Strengthening Multilateral Export Controls

A Nonproliferation Priority

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Strengthening Multilateral Export Controls

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Dan Joyner, Victor Zaborsky, Dmitri Nikonov, Julia Khersonsky This report is the product of a year-long study by the University of Georgia Center for International Trade and Security (CITS) on multilateral export controls. The objective of the report is to contribute to wider understanding in the policy community on the challenges facing international export controls.

The Center for International Trade and Security would like to thank the many international officials and experts who kindly agreed to share their views on multilateral control issues or to complete surveys on the multilateral export control regimes. We also wish to thank the experts who participated in our workshop on enhancing the multilateral control regimes on August 1-2 in Washington, D.C. (See Appendix I). The officials and experts who generously shared their time and views contributed greatly to this report and to forthcoming research on this subject. Finally, we wish to express gratitude to the Carnegie Corporation of New York, which provided a grant that made this study possible.

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Table of Contents

EXECUTIVE SUMMARY	5
I. Study Rationale	9
II. Globalization, Security and Export Control Efforts	9
III. Contribution of Multilateral Control Regimes to Preventing WMD Proliferation	.11
IV. Limitations of the Existing Multilateral Control Regimes	.13
Informality	.13
Consensus rules	.14
Lack of High-level Political Support	.14
V. Troubles of Rapid Expansion and Diverse Membership within the Regimes	.15
VI. Weaknesses of Institutions and Regulatory Mechanisms within the Existing Regimes	.19
Enforcement: The Weakest Link	.19
Information Sharing	.20
Transparency and Outreach	.21
Strengthening International Industry Compliance with Export Controls	.22
New Players in Control Efforts: The Need for Non-Governmental Participation	.23
VII. A New Multilateral Export Control Institution Needed	.23
VIII. Conclusion	.25

Appendices:

Appendix I – Methodology	29
Appendix II – Workshop Participants	31

page 4 STRENGTHENING MULTILATERAL EXPORT CONTROLS

EXECUTIVE SUMMARY

Strengthening Multilateral Export Controls: Challenges and Recommendations

Inhibiting rogue nations and terrorist organizations from acquiring weapons of mass destruction (WMD) and other dangerous weaponry requires significant international cooperation. In response to the real threat posed by terrorists and nations seeking nuclear, chemical, biological, and advanced conventional weapons, the United States and other suppliers have taken a number of steps to coordinate export controls that monitor and restrict the flow of dangerous weapons and related components, materials, and technologies. There are four informal multilateral export control regimes that complement and support broader international nonproliferation objectives and nonproliferation treaties. They are the Missile Technology Control Regime, the Nuclear Suppliers Group, the Australia Group, and the Wassenaar Arrangement.

These export control regimes face a growing array of international political and economic challenges that limit their ability to successfully stem the proliferation of dangerous weaponry and weapons-related items. Recognizing growing concerns about the efficacy of multilateral export control efforts, the University of Georgia Center for International Trade and Security undertook a comprehensive study aimed at evaluating and strengthening multilateral export control regimes to meet nonproliferation objectives. In carrying out this study, researchers from the Center interviewed and surveyed over one hundred officials and non-governmental experts around the world. This report provides an assessment of the regimes and the major challenges confronting them, as identified by the international experts. The principal authors of the study also set forth recommendations for strengthening multilateral proliferation control efforts.

Key Findings and Major Recommendation:

Finding 1:

Multilateral control regimes contribute to national and international efforts to reduce the threat posed by the proliferation of weapons of mass destruction.

The four multilateral export control regimes have helped to further delegitimize WMD acquisition by states and have also helped to promote international awareness of proliferation threats. Further, the governments that are party to the regimes have made it more difficult for some rogue states to obtain important components for nuclear, chemical, and biological weapons and the means used to deliver them. These successes can be attributed to improved information gathering and sharing on sensitive end-users and programs of proliferation concern.

Finding 2:

The multilateral export control regimes, however, confront a number of serious external and internal problems that limit their ability to tackle an increasingly complex global political and economic environment. These problems include the decision to take in a growing number of supplier nations which lack effective national control systems, divergent views among major suppliers about the nature of proliferation threats, and the inability to quickly adapt export controls to address new proliferation concerns. The differing perspectives among participating countries regarding security threats and how to address them, coupled with the informal nature of the multilateral control regimes, are likely to significantly reduce the effectiveness of multilateral control efforts in the coming years.

Multilateral proliferation control efforts, to be effective, depend upon all major suppliers agreeing on sensitive countries and programs of concern that should be targeted. Despite recent U.S. pronouncements about coun-

tries comprising the "axis of evil," members of the regimes do not agree about the threats posed by particular countries and programs of concern. Member countries, therefore, often do not apply the same standards in intelligence gathering, information sharing, licensing, and enforcing controls on the trade in strategic items.

Finding 3:

The interests of countries participating in the regimes have diverged significantly since the end of the Cold War, with grave implications for the effectiveness of multilateral export controls as they currently exist.

Many countries have joined the multilateral control regimes even though their security and economic interests differ from those of the original members. Even more troubling, some new members lack effective national export control systems. Because trade among regime members is not as carefully scrutinized as trade with those outside the regime, these "weak links" may be targeted by rogue states and terrorist organizations for exploitation in their efforts to build WMD. Russia's participation has been especially problematic, as its obstructionist stances within the regimes have impeded the evolution of more harmonized multilateral export controls.

Finding 4:

The informal nature of the multilateral export control regimes in combination with membership growth and diversity weakens the ability of multilateral export controls to carry out their mission: restraining the proliferation of dangerous weapons technology while not obstructing other legitimate forms of international trade. The absence of persistent high-level attention by political leaders in the United States and Europe to advancing the regimes has allowed this problem to linger. While globalization increasingly forces international trade to operate "at the speed of business," the control regimes are all too often held hostage by a few recalcitrant governments with agendas that differ from those of the majority of members. As a result, the control system, which serves as a bulwark of national and international security, progresses haltingly and is increasingly left behind by the advances in technology and trading mechanisms.

> Major Recommendation: To address membership challenges and the limitations of consensus-based decision-making, efforts should be undertaken towards negotiating a new, overarching regime that will replace the Nuclear Suppliers Group, the Missile Technology Control Regime, the Australia Group, and the Wassenaar Arrangement.

A single overarching control regime with one secretariat or administrative body would help increase political understanding of the rationale behind export control, promote wider adherence to export control norms, reduce travel and administrative costs, and provide an opportunity to correct limitations imposed by existing regime provisions and the disparate membership. The new regime should adopt voting procedures that are not based exclusively on consensus rules, which are easy to manipulate for those who consider a truly multilateral security regime a lesser priority.

Conclusion:

- Multilateral export controls have proven their ability to inhibit efforts at proliferation by rogue states and terrorist networks. However, the current export control regimes have serious flaws that could make them increasingly irrelevant in a globalizing world.
- Even so, they should not be discarded, because unilateral alternatives are even less useful in restraining weapons proliferation.
- > The regimes must be reformed and strengthened. It will be a daunting task and will require forward-thinking leadership, significant and sustained political commitment, resources and skillful diplomacy.

Reforming and strengthening multilateral export controls will not occur without high-level leadership from the United States, Japan and the European Union. These countries have the most at stake in both international trade and international security; and a significant percentage of global trade is conducted among businesses in these countries alone. They also have enormous resources that buttress international security—including robust national export control systems and a history of working together.

Export controls are one of the main bridges between trade and security, and they can only be effective when national systems are harmonized at the multilateral level. They are too important to the economic and security interests of the leading countries to be allowed to languish in the absence of clear political commitment for reform.

page 8 STRENGTHENING MULTILATERAL EXPORT CONTROLS

STRENGTHENING MULTILATERAL EXPORT CONTROLS

I. Study Rationale

The proliferation of weapons of mass destruction (WMD) and advanced conventional arms remains one of the gravest threats to the security of the international community. Rogue nations continue to pursue weapons of mass destruction by purchasing related technologies and components from foreign suppliers. Of increasing concern too is the real threat posed by terrorist organizations such as al Qaeda that are seeking to inflict mass casualties. There is little doubt that such groups would use a weapon of mass destruction. Furthermore, unregulated arms transfers can introduce instability and conflict into countries and regions, making them breeding grounds for terrorism.

A great deal of policy attention and resources has been directed towards addressing this proliferation threat, as well as towards securing nuclear materials from possible theft or sabotage. Nevertheless, policy makers should not overlook a basic fact: most countries and terrorists seek to *purchase* the components they need for developing weapons of mass destruction.¹ Greater attention and resources, consequently, need to be devoted to strengthening export controls, with due respect for the needs of legitimate trade.

The United States and dozens of other countries seek to coordinate their export controls through multilateral export control regimes or arrangements, including the Australia Group (AG), the Missile Technology Control Regime (MTCR), the Nuclear Suppliers Group (NSG), and the Wassenaar Arrangement (WA). This study was prompted by a growing perception in policy circles that these proliferation control regimes, designed to regulate trade in sensitive WMD-related components and conventional arms, were struggling to keep pace with the rapid changes wrought by economic globalization, the digital and telecommunications revolution, and an increasingly uncertain international security arena.²

The objectives of the study were:

- To explain and compare how the multilateral export control regimes operate;
- To assess the effectiveness of the control regimes;

• To make recommendations on how to strengthen the ability of the control regimes to impede weapons proliferation.

The study is also based on the assumption that export controls that are not improving in terms of their ability to inhibit weapons proliferation are getting worse. There is and will be a continual need to reevaluate the effectiveness of national and international control efforts, because those who seek weapons of mass destruction are constantly refining their weapons acquisition efforts, which in turn makes it more and more difficult to detect and curtail proliferation activity.

This policy report represents the key findings of a yearlong Center for International Trade and Security (CITS) evaluation of the multilateral export control regimes (see Table 1 for background on the regimes). The report takes note of some of the progress that has been made in strengthening multilateral controls over the last decade. It highlights some of the significant challenges to multilateral control efforts based upon extensive surveys and interviews with international officials and experts. Finally, the report offers recommendations by CITS researchers for tackling some of the problems impeding effective international control efforts. Information on the study methodology is included in Appendix I.

II. Globalization, Security and Export Control Efforts

Governments face a growing number of challenges to controlling strategic technologies and goods in a global environment. These challenges further complicate efforts to craft a unified multilateral response and to harmonize export controls.

First, whereas several decades ago there were only a handful of states offering dual-use technologies, there are now several dozen international suppliers of hightechnology items. This expansion, combined with increased amounts of global trade in weapons and dualuse technology, increases the threat of the proliferation of strategic materials and the tools necessary for weapons programs. Some of the new supplier nations

Table I

The Nuclear Suppliers Group (NSG) is an informal institution comprised of 40 states, more than half of those are nuclear technology suppliers. It establishes common guidelines governing nuclear transfers in an effort to ensure that civilian nuclear trade does not contribute to nuclear weapons acquisition. The International Atomic Energy Agency (IAEA) first published the NSG guidelines on nuclear export in 1978. Prompted by the common concern about Iraq's clandestine efforts to acquire weapons of mass destruction, in 1992 the NSG established additional guidelines for transfers of nuclear-related dual-use equipment, material and technology. Members voluntarily adhere to the guidelines, and share information on nuclear proliferation concerns. Recently, NSG members have begun to consider proposals for responding to the threat posed by nuclear terrorism.

The Australia Group (AG) is an informal arrangement that aims to allow exporting or transshipping countries to minimize the risk of assisting chemical and biological weapon (CBW) proliferation. The Group was formed in 1984 at the Australian initiative, as a response to evidence about CW use in the Iran-Iraq War. Fifteen states met initially in Brussels, but later decided to meet annually in Paris. The Group's actions are viewed as complementary measures in support of the 1925 Geneva Protocol, the 1972 Biological and Toxins Weapons Convention and the 1993 Chemical Weapons Convention. As of July 2002, there are 33 members of the Group, with the European Union as an Observer. The Group has no charter or constitution. It operates by consensus. Recently, AG became the first regime whose members agreed to adopt catch-all controls as a means for ensuring greater government-industry partnership in controlling sensitive exports to suspect end-users.

The Missile Technology Control Regime (MTCR) is an informal and voluntary association of countries sharing the goals of nonproliferation of unmanned delivery systems for weapons of mass destruction and seeking to coordinate national export licensing efforts aimed at preventing their proliferation. The group was originally established in 1987 and the number of members has increased steadily to its present total of 33 countries. It controls exports of missiles (and related technology) whose performance in terms of payload and range exceeds stated parameters. There are two categories of items controlled. Category I includes complete systems and subsystems capable of carrying a payload of 500kg over a range of at least 300 km and, and specially designed production facilities for such systems. Category II includes missile-related components such as propellants, avionics equipment, and other items used for the production of Category I systems.

The Wassenaar Arrangement (WA) is an informal agreement of 33 states established in 1995 to control transfers of conventional weapons and sensitive dual-use goods and technologies. It was designed to promote transparency, an exchange of views and information, and greater responsibility in preventing destabilizing accumulations of advanced conventional weapons and dual-use technologies. The institution has no list of target countries or restricted entities, although it does (since December 2001) target "terrorist groups and organizations, as well as individual terrorists." There are, however, agreed lists of items: a munitions list that consists of the same basic categories of major weapons-systems as the UN Register on Conventional Weapons; and a dual-use technology list that is broken into two tiers. Tier 1, the basic list, is made up of sensitive items and technologies; and tier 2 consists of very sensitive items that are subject to more stringent monitoring. Final interpretation and implementation of these lists is left to the national discretion of participating states. There is a small Secretariat located in Vienna, and there are several expert and technical working group meetings held each year in addition to the plenary in December. The Wassenaar Arrangement replaced the Cold War export control mechanism, COCOM, that sought to deny the Soviet Union and its allies military-related articles.

have been admitted to the nonproliferation export control regimes, while others remain outside the realm of multinational cooperation on proliferation control issues.³

Second, transnational defense industry consolidation and increased international competition among technology and arms suppliers make it more difficult for national governments to regulate the transfer of defense items. Increasingly, the defense industry has become multinational. As with the products of all multinational corporations, defense technology does and will continue to cross borders, with little opportunity for government oversight unless export controls are given high national and international priority and consistently applied among trading partners. International competition in the global marketplace in high technology and weapons will necessitate increased government vigilance to prevent improper marketing of defense items. Industrial strategies adopted by many major conventional weapons suppliers, for example, threaten international security by supplying both dual-use technology and surplus weapons to unstable and/or conflictprone states in the developing world.⁴

Third, weapons-related technologies that require control no longer emerge primarily from governmentfunded military research, but from civilian sector research. In economic parlance, military research and development is no longer the primary catalyst of products that are "spun off" from military applications. Instead, commercial products are increasingly used to supply off-the-shelf technology for military applications, as government entities find that higher quality and lower prices are available on the open market. This development means that there are increasing numbers of companies producing and selling technologies that, while intended for civilian use, instead can be used as components for weaponry or military use. Governments must find ways to keep these companies in compliance or face the risk that these transfers will contribute to a WMD program and/or regional conflict.5

Fourth, states must now grapple with an additional complication: "intangible" technology transfers through electronic communications media. In the past, technology transfers were generally easier to track, since goods, services, or written information delivered personally or through the mail could be examined at national borders. But today, enormous quantities of

data can be exchanged instantaneously via fax, e-mail or other electronic means to any corner of the globe. Consequently, national borders are of increasing irrelevance when it comes to technology transfer.⁶

Finally, the pace of technological change and development has greatly accelerated. This has happened not just for computers and software, but also for all forms of weapons-related technology. This means that governments have to struggle with the issue of "trimming" control lists periodically, such as deciding whether to continue controls over old technologies that may be used by proliferators despite the availability of better substitutes. At the same time, if governments get bogged down in bureaucratic wrangling over which emergent technologies to control (and for how long), they fall behind the "control curve" of products that represent potential threats to international security. Change that occurs "at the speed of business" does not wait for governments to bring often under-funded and resource-starved export controls into play.7

III. Contribution of Multilateral Control Regimes to Preventing WMD Proliferation

The four multilateral export control regimes have made important contributions to efforts to prevent the spread of weapons of mass destruction. These institutions, along with other nonproliferation treaties and norms, have helped to delegitimize WMD acquisition by states. The regimes have also made it more difficult for some rogue states to obtain important components for nuclear, chemical, and biological weapons and the means used to deliver them. For example, some officials note that Iran, while still a proliferation threat, has found it difficult to achieve progress in its pursuit of various weapons programs thanks to the norms and cooperation facilitated by the Nuclear Suppliers Group and the other control regimes. Likewise, export controls have impeded Libya's efforts to acquire Western technology for missiles. These and many other successes can be attributed to improved information gathering and sharing on programs and end-users of concern within the framework of the multilateral export control agreements.8

When it comes to conventional weapons technology, however, the Wassenaar Arrangement has faced and continues to face significant barriers to effectively controlling the destabilizing buildup of military technologies. First, efforts to control conventional military technology inevitably run up against Article 51 of the UN Charter, which cedes to every member state the right to arm for self-defense. Since most of the world's nations do not produce conventional weapons (nor are the major suppliers necessarily willing to give them the know-how necessary to do so), the trade in conventional weapons, ammunition and technology is a big business. Wassenaar members controlled about 95 percent of the world's conventional weapons trade in the 1990s. Second, there are difficulties within the Wassenaar Arrangement in determining, as per its founding document, what a "destabilizing accumulation" of military weapons and technologies might be.9 For instance, in the spring and summer of 2002, members of the Wassenaar Arrangement could not even agree if arms transfers to a region such as South Asia should be deemed potentially destabilizing.

Critics of the multilateral export control regimes argue that the regimes have become increasingly ineffective because they have been unable to stop WMD proliferation in its tracks. However, much of this criticism stems from confusion regarding the aims and nature of the export control regimes as they were originally conceived and regarding the assumptions upon which these regimes are based. First, while export controls are important supply-side mechanisms, they cannot halt proliferation completely. Countries can, of course, indigenously develop any and all technologies necessary for chemical, biological, nuclear, or conventional weapons production. However, they are aided immensely if a supplier provides them with help, in the form of materials and technology, along the way. Although export controls cannot stop proliferation, they can and do play an important role in slowing itdelaying a security threat while other forces (diplomatic, economic, and potentially military) can be brought to bear.10

Second, if the regimes do not include all suppliers of proliferation-sensitive items, then their effectiveness even in slowing proliferation can be seriously compromised. If suppliers outside the regime either choose to or inadvertently undercut regime policies by supplying sensitive materials and technologies to countries of concern, the regimes have few tools at their disposal to counteract such behavior.¹¹ In order to bolster the effectiveness of the nonproliferation regime, therefore, even countries outside the four arrangements need to be encouraged to develop effective national systems of export controls. Finally, not all members within the

four export control regimes have a common security outlook. To the degree that some states disagree about the threat posed by a given program or country (e.g., Russia's stance on Iran), the nonproliferation export control regime can be compromised.

These problems are real and acknowledged by the officials and experts that we interviewed. If the problems besetting the regimes are left unattended, the risk of terrorist organizations and rogue states acquiring dangerous weapons and sensitive military items will increase correspondingly. However, most of those interviewed contend that the regimes have performed relatively well given the limitations imposed by their institutional design and absence of high-level governmental support. Of those officials surveyed, a majority said that the regimes were doing an "average" job in meeting their objectives. Moreover, 80 percent of survey respondents reported that multilateral controls had become *more* effective over the past ten years. The practices of information sharing and the fine-tuning of control lists, according to international officials, have become more institutionalized and have improved steadily.

The multilateral export control regimes have also attempted to respond to world crises, including the events of 9/11. Our interviewees noted that within the existing framework of the regimes there are incremental, immediate changes that can and should be made in terms of improving information-sharing, promoting coordinated and improved enforcement of controls, clarifying multilateral guidelines, responding to new technologies and terrorist groups of proliferation concern, and tightening oversight of new channels used for transferring sensitive military-related items.

At the same time, there are increasing expectations and demands from the security and the nonproliferation communities that, in the view of the authors of this report, cannot be met by the existing regimes. The problem of proliferation and the number of suppliers has grown ever more complex. And there are significant limitations as to what we can practically expect from the existing arrangements, given the fundamental problems of informal and consensus-based design together with diverse member interests. These problems are outlined below along with recommendations for moving towards a more formalized, and thereby strengthened, multilateral proliferation control norms.

IV. Limitations of the Existing Multilateral Control Regimes

Informality

• The informal structure of the export control regimes imposes significant limitations on their ability to achieve nonproliferation objectives.

The multilateral export control regimes represent a particular type of international institution: informal consultative arrangements best suited for coordinating policies among a small number of like-minded countries. During the Cold War, when the export control regimes emerged, they were comprised of a small number of *like-minded* countries (save the Wassenaar Arrangement.)¹² However, the regimes have grown

over the last dozen years to include an increasing number of countries, both supplier and nonsupplier, with different security outlooks and interests. And the growth has come without a corresponding increase in the formality and institutionalization of the

regimes. Unfortunately, without increased institutionalization and creation of more formal structures (along with changed procedures that will be discussed below), the nonproliferation regimes may no longer be efficient nonproliferation mechanisms.

The current problems of the control regimes, including vague provisions, uncertain membership criteria, and inability to effectively harmonize control mechanisms across the entire membership, are results of the lack of structure within the arrangements.¹³ As noted, the export control regimes were designed to be consultative gatherings by which a small number of like-minded suppliers could coordinate export control policies. Hence, there was no need to institutionalize what in essence was already *de facto* agreed upon: the source of threat. The collapse of the Soviet Union and admission of new members-many of whom were former targets of controls-has highlighted the limitations of such organizations. If the members do not share common interests or have much in the way of common identities or common political, economic and social structures, informal ways and means of establishing goals and agendas become less effective in coordinating efforts to slow proliferation.

Some officials also noted that the informal nature of the control regimes is problematic given various regime guidelines and provisions that are vague and open to a range of interpretations. For example, the Wassenaar Arrangement is considered to be the epitome of poorly defined objectives and vague provisions.¹⁴ Members of the Wassenaar Arrangement, which seeks to prevent "destabilizing accumulations" of arms by regulating transfers by suppliers, have been unable to define, to the satisfaction of all parties, what the term "destabilizing accumulation" means. Likewise, they have been unable to determine officially that conventional weapons trade would potentially destabilize any region. As a result, member states are forced to rely on norms created outside of the regime (e.g., the declaration of an embargo on warring parties by the UN Security Council), or their own national decision-making rules.

The former mechanism is, of course, prone to veto by a non-Wassenaar member, China.¹⁵ The latter obviously makes a multinational regime irrelevant if countries no longer consider coordinating their policies.

In the absence of binding and consistent interpretations of the guidelines, countries are able to adjust their export policies to meet other economic or policy goals that may conflict with the intent of the multilateral regimes. There are also no formal mechanisms to resolve differences in how the guidelines are interpreted by member states. This situation is a further indication of the limitations of informal control regimes. Finally, harmonized effort is also a problem within the export control regimes. Export control officials note that because the multilateral control agreements are informal and implemented at the discretion of national governments, one cannot speak of compliance with or violations of the regimes. According to one official, we can only speak of a country permitting exports that are "inconsistent" with regime guidelines. Unfortunately, according to many of those interviewed, the informal status of the regimes leaves members with few effective tools (persuasion being of limited utility with certain members) to promote uniformity of interpretation of the regime guidelines. And without such uniformity, export control regimes will continue to fail to live up to their potential.

Although the above criticisms are widespread, no government official that we interviewed, in the United

In the absence of binding and consistent interpretations of the guidelines, countries are able to adjust their export policies to meet other economic or policy goals that may conflict with the intent of the multilateral regimes. States or elsewhere, indicated that they believed that the multilateral export control regimes should be disbanded entirely. Many were strongly supportive of the multilateral efforts, indicating that the opportunity to debate the interpretation of regime guidelines, share information, or discuss national export control efforts is important in advancing supply-side norms. Most experts see the regimes as valuable forums for building a common, cooperative-security mindset among members. These officials are quick to point out that the nonproliferation regimes cannot operate unless a significant number of the major suppliers take part, and since certain major suppliers have both varying threat perceptions and varying abilities to commit resources to export controls, differences among regime members are endemic. The imperative to bring non-like-minded members into the fold means that the arrangements must continue to focus on norm creation and convergence, with the more liberal and cooperative members working hard and devoting significant resources to instilling these norms in the newcomers.¹⁶

Consensus rules

• Consensus rules allow even a single member to hold up efforts to strengthen the control regimes by voting against change.

Consensus rules represent a particularly intractable problem for all of the export control regimes. The regimes, which require unanimous votes to make or change policies, lists, or structures, are thus poorly equipped to handle the increased number of member countries—especially when those countries have significantly different concerns regarding the downsides of free trade in sensitive technologies. Because of consensus rules, efforts to further enhance the effectiveness of these regimes can be effectively blocked by any member, and unfortunately, this is not uncommon, especially in the Wassenaar Arrangement.

A common refrain among the international government officials who were interviewed was that the regimes could not *do* anything because one or two recalcitrant members hold them hostage. These problem members cannot be removed from the existing regimes since such decisions also require consensus (and they presumably would not vote for their own removal). According to experts, the need for consensus and the infrequency with which consensus is attained makes the regimes slow to react to intelligence about new military applications of existing technologies, new channels of illicit technology acquisition adopted by the proliferators, and emerging threats to international security. Also, delays in decontrolling obsolescent technologies from regime control lists are common. Ultimately, the authors of this report view the consensus rules of the nonproliferation export control regimes as a severe handicap to the realization of the nonprolif-

eration goals of the member states. With little ability to adapt to new realities, and no ability to remove members who threaten the security of all members by their individually deviant behavior, the regimes could potentially come to *undermine*, rather than *bolster*, international security.

Lack of high-level political support

• The multilateral nonproliferation export control mechanisms do not receive enough political support from the leadership in the United States, Europe, or Japan.

Mid-level government officials administer the current export control mechanisms. These officials have a tremendous store of practical and substantive knowledge about national export control mechanisms. Wherever there is continuity of personnel in the bodies designated to oversee export controls, an in-depth understanding of how the multilateral regimes operate usually exists. In many countries, one official attends several or all of the meetings of the export control arrangements, in addition to implementing the day-today tasks associated with export controls. While this indicates that resources for the export control bureaucracy are indeed scarce, it does have the effect of giving these particular officials a broad knowledge of the multilateral regimes. However, even in countries with export control bureaucracies built around a division of labor (i.e., with different representatives attending meetings of the four regimes), many officials feel overworked and indicate that it is difficult to keep up with all of the meetings in addition to their responsibilities within their national systems. In short, even though nonproliferation export controls are widely deemed to be one of the most important bulwarks in the international security system, they have not been given attention or resources commensurate with their importance by many governments.

Without high-level officials' knowledge of the efficacy of export controls, as well as political support reflect-

ing the high priority placed on export controls in the foreign policies of the Western countries, mid-level bureaucrats assigned to handle the technical issues and diplomacy related to the nonproliferation regimes are unable to clear away obstacles for cooperation. Several of those whom we interviewed indicated that even certain instances of Russian intransigence could probably be overcome if U.S. and European leaders would act together in pressuring Russia, but they also emphasized that if efforts were to be effective such pressure could not take the form of increased public "Russia bashing."

Finally, the lack of high-level attention to export controls may indicate to both member and non-member countries that nonproliferation export controls are not considered a priority among the leading states in Europe, the U.S., and Japan. This has obvious counterproductive implications, and has an effect on efforts by mid-level officials who are trying to help other countries develop fully capable export control systems.

Recommendation: Each of the problems above—informality, consensus rules that paralyze efforts at joint action, and lack of highlevel political support—is an overarching weakness in the multilateral nonproliferation export control system. These are troubling issues that adversely affect each of the regimes, and any significant reform of the multilateral regimes must consider how to break free of the constraints imposed by them.

In the next two sections, discussed in detail are two types of problems, expansion of membership and institutional deficiencies, which currently plague the regimes.

V. Troubles of Rapid Expansion and Diverse Membership within the Regimes

Tackling Membership Concerns

Three out of the four multilateral export control regimes (excluding the Wassenaar Arrangement) were established as cartels of like-minded supplier states that had effective export control systems. But over time, the criteria for membership have been diluted, with troubling implications for the effectiveness of multilateral controls (see Table 2 for regime membership).

• Countries have been allowed to join the multilateral control regimes despite the fact that they

are not major suppliers of conventional weapons, dual-use technology, or WMD materials.

The Missile Technology Control Regime (MTCR) and the Nuclear Suppliers Group were established primarily as cartels of supplier states. The MTCR was originally comprised of the Group of Seven (G-7) nations, but has now grown to include 33 countries. Many of these countries are non-exporting countries with no missile or space programs; yet, by the fact of their admission to export control regimes, they can now veto joint action by the core states. Similarly, the NSG, which started as a club of seven nuclear suppliers, has grown to 40 member states, although only 23 of them have relevant nuclear capabilities or industries. The expansion of Australia Group membership has also swelled as large numbers of non-suppliers have been admitted. Some argue that such states can make only a limited contribution to achieving the nonproliferation objectives of the control regimes. The addition of disparate members only compounds the informality problem, in that consensus rules limit the ability of the regime to adapt from within, as over 30 dissimilar members must all agree on the direction and scope of change.

• Many countries have been allowed to join the multilateral control regimes despite their lack of effective national export controls.

In particular, the export control regimes have evolved from being clubs of supplier countries to nonproliferation institutions comprised of countries with export control systems of varying degrees of maturity. In some cases, countries seeking membership have done little more than copy regime control lists and issue export control regulations, afterwards paying little or no attention to implementation and enforcement. Many smaller countries lack either the financial resources (e.g., Belarus) or the political interest (e.g., Iceland) to send representatives to regime meetings. Other countries of Eastern Europe have sought membership in order to demonstrate their "nonproliferation bona fides" and to pave the way to membership into other institutions, such as NATO and the EU. Increasing numbers of participants results in higher administrative and transaction costs for the regimes.

In theory, admitting such states could itself pose a proliferation threat because countries participating in the

Table II

Table 2. The Multilateral Export Control Regimes					
	Australia ¹			Wassenaar	
	Group	MTCR ²	NSG ³	Arrangement	
Argentina	0	0	0	0	
Australia	0	0	Ο	0	
Austria	0	0	0	0	
Belarus			Ο		
Belgium	0	0	0	0	
Brazil		0	Ο		
Bulgaria			0	0	
Canada	0	0	0	0	
Cyprus	0		0		
Czech Republic	0	0	0	0	
Denmark	0	0	0	0	
Finland	0	0	0	0	
France	0	0	0	0	
Germany	0	0	0	0	
Greece	0	0	0	0	
Hungary	0	0	0	0	
Iceland	0	0			
Ireland	0	0	0	0	
Italy	0	0	0	0	
Japan	0	0	0	0	
Latvia			0		
Luxembourg	0	0	0	0	
Netherlands	0	0	0	0	
New Zealand	0	0	0	0	
Norway	0	0	0	0	
Poland	0	0	0	0	
Portugal	0	0	0	0	
Romania	0		0	0	
Russia		0	0	0	
Slovakia	0		0	0	
Slovenia			0		
South Africa		0	0		
South Korea	0	0	0	0	
Spain	0	0	0	0	
Sweden	0	0	0	0	
Switzerland	0	0	0		
Turkey	0	0	0	0	
Ukraine		0	0	0	
	0	0	0	0	
United Kingdom United States		0 0	0 0	0 0	

¹ The European Commission also participates in Australia Group meetings. ² Countries pledging to abide by MTCR guidelines include the People's Republic of China, Israel, Romania, and Slovakia. ³ The European Commission is a permanent observer. Kazakhstan recently became an NSG member.

regimes do not scrutinize intra-regime trade, assuming instead that other members exercise adequate controls. Thus, a rogue actor or terrorist group based in a member country would find fewer hurdles to obtaining and re-exporting militarily sensitive items than it would in obtaining such items from a country, such as Pakistan or India, which does not take part in the export control regimes.

• Many countries have been allowed to join the multilateral control regimes despite the fact that their security and economic interests diverge significantly from the rest of the membership.

As previously mentioned, the multilateral export control regimes started out as groups of like-minded supplier states. But at the end of the Cold War, the criteria of like-mindedness was diluted, and states such as Russia and Belarus, whose security interests differ significantly from other members, have been allowed to join. This issue is particularly relevant now, as efforts are being undertaken to engage other supplier countries such as China, India, Pakistan, and Israel. Some officials have expressed grave reservations about including such states in a consensus-based, informal regime.

Admitting countries with disparate security interests is problematic because of consensus rules. For instance, in a consensus-based system, a single country can "hold hostage" a decision by the entire membership to adopt a common standard of behavior. Thus countries

of the former Soviet Union that participate in the regimes (Belarus, Ukraine, Kazakhstan, and Russia), and which have difficulty in competing with Western countries on international technology and arms markets, might successfully resist any institution-

al change that might limit their own ability to transfer items to former Soviet allies, many of which are now countries of proliferation concern.

Furthermore, criteria for membership in the export control regimes are indistinct and are often driven more by foreign policy considerations rather than by clearly defined rules. Ukraine's MTCR membership, for example, was made possible by U.S. activism outside the context of the MTCR. Ukraine gained admittance for political, economic, and security reasons rather than for its adherence to MTCR guidelines. However, the dramatic expansion of these regimes has not been without its benefits. Some experts see the benefits of including new members, including states of the former Soviet Union, as outweighing the costs of Some believe that expansion has including them. raised awareness of proliferation threats beyond the original members and serves as a venue to cultivate the right attitudes among the new members. However, even these officials admit that their governments have not devoted enough sustained effort toward this end (i.e., socializing). Despite the inclusion of nonproliferation at the top of many Western countries' list of national priorities, efforts at the socialization of new regime members has not occurred at the highest levels of government.

Recommendation: In the short term, until a new institution is established to manage a larger number of countries including nonsuppliers or members with disparate security interests, membership growth should be paused.

For the sake of efficiency and effectiveness, membership needs to be strictly controlled over the short term. If political circumstances dictate that additional countries be added to the arrangements, these countries should be required to provide solid evidence of their commitment to implementing and enforcing export controls. Additionally, new members (and current members) should demonstrate that they are capable of

enforcing export control laws for a sustained period.

Another interim option for dealing with growing numbers is to create new options for progressively enhancing the status of "adherents" to the regime— in effect cre-

ating a two-tiered system of membership. There are currently few perceived benefits of only being adherents. New entrants to the regime that adopt multilateral control lists and otherwise implement and enforce controls in a way consistent with emerging standards should be recognized as being adherents and accorded some of the technology trade privileges enjoyed by other members. This must be done as a progressive "confidence building measure," and not in a way that tends to equate adherent status to permanent secondclass status—a prospect about which China and India are particularly sensitive. At the same time, new chan-

Criteria for membership in the export control regimes are indistinct and are often driven more by foreign policy considerations rather than by clearly defined rules. nels for sharing information with cooperating or adherent countries should be developed.

A further means of realizing broad-based adherence to the ground rules of the regimes could be the establishment of multilateral control arrangements for transit states, or for especially troublesome countries. There already exist multilateral forums and regional conferences, such as the annual Asian Export Control Conference, that could set forth regional standards based on an assessment of the security challenges in that particular region, and on existing multilateral control lists. This would reduce the need for expanding the existing regimes while prompting strengthened controls in key regions. It would also go beyond the mere informal discussion of export control challenges that characterizes the regional conferences currently taking place.

The Russia Problem

• Russia has impeded multilateral export control cooperation and exported WMD technologies to countries of concern.

Although Russia has made significant progress in developing export control regulations, strengthening national export control institutions, and informing its industry of export requirements, Russia's ability to enforce national export controls has been called into question by continuous exports of WMD-related articles. Russia's willingness to prevent proliferation has also been called into question by Moscow's nuclear, military, and other dual-use technology trade with Iran, and by Russia's efforts to block U.S. and other European initiatives to strengthen the multilateral export control regimes, most notably the Wassenaar Arrangement.¹⁷ As a result, many international officials interviewed identified Russian exports and obstruction of multilateral cooperation as a major problem requiring attention.¹⁸

Russian exports of nuclear and missile items deemed to be inconsistent with multilateral norms have been a perennial flashpoint in U.S.-Russian relations. Russia has justified its nuclear cooperation with Iran by citing International Atomic Energy Agency (IAEA) reports and safeguards that are applied to Bushehr. The United States has vehemently objected to this, primarily on grounds that Iran is pursuing nuclear weapons. Many international officials have criticized Russian nuclear cooperation with India as contrary to the NSG guidelines and inconsistent with Russia's Nonproliferation Treaty (NPT) obligations. Specifically, Russia supplied nuclear fuel to the Tarapur Nuclear Power Plant in India. This action was a clear violation of NSG guidelines, since India does not have a full-scope safeguards agreement with the IAEA and is not an NPT signatory. Russia also entered a contract to build a nuclear reactor in India, claiming that the deal was sealed in 1988, and therefore not subject to the 1992 NSG provision requiring full-scope safeguards. Other regime members note that Russia's rationalizations regarding Iran and India are inadequate and clearly inconsistent with nuclear nonproliferation norms.

Most officials interviewed suggested that Russia's poor record of adherence and obstructionist behavior in the other arrangements would prevent it from being admitted into the Australia Group in the near future. Many interviewed also argued that admitting Russia into the MTCR in the first place was a mistake.

There is not a great deal of consensus among other regime members about how to respond to Russia's behavior. Some officials feel that Russian behavior should not be condoned, but must be tolerated. In this view Russia will over time come to share a more common outlook on security with the United States and other Western countries. In the bargain, it will be weaned away from traditional trading partners that are now considered to be deviant states. Some interviewed noted that Russia's record of permitting sensitive exports might be much worse if Russia were not a member of the MTCR, NSG, and the Wassenaar European officials tend to regard Arrangement. Russia's cooperation with Iran in the areas of defense and sensitive technology, and its opposition to strengthened international oversight, as understandable given the economic plight of Russia's military-industrial complex. Most U.S. officials, however, believe that despite the conditions that prompt proliferation, Russia must be held accountable for enforcing national controls and should forsake high-technology trade ties with countries having questionable intentions.

Recommendation: European regime member states should join the United States in expressing greater concern about Russian exports that are inconsistent with the multilateral regimes. Sustained high-level talks on export controls will provide the best forum for consultation. The issue of Russia's impeding efforts to strengthen multilateral proliferation control efforts should also be raised through higher-level U.S.-Russia bilateral channels, and through other Western security institutions that include Russia, such as NATO.

Although the United States has raised repeated concerns about Russian proliferation over the past decade, even resorting to sanctions against individual Russian entities, the United States has not attempted to engage Russia in a high-level dialogue on how Russia might play a more constructive role in strengthening multilateral norms. If Russian exports threaten the integrity of the nonproliferation regime and the multilateral control regimes and Russia blocks the emergence of stricter international proliferation control standards, the issue must be pressed with high-ranking Russian officials, including Foreign Minister Igor Ivanov. Russia should be encouraged to continue to strengthen its national export control system, and to demonstrate its professed commitment to nonproliferation by showing greater responsibility and cooperation in strengthening multilateral controls, rather than using the existing weaknesses of the regimes to rationalize sensitive transfers. A high-level political dialogue is also needed to complement the U.S. programs under whose auspices export control infrastructure has been built in, and technical expertise has been provided to, Russia.

Efforts to merge the export control arrangements also provide an opportunity to link more constructive Russian behavior and strengthened control institutions to Russia's participation in any future export control regime. If Russia continues to thwart international control efforts, other members could establish a new institution without Russia's participation. Care should be taken, however, not to punish Moscow for illicit exports resulting from industrial and official corruption or ignorance of control regulations. Rather, policies that deliberately undercut the goals of nonproliferation should be the target of any action designed to exclude the Russian government. The problem of exporters violating Russia's national legislation requires Russian authorities to enforce national export control legislation, and the West to continue providing assistance on export controls. The problem of the Russian government's practice of approving sensitive exports must be met with more intensive multilateral diplomacy.

VI. Weaknesses of Institutions and Regulatory Mechanisms within the Existing Regimes

Enforcement: The Weakest Link

Members of the export control regimes have done an inadequate job of enforcing export control regulations. Worse, the regimes do not set forth a standard for enforcement procedures. As with all other aspects of the regimes, national governments enforce the rules according to the parameters of national legislation. There are no explicitly stated "best practices" for training customs or interdiction officials. On occasion, the regimes host expert workshops on enforcement issues. For example, such a recent enforcement seminar was held as part of the 2001 plenary meeting of MTCR members in Ottawa. In 1999, the Wassenaar Arrangement developed a rudimentary list of the key elements of export control enforcement. Nevertheless, the regimes stop well short of codifying standard enforcement procedures.

Recent studies of national export control systems conducted by the Center for International Trade and Security in over two dozen countries suggest that enforcement is one of the least harmonized elements among member states.¹⁹ Training of enforcement officials is inconsistent across members in the various export control regimes, and in some cases it is nonexistent. To a large extent this inconsistency is a result of resource limitations. The rates of prosecutions and the severity of the punishments meted out also vary significantly across regime members.

The lack of concrete standards for enforcing export controls undermines the efficacy of efforts to construct controls lists and guidelines in the first place. Member states must be able to ascertain that each member and each adherent is enforcing its export control laws and obligations with some degree of consistency and uniformity. In the absence of such standards, the United States is left to act as the sole enforcer by imposing unilateral sanctions.

Recommendation: Training for enforcement officials should be harmonized in the form of essential elements and best practices. Regime members should seek to standardize key trade documentation (e.g., shippers' export declaration) and nomenclature for enhancing the ability of customs agencies to monitor the movement of WMD-relevant items. Enforcement officials should be equipped with new technologies for better monitoring of WMD-relevant trade.

Countries participating in the multilateral regimes should invest greater resources in developing and using technologies that help track the flow of controlled goods and technologies. If the use of these technologies was standardized internationally, with regime members taking the lead, the ability of customs agencies to enforce controls and monitor exports would be enhanced. For example, Radio Frequency Identification Devices could be used to track more effectively dualuse items in transit. These devices could encode the shipper's manifest, bills of lading, and export license number. If they were required on physical shipments of controlled items, the devices would help to ensure that items were delivered to the intended location, and to the licensed end-user. Obtaining and coordinating enforcement training, practices, and technologies will require additional resources as well.

Improving Information Sharing

• Only a few among the current regime members gather information on technologies and projects of proliferation concerns through their national intelligence and technical means. Such information is not routinely shared with the entire membership, but only with those that are co-members of other security and economic associations.

Members mostly share information on export license denials. Sometimes they also share information about technologies and materials that proliferants appear to be interested in acquiring. While sharing information about denials is a routine practice, and thus not problematic for most members, sharing information about programs of proliferation concern presents some challenges. Such information is often collected by national intelligence agencies, which do not want to reveal their sources and methods. The intelligence agencies of major countries also have qualms about the ability of fellow members to guard against the deliberate or inadvertent leaking of such information. As such, official representatives of member states are often left in the uncomfortable position of voicing concerns about the activities of certain non-members without being able to substantiate the allegations with hard evidence.

Some information is shared with the entire membership at annual plenary meetings and at intercessional meetings. More sensitive information, however, is often only shared among major supplier states that have a significant interest in, and intelligence on, the controlled technologies. Often, such sharing is done during informal meetings on the margins of other bi- or multilateral meetings.

Smaller member states that lack elaborate intelligence services often complain that, unable to confirm the claims of the major states, they are left to make subjective assessments about the truthfulness of the limited or incomplete information supplied to them. Given the intensely competitive nature of some industrial sectors, such as the global electronics, biotechnology, pharmaceutical, and chemical industries, there is sometimes a propensity among these smaller states to believe that the more influential states advocate export restraints that fail to take into account their commercial interests and are more restrictive than current security concerns justify.

Recommendation: Intensify ongoing efforts to improve multilateral intelligence sharing, while moving towards a common information-sharing system as part of a new control regime.

Most of the regimes (i.e., AG, NSG, and WA) have enhanced their ability to share information using online networks. The key is now for a greater number of countries to participate in sharing information on matters such as license denials. Since information is the currency of export control regimes, the more that is shared in an effort to reduce dangerous transfers – or to prevent one member from undercutting another's denial – the better the multilateral controls.

The Australia Group, for instance, plans to create a virtual information center that will allow all members to gain access to basic information, past and proposed agendas, talking points, and position papers by national delegations. This would help create institutional memory, avoid redundancy in discussions, and help train new export control representatives. It would also be helpful for smaller members whose export control agencies find it overwhelming to receive and distribute all the information that is exchanged at the meetings, yet need to keep their political leaders and industries updated. Recommendation: Other regimes should learn from the Australia Group and institute similarly detailed information-sharing mechanisms. All regimes should consider including information on license denials as well as approvals in a form that does not violate business confidentiality yet allows members to track patterns of acquisition by non-members.

There is currently a difference of opinion on the issue of creating "black lists" of groups suspected of supporting or engaging in terrorism. Some members believe that this would expand the scope of the multilateral control regimes and overlap with that of agencies involved in counter-terrorism. Besides the problem of updating the lists frequently (because terrorist groups routinely change their names to evade action by state agencies) it would be difficult for many member states to implement because of national legal requirements. Additionally, there is the potential for politicizing the regimes because of differences in intra-state as well as inter-state assessments of these groups.

Recommendation: Information sharing should also be directed towards forging greater consensus on actors of proliferation concern and sub-state actors suspected of supporting terrorism. Regime members should become more sensitive to the possibility of homegrown terrorism, and institute measures such as national registries of legitimate end-users and better coordination between export control and counter-terrorism officials.

In the short term, the export control regimes might follow the lead of the Australia Group, where members have decided to incorporate catch-all clause into their regulations regarding CBW-relevant exports. A longterm measure that all control regime members could adopt is to establish national registries of all authorized end-users and ensure that their national export control agencies develop better coordination with their own colleagues in counter-terrorism agencies. The U.S. has taken the first step in this direction by requiring all research institutions that work with selected chemical and biological materials to notify the designated government agency within a certain time.

Transparency and Outreach

 Multilateral regimes face two related challenges from non-members: some question their legitimacy, while others do not consider themselves obliged to restrain their sensitive exports because they are outside the regimes.

Post-9/11, there is growing realization that countries not party to the control regimes might become an attractive target for acquisition efforts by terrorist organizations. Addressing the problem of countries that are either hostile or simply indifferent to international nonproliferation efforts will require greater attention, because they pose the risk of secondary proliferation. In some cases, diplomatic pressure will be needed to force a policy change or to block a specific transaction. The United States and members of the European Union must also intensify export control assistance to transit states in Central Asia and Southeast Asia. South Asia is another key region for such assistance, where sensitive technologies exist and are controlled only through unilateral export controls, i.e., without any international obligations or restraints.

Recommendation: Efforts should be undertaken to increase understanding of the multilateral control regimes in order to promote wider adherence to their guidelines and more effective export control practices by transit states and suppliers outside of the regimes.

In the past, countries belonging to multilateral export control regimes have been somewhat apologetic about the existence of these arrangements, and have tried to justify their decisions. Indeed, much of the outreach and transparency effort initiated by the Australia Group and the Nuclear Suppliers Group was guided by the need to deflect such criticism, which, at different points in time, was threatening to scuttle the negotiations on the Chemical Weapons Convention (CWC), the Biological Weapons Convention (BWC) Protocol, and the indefinite extension of the NPT. Transparency efforts are also important in countering legitimacy concerns raised by developing countries, especially those within the Non-Aligned Movement (NAM). Some NAM states claim that the multilateral control regimes are a tool used by the developed states to restrict the access of developing countries to new technology. While these critics have supplied little more than anecdotal evidence to support their claims, it seems clear that, if the international community is to achieve broader adherence to multilateral controls, stepped-up transparency efforts by the developed countries will be critical.

Thus far, outreach efforts by the regimes have focused on explaining to the non-members, suppliers, and transit states that multilateral control arrangements are an additional institutional layer needed to achieve the nonproliferation goals of the NPT, CWC, and BWC. As such, the multilateral regimes are a legitimate complement to the treaties, and should be seen as their implementing arms.

Recommendation: Transparency measures will be essential for explaining the necessity of continuing or strengthening multilateral export controls in the face of treaty-based agreements that aim at near-universal membership and promote technology sharing. If regime members downgrade their outreach efforts, it is likely that implementation of, and adherence to, the formal treaties themselves might be affected. This will undermine the legitimacy of the regimes themselves.

Some countries criticize the Australia Group for being an exclusivist, informal, and secretive institution. They also see little reason for AG to continue after the Organization for the Prohibition of Chemical Weapons (OPCW) has become functional.²⁰ They also see little reason for the Nuclear Suppliers Group to keep expanding its scope to the detriment of the NPT-based Zangger Committee, or in the face of a strengthened IAEA safeguards regime. Other critics of the regimes have argued that even in the interim, when the OPCW and the proposed Organization for the Prevention of Biological Weapons (OPBW) have yet to prove their effectiveness, if the AG has to continue, it should allow exports to CWC/BWC members in good standing, because formal treaties should take precedence over informal ones.

To counter such criticisms, the Nuclear Suppliers Group has held at least two international seminars and several regional outreach seminars. Recently, it decided to coordinate outreach to significant non-members, notably India, Israel, and Pakistan, through the "troika"— consisting of representatives from the past, present, and future chairs of the NSG. Similarly, MTCR, AG, and WA have also made efforts in the past to engage "significant suppliers" of technologies of concern to them. For instance, MTCR and AG have sought to engage India and Pakistan, while WA has sought to engage South Africa and Brazil.

Recommendation: Future outreach activities should make it clear that multilateral controls can become obsolete only when there is full and universal compliance with the formal treaties, viz. the NPT, CWC and BWC.

Regime members should emphasize that until the signatories to these universal treaties develop export control systems comparable to those of the regime members, multilateral controls, whether in their existing framework or in a strengthened regime covering all WMD technologies, will continue to be the primary means for the major supplier states to coordinate their WMD-relevant exports.

Strengthening International Industry Compliance with Export Controls

• Industry is a key player in export control efforts because in-house compliance efforts represent the "front line" of efforts to control trade in dangerous goods and technologies. However, international industry awareness of export responsibilities and compliance with export control regulations is in many cases lacking.

The problem is especially acute among small companies within the larger countries, and almost all companies within certain smaller ones.²¹ Ultimately, if exporters of sensitive technologies disregard (or are unaware of) national export controls, they will be more likely to export proliferation-sensitive items.

Recommendation: Promote wider security awareness and corporate responsibility amongst exporters by developing international norms for industry compliance with export control regulations.

Government, industry associations, and NGOs must do more to promote corporate responsibility and accountability amongst exporters of militarily sensitive items. One option is for a trade association or NGO to develop international industry compliance standards that companies voluntarily pledge to observe. Although a voluntary pledge by company executives would not bring export privileges from government, it would be a way for companies to signal to others in world markets that they are responsible corporate actors concerned with national and international security. Policies should be created within this pledge program so that resources would reach medium and smaller exporters that are most poorly informed and most apt to violate export laws.

A second option is for the chairs of the multilateral export control regimes to establish industry compliance norms. With adequate resources, national governments participating in the export control arrangements could then certify that these industry internal (in-house) compliance programs (ICP) meet multilateral standards. Under such a government-sanctioned certification program, governments might provide certified companies with special licensing privileges.

These two approaches might also be pursued in a complementary manner, as their scope and objectives are different. The former is a voluntary pledge that might involve minimal effort on the part of smaller and medium-sized firms. The latter approach to promoting industry compliance would provide tangible benefits for a demonstrated commitment to export controls and would be of greatest interest to large exporters. An international standard for compliance programs could build on the similar models for such programs in the United States, the United Kingdom, Japan, and several other Western countries.

New Players in Control Efforts: The Need for Non-Government Participation

 Multilateral regimes are seen as closed and non-responsive, even to activists and NGOs that support their nonproliferation agenda. The potential of these groups as partners, consequently, remains unrealized.

As in many other areas of trade relations, especially the World Trade Organization (WTO), the European Union, and North American Free Trade Agreement (NAFTA), the nonproliferation export control regimes are sometimes seen as unnecessarily exclusive and non-receptive to input from citizen, activist, and nongovernmental groups. There is a long history of grassroots agitation on issues related to the weapons trade in both its mass destruction and conventional sides. Increasingly, there are citizen- and activist-led movements that seek to control the trade in weapons and dangerous technologies at the international level (e.g., the Ottawa Convention concerning the prohibition, ban, and destruction of landmines and efforts taken at the UN to seek a similar ban on small arms and light weapons), as well as at the national level. Furthermore, citizen-initiated programs have been acknowledged to play an important role in modification of other international governance institutions such as the WTO, the World Bank, and the International Monetary Fund (IMF).

Government representatives sometimes feel that nongovernmental actors seeking access to security regimes do not have the substantive knowledge of the issue required to engage in dialogue with the member states. Unfortunately, even if this is true, increasingly engaged publics are likely to persist, thereby making it incumbent upon governments to address issues important to them.

Recommendation: Allow limited participation by non-governmental groups in the meetings of the multilateral export control regimes

There are several different models for involving NGOs. The World Trade Organization has developed an elaborate mechanism through which various non-state groups can participate in dialogue by meeting concurrently with the national representatives, and allowing them to propose agenda items concerning the development of new trade rules. James Wolfensohn, when he became president of the World Bank, undertook a different model, but one that conformed to the World Bank's decision-making and programmatic structures by channeling NGO participation into the areas of operational collaboration, economic and sector work, and policy dialogue. The NAFTA process in the United States, Mexico and Canada exemplified a third, more state-based process. In these negotiations, the U.S. government, especially, chose to co-opt certain NGOs to cooperate in establishing the trilateral agenda.

VII. A New Multilateral Export Control Institution Needed

The growing and increasingly complex task of preventing weapons proliferation requires a new approach to multilateral export controls. The existing multilateral regimes cannot be expected to effectively deal with increased volumes of global strategic trade with the informal patterns of operation, consensus voting rules, increasingly diverse member countries, new proliferation threats, and absence of high-level political interest and support. They were created in a different era, for a different purpose, and with different targets in mind.

Recommendation: Merge the four nonproliferation export control regimes into an overarching Multilateral Nonproliferation Export Control Regime so that more effective multilateral export controls can be developed.

The informal multilateral export control regimes emerged to address important security concerns. However, the growing concern with proliferation and terrorism and new global economic realities suggest a need for a more formal, rationalized, and responsive institution. Failure to seek a new institution or institutions to replace and/or complement existing multilateral proliferation controls is to place the security of the United States and its allies in great jeopardy. If export controls are not improving, they are getting worse, because proliferants continue to seek new channels for acquiring sensitive, WMD-relevant technologies.

We suggest that the export control regimes be merged in discreet steps.²² First, all plenary meetings of the existing regimes should be moved to one city. This would bring all of the export control regimes to one central location, with Vienna being a logical site. The benefits would be reduced administrative costs and personnel requirements on the one hand (a particular boon to the small states that, as mentioned previously, have only a handful of officials to attend all of the plenary meetings), and on the other, increased coordination across regimes, along with more focused understanding among political leaders in member states.

Second, a multilateral coordination forum should be held prior to each regime's annual plenary meeting. This multilateral coordination forum would consist of national representatives from all countries party to one or more of the export control regimes. The objective of the coordination forum would be twofold.

- First, it would provide members an opportunity to address common, crosscutting proliferation challenges, as well as potential responses, in a collective manner.
- Second, the officials attending the coordination

forum could begin the process of negotiating and framing a new, more formalized Multilateral Nonproliferation Export Control Regime.

As the new regime is being negotiated, the existing export control regimes should hold annual plenaries in Vienna and focus more specifically on technical aspects related to multilateral controls (e.g., control lists and new technologies of concern). The four current regimes would also continue to have their regular Eventually, the existing working group meetings. export control regimes might evolve into technical working bodies or sub-regimes focused on list maintenance, review, and study of items of emerging proliferconcern. while the Multinational ation Nonproliferation Export Control Regime collective body would focus on tackling policy issues.

The consensus rule must not bind the decision on the need to have a new unified regime. Negotiating a new institution that is not burdened by consensus rules will require both time and significant political effort. Because of the political difficulties that will need to be overcome, raising political awareness and understanding is absolutely critical. Further, additional diplomatic, bureaucratic and political resources must be devoted to the negotiating process in order to correct export control deficiencies in the international system.

A new Multilateral Export Control Regime should include:

- a. Major suppliers to the extent that they are committed to preventing the spread of weapons of mass destruction.
- b. Decision-making procedures that do not cripple efforts to establish more binding multilateral requirements.
- c. Agreement on actors of proliferation concern that should be prevented from acquiring sensitive, military-related items.
- d. Means for ensuring that other members are complying with standards and guidelines that are unambiguous.
- e. Incentives or requirements to share information critical to the success of preventing weapons proliferation.
- f. The requirement for members to demonstrate that they have put in place adequate resources to implement and enforce export controls.

Many export control officials oppose a unified control regime because they have vested bureaucratic interests in the *status quo* or fail to believe that one export control organization can emerge where four exist. Some officials have argued against one institution that attempts to implement WMD and conventional weapons controls, arguing that each of the existing control regimes has a different origin, history, and membership. However, many of the objectives, issues, and information resources that governments are sharing are crosscutting, and the benefits of one focused institution as opposed to four separate institutions far outweigh the costs.

Bringing about significant changes to multilateral controls and establishing new control institutions will require considerable political commitment above and beyond what exists now. It will also require leadership from the United States, the European Union, and Japan that is currently lacking. Sustained legislative and executive commitments are indispensable prerequisites to this end, as the prospects for innovations within the current regimes are significantly limited.

VIII. Conclusion

Undoubtedly, the institutional and environmental challenges facing the multilateral export control regimes are manifold, relentless, and demand solutions requiring a wide range of skill sets and resources. Yet, if current criticisms of the regimes are any indication, multilateral efforts to manage the flow of weapons-related goods and technologies are foundering. This report has canvassed the reasons as to why this is so, as well as proposed several recommendations to improve such efforts.

It is clear that the regimes suffer from the external misperception that they alone are capable of preventing weapons proliferation. The reality is that these institutions are only one nonproliferation tool that requires support from other institutions to be effective in addressing the threat posed by the spread of weapons of mass destruction. They were designed to coordinate export policies amongst a relatively small collection of like-minded supplier countries. Yet, they are now being asked, for example, to address the challenge of terrorism, take the blame for not stopping the Indian, Pakistani, and Israeli nuclear programs, to halt North Korean WMD-related exports, and to expand respective memberships for political as well as security reasons. The present regime structure—or, more precisely, the lack of it—is inadequate to these ends.

The major challenge of the regimes is to initiate proactive reform and innovation. The compelling nature of the threat posed by continued WMD proliferation and lightly-regulated military exports is such that controls are no longer a matter for informal organizations. A terrorist organization armed with a nuclear, biological or chemical device is a threat that cannot be effectively addressed by four separate regimes operating on the hobbling basis of consensus rules.

This threat, as well as continued proliferation, requires a complete and profound commitment by the political establishment in each member state to devote the requisite policy focus and resources to creating more binding norms. The need for harmonized systems of control and international cooperation in regulating sensitive proliferation and munitions trade, however, has been left largely to mid-level representatives who lack the political weight to prompt significant changes in multilateral policy. The United States, the European Union, and Japan must exercise greater leadership by involving higher-level decision makers in efforts to create a new, overarching regime that will improve oversight of strategic military items and WMD-related trade.

There are numerous foreign policy issues that vie for the time of decision makers and the resources that they direct. Given the paramount concern with rogue states, terrorism, WMD proliferation, and the impact of the conventional weapons trade on political violence, it is time to devote greater attention to the need to strengthen multilateral nonproliferation export controls. While U.S. officials tend to focus most heavily on issues related to the spread of WMD, they should not forget that these are not the only types of weapons that can be used by terrorists and rogue nations. In Europe, a greater concern exists with regulating the arms trade because NGOs and public activists have successfully raised awareness of the security and moral pitfalls of trading arms with rogue regimes and violence-prone regions. The U.S. concern with WMD-related trade and the greater European public concern with preventing arms trade to problem states together can forge strengthened export control norms and practices across the board.

¹ As post-Gulf War national and international investigations revealed, Iraq purchased–either directly or through front companies

- the majority of materials and technologies needed for its various weapons programs. Quite recently, U.S. officials have contended that Iraq has stepped up its quest for nuclear weapons and has embarked on a worldwide hunt for materials to make an atomic bomb. Iraq has sought to buy thousands of specially designed aluminum tubes, which American officials believe were intended as components of centrifuges to enrich uranium. See Michael Gordon and Judith Miller, "U.S. Says Hussein Intensifies Quest for A-Bomb Parts," *The New York Times*, 8 September 2002.

² For example, Joseph Cirincione, ed., *Repairing the Regime: Preventing the Spread of Mass Destruction* (New York: Routledge, 2000) Michael Barletta and Amy Sands, eds., Nonproliferation Regimes at Risk, *Occasional Paper No. 3*, Center for Nonproliferation Studies (Monterey: Monterey Institute for International Studies, 1999).

³ Non-traditional suppliers represent the latest proliferation trend. As identified in his annual Congressional testimony - Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January Through 30 June 2000 - Director of Central Intelligence George Tenet asserted that there were countries determined to maintain WMD and missile programs over the long term by placing significant emphasis on insulating their programs against interdiction and disruption, as well as trying to reduce their dependence on imports by developing indigenous production capabilities. Although these capabilities may not always be a good substitute for foreign imports - particularly for more advanced technologies - in many cases they may prove to be adequate. In addition, as their domestic capabilities grow, traditional recipients of WMD and missile technology could emerge as new suppliers of technology and expertise. Many of these countries - such as India, Iran and Pakistan - do not adhere to the export restraints embodied in such supplier groups as the NSG and the MTCR. See also, Jason Ellis, "Beyond Nonproliferation: Secondary Supply, Proliferation Management, and U.S. Foreign Policy," Comparative Strategy, 20:1-24, 2001 and Michael Moodie, "Beyond Proliferation: The Challenge of Technology Diffusion," The Washington Quarterly, vol. 18, no. 2, Spring 1995.

⁴ Defense Industry Consolidation: Competitive Effects of Mergers and Acquisitions (Testimony, 4 March 1998, *GAO/T-NSIAD-98-112*). For a discussion of post-Cold War arms export policy, see William W. Keller and Janne E. Nolan, "The Arms Trade: Business As Usual?" *Foreign Policy* 109 (Winter 1997/98), 113–125. See also, Paul Levine and Ron Smith, "Arms Export Controls and Proliferation," *Journal of Conflict Resolution*, Vol. 44, No.6, December 2000.

⁵ William W. Keller and Janne E. Nolan, "Proliferation of Advanced Weaponry: Threat to Stability," *Foreign Policy*, Winter 1997-1998 and Michael Hirsh, "The Great Technology Giveaway," *Foreign Affairs*, September/October 1998, pp. 2-9.

⁶ "Globalization and Control of Intangible Technology Transfers: A Major Challenge to Export Controls in the 21st Century," *CITS Working Paper* presented at the Conference in Moscow, May 2000, *The Monitor: International Perspectives on Nonproliferation*, Vol. 6, No. 3, Summer 2000. See also, *Defense Science Board Task Force on Globalization and Security, Final Report* (Washington, DC: Office of the Under Secretary of Defense for Acquisition and Technology, December 1999).

⁷ For an examination of how the rapid increase in technological capacity has impacted trade controls and security policy, see Sam

Nunn Bank of America Policy Forum, *Executive Summary: Globalization, Technology Trade and American Leadership: A New Strategy for the 21st Century*, (Athens: The University of Georgia, March 2000), and *Technology and Security in the 21st Century: U.S. Military Export Control Reform*, Center for Strategic and International Studies (Washington, DC: CSIS, 2001), and Sten Lundbo, "Nonproliferation: Expansion of Export Control Mechanisms," *Aussenpolitik*, Vol. 48, No. 2, August 1997.

⁸ Richard T. Cupitt, "Multilateral Nonproliferation Export Control Arrangements in 2000: Achievements, Challenges, and Reform," Center for Strategic and International Studies, *Occasional Paper*, September 2000.

⁹ Michael Lipson, "The Reincarnation of CoCom: Explaining Post-Cold War Export Controls," *The Nonproliferation Review*, 6, 2 (Winter 1999), pp. 33-51.

¹⁰ Michael Beck, "Reforming the Multilateral Export Control Regimes," *The Nonproliferation Review*, 7, 2 (Summer 2000), pp. 91-103.

¹¹ The standing exception to the lack of enforcement capabilities in the regimes has been the use or threat of economic sanctions by the U.S.

¹² The Coordinating Committee on Multilateral Export Controls (COCOM) preceded the Wassenaar Arrangement in the control of dual-use technologies. Its members disbanded COCOM after the Cold War ended, but within months, negotiations were underway to launch a successor regime, which became the Wassenaar Arrangement. While COCOM controlled much of the same dual-use technology as Wassenaar, the latter also has reporting requirements for the trade in major conventional weapons. Even more importantly in negotiations prior to the founding of Wassenaar, the new arrangement included both former COCOM members and many targets of the Cold War regime—making it a truly post-Cold War arrangement.

¹³ Richard T. Cupitt, "Multilateral Nonproliferation Export Control Arrangements in 2000: Achievements, Challenges, and Reform."

¹⁴ Kenneth A. Dursht, "From Containment to Cooperation: Collective Action and the Wassenaar Arrangement," *Cardozo Law Review*, 19, 3 (December 1997), pp. 1079-1123.

¹⁵ For more on China's nonproliferation policy, see Jing-Dong Yuan, "The Evolution of China's Nonproliferation Policy since the 1990s: Progress, Problems, and Prospects," *Journal of Contemporary China*, Vol. 11, No. 31, May 2002.

¹⁶ An in-depth examination of the membership problem as it pertains to the MTCR is found in, "Missile Proliferation and the MTCR: The Nth Member and Other Challenges", Scott Jones and Victor Zaborsky, *Occasional Paper*, Center for International Trade and Security (Athens: University of Georgia, 1997).

¹⁷ For example, in his testimony before the Senate Governmental Affairs Committee, Assistant Secretary of State for Nonproliferation John S. Wolf asserted that "Russian exports related to WMD and missiles to proliferant states take place in a complex environment. Strong economic motivation for enterprises to increase exports vie with mixed enforcement of export controls, a level of official corruption, and governmental policies that often confuse rather than clarify what is permissible and what is not. Russia's policy on such exports is generally to interpret its nonproliferation commitments narrowly. In selling uranium fuel to India in the face of overwhelming opposition from the Nuclear Suppliers Group, Russia made decisions contrary to the guidelines. Moscow

also tends to downplay the threat posed by proliferant weapons programs and to express the belief that the limited technological capability of proliferant states will prevent them from developing WMD and missiles. That view is shortsighted and dangerous." Testimony by Assistant Secretary of State for Nonproliferation John S. Wolf, Senate Governmental Affairs Committee, Subcommittee on International Security, Proliferation and Federal Services, 6 June 2002.

¹⁸ "Russian Exports of Sensitive Equipment and Technology," Testimony of Leonard S. Spector, Deputy Director Center for Nonproliferation Studies, Monterey Institute of International Studies, Before the Subcommittee on International Security, Proliferation, and Federal Services of the U.S. Senate Committee on Governmental Affairs 6 June 2002. In his testimony, for example, Spector stated that "given these patterns (of sales of controlled goods and technologies), it seems clear that the fundamental problem is a lack of political will in Moscow to enforce a disciplined export control system, an export control system that gives a higher priority to nonproliferation than to profit."

¹⁹ The Center for International Trade and Security at The University of Georgia maintains a national export control evaluations database of nearly three dozen countries: www.uga.edu/cits. An examination of five key supplier states – The United States, France, Russia, China, and India – can be found in Michael Beck, Richard Cupitt, Seema Gahlaut, & Scott Jones, *To Supply or To Deny: Nonproliferation Export Controls in Five Key Countries* (New York: Kluwer, 2002).

²⁰ For example, Andrew Latham and Brian Bow, "Multilateral Export Control Regimes: Bridging the North-South Divide," *Canadian Institute of International Affairs International Journal*, 53, 3 (Summer 1998), pp. 465-486.

²¹ In 2001, the Center for International Trade and Security conducted an initial survey to measure the export control compliance efforts of select U.S. companies on defense and dual-use items. The survey explored the current export control compliance practices of 120 leading U.S. exporters of strategic munitions and dual-use items. The preliminary findings suggest that violations of export control regulations among U.S. companies are not rare. Thirty percent of the survey respondents believe that violations of export controls occur "very often" or "often" in their industry. Nearly 54% of the companies had self-reported violations and nearly 27% have received a warning letter from the U.S. government about violations. More than 81% of the respondents contend that lack of knowledge about export controls was a "most important" or "important" cause of violations. Full report is available on-line: http://www.uga.edu/cits/news/news_us_indi_full.htm.

²² While the idea of merging the regimes has been proposed by others, the rationale was based largely on cost concerns of the smaller country members. For instance, see Danish non-paper, "Working Towards a New Export Control System," U.S. Department of Commerce, Bureau of Export Administration, Appendix to Proceedings, International Conference on Export Controls, St. Hugh's College, Oxford, England, September 28-30, 1999, Washington, DC: U.S. Department of Commerce.

Appendix 1

Methodology

This CITS/UGA study on multilateral export control regimes was guided by four objectives.

- To explain and compare how export control arrangements operate;
- To assess the effectiveness of the arrangements;
- To make recommendations on how to strengthen the arrangements to meet nonproliferation objectives; and
- To assess and compare the ability of the arrangements to adapt to a new environment.

Phase I: During the summer of 2001, the authors of this study first established a framework for evaluating multilateral regimes in general. Researchers then identified several elements critical to the effectiveness of international institutions, including the multilateral export control regimes. These elements included information sharing procedures, information-gathering procedures, decision-making practices, authority and autonomy, adaptation to international changes, compliance, legitimacy, and relationship of the regimes to other international nonproliferation efforts.

Phase II: The authors developed a series of questions surrounding each element, broadly categorized under two sub-headings. The first set of questions aimed at systematizing data about the policies, practices, procedures, norms, and rules related to each element of effectiveness. The second set of questions (identified through expert assessments) attempted to tap the perceived utility of these policies, practices, procedures, and rules, in order to generate recommendations for changes, if any.

Phase III: Each of the authors was assigned one of the regimes for analysis. Authors gathered data through "official" documents (press releases, information on regime-websites, information compiled and released by member governments) of each regime, to help answer the first set of questions developed in Phase II. This formed the backbone of the initial exploration by the UGA/CITS team, and was supplemented with the published and unpublished description, analyses, and critiques of the regimes available in the open source literature. This initial data helped the researchers identify some of the constant themes being discussed vis-à-vis a particular regime and to extract issue-areas of common concern.

Phase IV: Project authors developed two primary sources for systematic examination of the second set of questions developed in Phase II. First, they used these to conduct interviews with officials in some large and some small member states of the regimes. Some interviews were conducted in national capitals while others were conducted during regional export control conferences, viz. the Oxford Conference in UK and the Asian Export Control Seminar in Tokyo, Japan. Overall, officials from 24 different countries were interviewed over the course of the year. Officials from the following countries were interviewed: Argentina, Australia, Austria, Belarus, Belgium, Brazil, Canada, Czech Republic, Denmark, the European Union, France, Germany, Iceland, Japan, Kazakhstan, Latvia, Netherlands, Norway, Poland, Russia, Switzerland, South Korea, Ukraine, United Kingdom, and the United States.

Second, in order to augment the qualitative assessments, CITS/UGA researchers designed and conducted a brief written survey of export control officials (current and past) in states that participate in at least one export control regime. All information collected from interviews, surveys, and official meetings, was gathered on a "not-for-attribution" basis, to maintain anonymity for respondents and to promote frank discussion.

The survey was distributed to international officials at several conferences and e-mailed to international experts over the course of seven months. The response was disappointing, despite assurances of anonymity, repeated follow-up, and the fact that questions were not sensitive in nature, but only sought to tap perceived regime effective-

page 30 STRENGTHENING MULTILATERAL EXPORT CONTROLS

ness in several broad areas. Because of the low response rate, the survey findings have been used in this report primarily to augment themes, trends, and views captured during interviews.

Phase V: Finally, a small experts workshop was convened in order to share initial findings and to seek additional input on multilateral export control regime challenges (See Appendix I for list of select participants). Officials from the United States, UK, Australia, the Netherlands, Denmark, and Germany participated in the workshop, and gave detailed (off-the-record) responses to our questions and comments regarding the challenges and the future of the regimes.

The discussion in this report is based on the collation and assessment of the data gathered through all of the above means. Many workshop themes and views are captured in this report. Furthermore, this workshop proved especially useful in identifying obstacles to reform and in understanding the inherent limitations of the existing multilateral regimes. More comprehensive analysis on the individual regimes resulting from this study and workshop will be captured in a forthcoming book, and a series of specialized CITS publications. The study protocol is available at CITS web-site www.uga.edu/cits.

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THE CENTER FOR INTERNATIONAL TRADE AND SECURITY (CITS)

CITS is a non-profit, non-governmental institute within the School of Public and International Affairs at the University of Georgia devoted to research, teaching, and outreach on global technology trade and security issues.

The Center focuses much of its research and international outreach on preventing the spread of weapons of mass destruction. In particular, CITS has emerged as one of the world's leading NGOs promoting and studying international export control developments. CITS has given special attention to the need for international dialogue on pressing nonproliferation and export control issues.

CITS researchers have published widely on weapons proliferation and export control issues. They have been called upon to share the results of their research in Congressional testimony, at international conferences, and with foreign government officials seeking to address proliferation control issues.

CITS RESOURCES

The Monitor

CITS quarterly publication with international perspectives on international security and nonproliferation issues.

Export Control Update

Bi-monthly export control news and developments for the international policy community

Export Control Database

On-line database with news, academic research, and links to export control information

Occasional Papers, Reports, Books

Briefings

Research findings on nonproliferation policies and practices aimed at government officials, industry representatives, and NGO partners.



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