermore, while neither these governments nor regimes made any evaluation of the regimes' effectiveness, they have asserted that the regimes are effective.[25] The importance of developing criteria to assess regime effectiveness is underscored by the Export Administration Act of 2001.[26] Pending before the Congress at the time of this report, this act would require monitoring of and annual reporting on the regimes' effectiveness.

Some U.S. and foreign government officials noted several possible limitations to an effort to assess the effectiveness of the regimes. First, multilateral export control regimes could not be assessed separately from the entire nonproliferation system, including national export enforcement systems and treaties. Second, demonstrating the effectiveness of the regimes would depend on being able to prove that the international community would be worse off without the regimes than with them. Third, several government officials and industry representatives noted that the mission, obligations, and political commitment of the Wassenaar Arrangement are not as clear as those of the other regimes. Thus, assessing the effectiveness of this regime would be especially problematic.

[24]The Under Secretary of Commerce for Industry and Security publicly announced in September 2001 that the effectiveness of the regimes would be strengthened by (1) improving timeliness and content of required reporting, (2) adopting a formal denial consultation procedure, and (3) adopting "catch-all" controls.

[25]Although the Wassenaar Arrangement has a process for assessing the Arrangement every 3 years, its 1999 assessment produced many proposals for improving the Arrangement but no evaluation of the arrangement's effectiveness.

[26]S. 149, Section 501 (b) and H.R. 2581, Section 501 (b).

Notwithstanding these possible limitations to an effort to assess the effectiveness of the regimes, some foreign and U.S. government officials have proposed criteria to do so. The proposed criteria include the following:

- clarity of each regime's mission, obligations, and political commitment;
- quality, quantity, and timeliness of regime information exchanged, including denial notifications;
- strength of no-undercut provisions;
- willingness and ability of the regime to adapt its practices and common control lists to deal with new proliferation challenges;
- number of participants and level of their participation;
- level of compliance with regime standards;
- existence of guidelines for licensing and enforcement; and
- criticism from nonmembers—specifically proliferators—as evidence of a regime's effectiveness.

Conclusion

Strengthening multilateral export control regimes would help them better meet the U.S. national security objective of preventing the proliferation of weapons of mass destruction and conventional weapons to countries of concern and terrorists. A key function of each regime is sharing information related to proliferation. Yet the regimes often lack even the basic information that would allow them to assess whether their actions were working as intended. The regimes cannot effectively limit or monitor efforts by proliferators to acquire sensitive technology without more complete and timely reporting of licensing information and without more information on when and how members adopt and implement agreed-upon controls. Addressing these deficiencies would enhance the regimes' ability to accomplish their nonproliferation goals. However, the consensus-based and voluntary nature of these regimes poses organizational and political obstacles to implementing needed reforms. In addition, the lack of explicit criteria to assess regime effectiveness will make it difficult to determine the success of any effort to strengthen the regimes. While the regimes have adapted to changing threats or conditions in the past, their continued ability to do so may determine whether the regimes remain viable in

curbing proliferation in the future. However, the United States lacks a coherent strategy to address the regimes' common weaknesses and overcome the organizational and political obstacles to strengthening their effectiveness.

Recommendations for Executive Action

To help the multilateral export control regimes achieve their stated goals and objectives, we recommend that the Secretary of State establish a strategy to work with other regime members to enhance the effectiveness of the multilateral export control regimes. This strategy should identify steps regime members should take to

(1) improve information-sharing by

- establishing clearly defined standards for reporting export denials on a more complete and timely basis;
- sharing greater and more detailed information on approved exports of sensitive transfers to nonmember countries; and
- adopting automated information-sharing systems in the MTCR and Australia Group to facilitate more timely information exchanges.

(2) adopt and implement agreed-upon regime changes to export controls more consistently by

- setting guidelines for when each regime member should adopt control list changes into national laws and regulations and making this information available to all members;
- tracking when members adopt regime changes into national law and regulations and making information on the timing and content of these changes available to the membership;
- establishing minimal standards for an effective national export control system; and
- periodically assessing each member's national export control system against these standards and reporting the results of these assessments to the regime;

(3) identify potential changes in policies and procedures by

- assessing alternative processes for reaching decisions,
- evaluating means for encouraging greater adherence to regime commitments, and
- conducting an annual self-assessment of regime effectiveness.

To ensure that the United States is reporting all relevant information to the multilateral export control regimes, as expected, we recommend that the Secretary of State report U.S. denials of all export licenses for items controlled by a multilateral export control regime at the time the exporter is informed of the U.S. government's intent to deny an export license.

To enable the U.S. government to better implement its policy of strengthening the effectiveness of the multilateral export control regimes, we also recommend that the Secretary of State establish criteria to assess the effectiveness of the multilateral export control regimes.

Agency Comments and Our Evaluation

We provided a draft of this report to the Secretaries of Commerce, Defense, Energy, and State for their review and comment. We received written comments from the Departments of Commerce, Energy, and State that are reprinted in appendixes VI, VII, and VIII. The Department of Defense declined to provide us with written comments. The Department of State also provided us with technical comments, which we incorporated as appropriate.

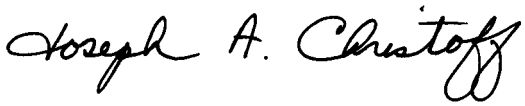
The Department of Commerce agreed with our findings, conclusions, and recommendations. Commerce agreed that strengthening the multilateral export control regimes would serve U.S. national security objectives. In its written comments, the Department of Energy indicated that it had no comments on the report. The Department of State said that it will give due regard to our recommendation to work with other regime members to establish a strategy for enhancing the effectiveness of the multilateral export control regimes. State also agreed with our conclusion that information sharing of export licensing is an important element of regime activity.

However, State asserted that our report overall did not reveal any shortcomings of nonproliferation significance. In fact, our report highlighted the inability of the regimes to enforce Russia's compliance

with its regime commitments, a matter of major nonproliferation significance. Our report also identified several specific weaknesses in the processes the regimes use to share information about each other's licensing decisions and to implement regime decisions. Weaknesses in regime processes undermine the regimes' effectiveness in meeting nonproliferation purposes.

We are sending copies of this report to appropriate congressional committees and to the Secretary of Commerce, Secretary of Defense, Secretary of Energy, and Secretary of State. Copies will be made available to others upon request. In addition, this report will be available at no charge on the GAO Web site at http://www.gao.gov.

Please contact me at (202) 512-8979 if you or your staff has any questions concerning this report. A GAO contact and staff acknowledgments are listed in appendix IX.



Joseph Christoff, Director
International Affairs and Trade

Appendix I: Scope and Methodology

To describe accomplishments of the multilateral export control regimes, we reviewed analyses and documents prepared by the Departments of State, Commerce, Defense, the intelligence community, and nonproliferation specialists in academia. We also reviewed the database of the Monterey Institute for International Studies. Also, we reviewed plenary, working group, and information exchange documents of the Australia Group, MTCR, Nuclear Suppliers Group, and Wassenaar Arrangement. We met with officials of the Departments of State, Commerce, Defense, and Energy, and the intelligence community in Washington, D.C.; the Department of Energy's Los Alamos National Laboratory in Los Alamos, New Mexico; and the Center for Nonproliferation Studies of the Monterey Institute for International Studies in Monterey, California. We also met with officials of the governments of Australia, Austria, Canada, France, Japan, the Netherlands, New Zealand, and the United Kingdom. In addition, we received written responses to questions we provided to the governments of Canada, Japan, Germany, Russia, and Hong Kong. Also, we met with representatives of the points of contact for the MTCR in Paris, France; and the Nuclear Suppliers Group in Vienna, Austria; the Secretariats of the Australia Group in Canberra, Australia; and of the Wassenaar Arrangement, including the Director General, in Vienna, Austria. Also, we interviewed representatives of American companies from the Alliance for Network Security, American Electronics Association, Association for Manufacturing Technology, American Chemistry Council, and Nuclear Energy Institute. We also met with representatives of the International Atomic Energy Agency and the Zangger Committee in Vienna, Austria; and of the Organization for the Prohibition of Chemical Weapons in The Hague, The Netherlands, to identify the relationship between the regimes and those organizations.

To assess weaknesses of the multilateral export control regimes, we analyzed documents and studies noted above and met with officials and representatives of the previously mentioned governments and organizations. In addition, we reviewed listings of denial notifications for all the regimes and approval notifications for the Wassenaar Arrangement to try to identify timeliness and completeness of reporting. In trying to identify the amount of time for members to report denials to each regime, we learned that the regimes do not maintain this data in a manner that allows such an analysis. The Department of State confirmed this limitation in July 2002. We analyzed and compared both the means and frequency with which regime points of contact or secretariats distribute the export denial and, in the case of the Wassenaar Arrangement, approval notifications to the membership. We also identified which countries have

and have not reported export denials and the percentages of export denials for each country that has reported them. We also reviewed regulations of the governments of the United States, Japan, and the European Union to determine the time it took to incorporate the most recent changes from the regimes into regulations.

To identify obstacles that the United States faces in strengthening the regimes, we analyzed the documents and studies noted above and met with officials and representatives of the noted governments and organizations. We could not fully assess how regime members comply with their commitments or how well efforts to encourage compliance work because of limited access to key Department of State data. Even though 22 U.S. Code Section 2593a requires a report to the Congress each January discussing compliance of countries with various arms control agreements, including the MTCR, the 2000 and 2001 reports have not yet been provided to Congress; and the Department of State declined to provide us access to the report drafts. Consequently, we could not review the reports to determine how other countries are complying with this regime. In addition, we could not fully assess how diplomatic pressure has worked overall to stop questionable transfers of items to nonmember countries for two reasons. The Department of State could not tell us (1) how many demarches in total the United States has provided to other regime members and (2) whether the questionable transfers that the demarches protested were or were not stopped in each case. Although State provided us with about 100 demarches concerning questionable exports from 1998 to 2002, officials from the Departments of Defense and Commerce indicated that the United States delivered an estimated 100 demarches to MTCR members alone, in 2001.

We channeled all requests for regime information and documentation through the Department of State and experienced significant delays in obtaining these documents from the Department. After presenting State with an initial document request in September 2001, we reduced the scope of that request in October 2001 to accommodate State's concerns about the size of the request. In response to the revised request, one State office provided requested documents by December 2001 and was prompt in fulfilling our subsequent requests for documents. Nonetheless, we continued to experience delays from all other State offices in receiving access to documents over the next 7 months. State officials attributed these delays to the Department's time-consuming process of reviewing every document multiple times before agreeing to provide us with access.

We performed our work from August 2001 to September 2002 in accordance with generally accepted government auditing standards.

Appendix II: List of Members of Multilateral Export Control Regimes

Country	Australia Group	MTCR[a]	Nuclear Suppliers Group	Wassenaar Arrangement	Number of Regimes
Argentina	●	●	●	●	4
Australia	●	●	●	●	4
Austria	●	●	●	●	4
Belarus			●		1
Belgium	●	●	●	●	4
Brazil		●	●		2
Bulgaria	●		●	●	3
Canada	●	●	●	●	4
Cyprus	●		●		2
Czech Republic	●	●	●	●	4
Denmark	●	●	●	●	4
Finland	●	●	●	●	4
France	●	●	●	●	4
Germany	●	●	●	●	4
Greece	●	●	●	●	4
Hungary	●	●	●	●	4
Iceland	●	●			2
Ireland	●	●	●	●	4
Italy	●	●	●	●	4
Japan	●	●	●	●	4
Kazakhstan			●		1
Latvia			●		1
Luxembourg	●	●	●	●	4
Netherlands	●	●	●	●	4
New Zealand	●	●	●	●	4
Norway	●	●	●	●	4
Poland	●	●	●	●	4
Portugal	●	●	●	●	4
Romania	●		●	●	3
Russia		●	●	●	3
Slovakia	●		●	●	3
Slovenia			●		1
South Africa		●	●		2
South Korea	●	●	●	●	4
Spain	●	●	●	●	4
Sweden	●	●	●	●	4
Switzerland	●	●	●	●	4
Turkey	●	●	●	●	4
Ukraine		●	●	●	3

Country	Australia Group	MTCR[a]	Nuclear Suppliers Group	Wassenaar Arrangement	Number of Regimes
United Kingdom	●	●	●	●	4
United States	●	●	●	●	4
Total	**33**	**33**	**40**	**33**	

Legend:

● represents the regimes applicable to each listed country.

[a]Countries pledging to abide by MTCR guidelines include the People's Republic of China, Israel, Romania, and Slovakia.

Sources: Center for International Trade and Security, Nonproliferation Export Controls: A Global Evaluation, 2001 and the Australia Group, Nuclear Suppliers Group, MTCR, and Wassenaar Arrangement.

Appendix III: Reporting Practices of Multilateral Export Control Regimes

Regime	Denied exports reported	Expected time frames for members to report denied exports	"No undercut" policy in effect
Australia Group	Yes	No	Yes
MTCR	Yes	No	Yes
Nuclear Suppliers Group	Yes	No	Yes
Wassenaar Arrangement	Yes	Yes[a] Aggregate denials within 90 days of 6-month reporting period; Individual denials within 30 days but no longer than 60 days from date of denial	No

[a]The Wassenaar Arrangement calls for two types of export denial reporting: export denials in aggregate form for less sensitive (basic) items (about 76 percent of items) on the dual-use control list and individual export denials for sensitive items (about 24 percent of items) on the dual-use control list.

Source: GAO analysis based on guidelines of regimes.

Appendix IV: Comparison of Control Lists of Multilateral Export Control Regimes

Each regime and treaty-related organization maintains lists of sensitive items to be monitored and controlled, but the purpose and composition of each list differs. The Chemical Weapons Convention list of chemicals was intended to be as comprehensive as possible, primarily related to countries' declarations and destruction of their chemical weapons; and its provisions on transfers have a different goal from that of the Australia Group, according to officials of the Organization for the Prohibition of Chemical Weapons. Also, 20 Australia Group chemicals are not on the Chemical Weapons Convention list, although families of chemicals are listed. Finally, the Chemical Weapons Convention list does not focus on chemical equipment and transfers, but the Australia Group list does.

Table 3: Regime Control Lists and Items: Australia Group[a]

Description of List Items	Examples of Items on the List
• 54 dual-use chemical precursors • Dual-use chemical weapons-related production equipment	Chemical: • Thiodiglycol • Reaction vessels, reactors, or agitators • Heat exchangers or condensers • Multiwalled piping
• 94 pathogens and toxins that affect humans, livestock animals, and/or food plants • Dual-use biological production equipment	Biological: • Ebola virus • Bacillus anthracis • Centrifugal separators • Aerosol inhalation chambers

[a]The United States had not yet published regulations incorporating changes from the June 2002 Australia Group plenary at the time of this report. The changes include the addition of eight toxins to the biological agents core list. The new total will be 102 once revised regulations have been issued.

Source: Australia Group.

Table 4: Regime Control Lists and Items: MTCR

Description of List Items	Examples of Items on the List
MTCR equipment and technology annex: • 196 items in two categories. Category I Annex items include complete missile systems, as well as major subsystems such as rocket stages, engines, guidance sets, and reentry vehicles and are rarely licensed for export. Transfers of production facilities for Category I items are prohibited absolutely. Category II Annex items include other missile related components, including cruise missiles and unmanned aerial vehicles, not covered in Category I.	Category I— complete missile systems, as well as major subsystems: • Individual rocket stages • Reentry vehicles • Solid or liquid fuel rocket engines • Guidance sets • Thrust vector controls • Warhead safing, arming, fuzing, and firing mechanisms Category II— other missile related components: • Propulsion components • Propellants and constituents • Propellant production technology and equipment • Missile structural composites: production technology and equipment • Avionics equipment • Reduced observables technology, materials, and devices

Source: MTCR.

Table 5: Regime Control Lists and Items: Nuclear Suppliers Group[a]

Description of List Items	Examples of Items on the List
• Part 1 guidelines provide an annexed list ("Trigger List") of 89 items of nuclear materials and equipment that if exported require that the recipient country have in place a full-scope safeguards agreement with the International Atomic Energy Agency	Part 1— • Special fissionable material • Nuclear reactors and equipment • Plants and equipment for reprocessing irradiated fuel elements • Plants and equipment for separation of uranium isotopes
• 67 items in part 2 consisting of exports of nuclear-related, dual-use equipment, materials, and related technology	Part 2— • Machine tools • Materials (beryllium) • Lasers, laser amplifiers, and oscillators • Flash x-ray equipment

[a]The Nuclear Suppliers Group maintains two lists of controlled items: a list of items, called the "Trigger List," whose export would require international safeguards to all nonnuclear weapons states; and a list of dual-use items. In contrast, the Zangger Committee maintains only a Trigger List of items whose export would require international safeguards, such as inspections and monitoring equipment, to nonnuclear weapons states that have not signed the Nuclear Nonproliferation Treaty. In 1971, a group of nuclear supplier countries known as the Zangger Committee came together to agree on how to implement and consistently interpret their obligations under Article III.2, a provision of the Nuclear Nonproliferation Treaty. Memberships of both regimes are similar; a significant difference is that China is a member only of the Zangger Committee. We did not review the activities of the Zangger Committee except as they relate to the Nuclear Suppliers Group.

Source: Nuclear Suppliers Group.

Table 6: Regime Control Lists and Items: Wassenaar Arrangement

Description of List Items	Examples of Items on the List
• 541 items in Appendix 5 List of Dual-Use Goods and Technologies Wassenaar Arrangement List 1	Dual-use List • General purpose integrated circuits • Optical fibre communication cables, optical fibres and accessories • Marine acoustic systems, equipment, and specially designed components • Solid rocket propulsion systems
• 196 items in Munitions List • 7 items in Appendix 3 Specific Information Exchange on Arms	Munitions List— • Bombs, torpedoes, rockets, missiles, and related equipment and accessories, specially designed for military use • "Military explosives" and fuels, including propellants, and related substances • Vessels of war, special naval equipment and accessories, as follows, and components therefore, specially designed for military use • "Aircraft," unmanned airborne vehicles, aero-engines and "aircraft" equipment, related equipment and components, specially designed or modified for military use

Source: Wassenaar Arrangement.

Appendix V: Some Factors Considered in Accepting New Members to Regimes

Groups	Some factors to consider in reviewing potential members
Australia Group	• Applicant must demonstrate an established, effective, and legally based system of national export controls; • Be a member in good standing of the Biological and Toxins Weapons Convention and Chemical Weapons Convention; • Demonstrated compliance with all multilateral treaties banning chemical and biological weapons activities.
MTCR	Whether a prospective new member • has a legally based effective export control system that puts into effect the MTCR Guidelines and procedures; • administers and enforces such controls effectively; • demonstrates a sustained and sustainable commitment to nonproliferation; • would strengthen international nonproliferation efforts.
Nuclear Suppliers Group	• Enforcement of a legally based domestic export control system that gives effect to the commitment to act in accordance with the Nuclear Suppliers Group Guidelines; • Ability to supply items (including items in transit) covered by the annexes to Parts 1 and 2 of the Nuclear Suppliers Group Guidelines; • Adherence to the Guidelines and action in accordance with them; • Adherence to and compliance with one or more of various nonproliferation treaties, including the Nuclear Nonproliferation Treaty or equivalent international nuclear nonproliferation agreement; • Support of international efforts towards nonproliferation of WMD and of their delivery vehicles.
Wassenaar Arrangement	• A state's adherence to fully effective export controls; • Whether a state is a producer/exporter of arms or industrial equipment, respectively; • A state's nonproliferation policies, control lists, and, where applicable, guidelines of the Nuclear Suppliers Group, the MTCR and the Australia Group; and through adherence to the Nuclear Nonproliferation Treaty, the Biological and Toxicological Weapons Convention, the Chemical Weapons Convention and (where applicable) START I, including the Lisbon Protocol.

Sources: Unclassified sources are the State Department Web site http://www.state.gov/t/np/rls/fs/2001/3528.htm; MTCR Web site http://www.mtcr.info/english/partners.html; International Atomic Energy Agency Web site http://www.nuclearsuppliersgroup.org/member.htm; and Wassenaar Arrangement Web site http://www.wassenaar.org/docs/IE96.html.

Appendix VI: Comments from the Department of Commerce

UNITED STATES DEPARTMENT OF COMMERCE
Assistant Secretary for Export Administration
Washington, D.C. 20230

October 11, 2002

Mr. Joseph Christoff
Director, International Affairs and Trade
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Christoff:

This is in response to your September 30, 2002 request for Department of Commerce comments on the General Accounting Office (GAO) draft report entitled Nonproliferation: Strategy Needed to Strengthen Multilateral Export Control Regimes. We appreciate the opportunity to comment on the draft report.

The Department of Commerce agrees that strengthening the multilateral export control regimes would serve U.S. national security objectives. The Department of Commerce also agrees with the GAO recommendations that improved information sharing, consistent adoption and implementation of export control systems, and assessing ways to overcome obstacles to reach decisions as well as enforcing member compliance with regime commitments would strengthen the regimes.

The Department of Commerce will continue to work with the Department of State, as well as the Department of Defense and the Department of Energy, to implement a coordinated and comprehensive U.S. strategy to strengthen the multilateral export control regimes.

Thank you for the opportunity to provide comments on the draft report. Our specific comments are enclosed. If you have any further questions, please do not hesitate to contact me at (202) 482-5491, or contact Ms. Julissa Hurtado at (202) 482-8093.

Sincerely,

James J. Jochum
Assistant Secretary
for Export Administration

cc: Steve Lord

Enclosure

Appendix VII: Comments from the Department of Energy

Department of Energy
National Nuclear Security Administration
Washington, DC 20585

October 15, 2002

Mr. Joseph Christoff
Director
International Affairs and Trade
U. S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Christoff:

The General Accounting Office provided the National Nuclear Security Administration (NNSA) with a copy of its draft report GAO-03-43, "NONPROLIFERATION: Strategy Needed to Strengthen Multilateral Export Control Regimes." We have reviewed the report and understand GAO is recommending that the Department of State should establish a strategy to strengthen the Multilateral Export Control Regimes. NNSA, on behalf of the Department of Energy, appreciates the efforts of the General Accounting Office and has no comments to the report as written.

Sincerely,

Anthony R. Lane
Associate Administrator for
Management and Administration

Printed with soy ink on recycled paper

Appendix VIII: Comments from the Department of State

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

United States Department of State

Washington, D.C. 20520

OCT 1 0 2002

Dear Ms. Westin:

We appreciate the opportunity to review your draft report, "NONPROLIFERATION: Strategy Needed to Strengthen Multilateral Export Control Regimes," GAO-03-43, GAO Job Code 320073.

The Department's comments are enclosed for incorporation, along with this letter, as an appendix to the GAO final report.

If you have any questions regarding this response, please contact Pamela Roe, Deputy Director, Office of Chemical, Biological and Missile Affairs, Bureau of Nonproliferation on (202) 647-4931.

Sincerely,

Christopher B. Burnham
Assistant Secretary of
Resource Management and
Chief Financial Officer

Enclosure:

As stated.

cc: GAO/IAT - Mr. Christoff
State/OIG - Mr. Berman
State/NP - Mr. Van Diepen

Ms. Susan S. Westin,
Managing Director,
International Affairs and Trade,
U.S. General Accounting Office.

Department of State Comments on GAO Draft Report

NONPROLIFERATION: Strategy Needed to Strengthen Multilateral Export Control Regimes
GAO-03-43

Department of State comments are set forth in detail. Department officials are prepared to discuss and elaborate on these comments in person at any time.

The Department of State appreciates the opportunity to comment on the GAO's report entitled "Nonproliferation: Strategy Needed to Strengthen Multilateral Export Control Regimes." We were gratified to see that GAO's thorough research into the workings of the four regimes did not reveal any shortcomings of nonproliferation significance. Your report contained three broad recommendations to help the Secretary of State establish a strategy to work with other regime members to enhance the effectiveness of the multilateral nonproliferation regimes. We intend to give due regard to GAO's recommendations in the recently-begun review of the WMD/missile nonproliferation regimes ordered by the President. Our specific comments to those recommendations follow.

(1) Improving information sharing

See comment 1.

Regarding the report's conclusion that "regimes cannot effectively limit or monitor efforts by countries of concern to acquire sensitive technology without more complete and timely reporting of licensing information and without information on when and how members adopt and implement agreed-upon export controls," the Department believes that the regimes are effectively limiting acquisition of controlled items by proliferators. For example, regime-member countries have put in place export controls covering listed items. These controls have made an important contribution to inhibiting acquisition of WMD and missiles. Almost all regime members have national catch-all controls that they use to help prevent otherwise non-controlled exports from assisting weapons programs. As such, regime members (except for Russia) are not significant contributors to proliferation and, in fact, have helped delay such proliferation -- a central accomplishment of the regimes as they currently operate. Instead, proliferators must look to other, non-regime, suppliers to obtain materials and equipment - often of less than optimum quality. In fact, the great majority of acquisition of regime-listed items by programs of concern occurs from and between non-member countries such as China and North Korea.

See comment 2.

The report deals extensively with the important role information sharing on export licensing decisions plays in efforts to curb the spread of WMD and missile equipment and

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See comment 3.

technology. The Department believes that another and even more valuable aspect of information sharing within the regimes concerns sharing information on trends in proliferation, trends in proliferator procurement, the use of front companies and brokers, and end-users of concern. Such exchanges sensitize regime members to proliferation issues of concern and provide the "big picture" about weapons procurement. Officials gain a better understanding about issues of priority concern, which lays the groundwork for future cooperation through diplomatic channels or other forms of interdiction cooperation aimed at impeding specific transfers of concern. While sharing information about export licenses is valuable, the broader information sharing described above is a large and, in our view, more important element of the regimes' information exchange efforts.

See comment 4.

Regarding sharing more complete information on export license denials, the Department notes that the AG and MTCR have a standard format for denial notifications which ensures uniform data is circulated to regime participants. The Department does not necessarily see the nonproliferation utility in sharing with regime members information on approved U.S. exports of regime-listed items to non-members.

(2) Adopting and implementing agreed-upon regime changes to export controls more consistently

See comment 5.

The Department is not aware of any instance in which time lags have resulted in proliferators obtaining controlled items from regime members as suggested in the report. Also, our expectation, validated by long-standing practice, is that regime members share similar concerns about the proliferation threat, that they scrutinize export license applications for nonproliferation concerns, and that they would be alert to the same kinds of concerns in reviewing licenses.

See comment 6.

The report also discusses differences found in participants' implementation of regime controls, and questions the effectiveness of catch-all controls as a nonproliferation tool. From the Department's perspective, experience shows that the presence of catch-all controls has been a critical factor in inhibiting proliferators' attempts to acquire unlisted items; there is no question about their effectiveness. Differences in implementation are a necessary result of differences in individual countries' legal and political systems in coping with the novel, non-list-based requirements of catch-all controls. It has been our experience that it is much more important that countries have catch-all controls, than they have controls implemented exactly the same way.

(3) Identifying potential changes to policies and procedures

-3-

See comment 7.

The report takes issue with the consensus decision making process of the regimes, asserting that it hampers the adoption of decisions and reduces the potential effectiveness of the groups. We would note that while achieving consensus in the regimes can be difficult, consensus also ensures that ill-conceived proposals that could inadvertently harm U.S. interests are not adopted.

See comment 8.

In response to the recommendation that the regimes conduct annual effectiveness self-assessments, the Department notes that at annual plenaries, each regime routinely scrutinizes its relevance, impact, and progress in stemming proliferation. Control lists are constantly evaluated and updated to take into account trends in proliferation and acquisition. The nonprolfieration regimes also routinely discuss (and in many cases adopt) a wide variety of policy proposals designed to strengthen their effectiveness in fighting proliferation. In effect, annual self-assessments already occur, but perhaps not in as systematic a manner as the GAO would like to see. However, we intend to give due regard to GAO's recommendations in the recently-begun review of the regimes ordered by the President.

The following are GAO's comments on the Department of State letter dated October 16, 2002.

GAO Comments

1. The Department provided examples of the commitments that governments make when they become members of the multilateral export control regimes. However, simply listing the types of export control commitments these members make says nothing about how these commitments are implemented in practice and whether they are effective. Therefore, it is unclear how State can contend that regime members are effectively implementing regime commitments.

2. We agree with State that proliferators must often look to nonregime suppliers to obtain materials and equipment and discussed this issue in our report.

3. We agree that it is important for regime members to share information on trends in proliferation, procurements, the use of front companies, and end users of concern. We also believe that it is important to collect and share comprehensive licensing information on sensitive export transfers and denials—the building blocks for assessing these broader trends.

4. The Department stated that it sees no utility in sharing increased information about export approvals to nonregime members. This statement is inconsistent with its current policy and practice. For example, on October 11, 2002, the Deputy Assistant Secretary of State for Nonproliferation stated that regime members should share more information on export approvals to facilitate monitoring of regime member compliance with their "no undercut" commitments. Moreover, the U.S. government has led efforts to increase this type of information sharing in two regimes. The Wassenaar Arrangement already expects members to share information on export approvals, and the U.S. government submitted a proposal to the Nuclear Supplier's Group in 2002 that would provide for reporting export approvals.

5. None of the regimes systematically tracks the time regime members take to implement agreed-upon changes in their control lists. In the absence of this tracking, State cannot demonstrate that time lags have not resulted in proliferators' obtaining controlled items or that the time lags could not contribute to proliferation.

6. We agree that catch-all controls have been a critical factor in inhibiting proliferators' attempts to acquire items not on regime control lists. However, as noted in our report, different country standards hamper effective implementation and complicate law enforcement cooperation.

7. Our report already acknowledges that decisions based on consensus are a double-edged sword. As we noted, while the need for consensus hampers the adoption of important decisions, it can also prevent regime members from adopting a position that the United States opposes.

8. During our review, we did not identify any systematic or formal assessments of regime effectiveness routinely conducted by the regimes or their members. Rather, regime statements sometimes assert the effectiveness of the regimes but, as we reported, have established no agreed upon criteria against which these assertions can be assessed.

Appendix IX: GAO Contact and Staff Acknowledgments

GAO Contact

Stephen Lord (202) 512-4379

Acknowledgments

In addition to the individual named above, Jeffrey D. Phillips, Eugene Beye, Lynn Cothern, Nanette Ryen, and Richard Seldin made key contributions to this report.

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