# JAPAN'S EXPORT CONTROL INITIATIVES: MEETING NEW NONPROLIFERATION CHALLENGES

by Bates Gill, Kensuke Ebata, and Matthew Stephenson<sup>1</sup>

Dr. Bates Gill heads the Project on Security and Arms Control in East Asia at the Stockholm International Peace Research Institute. Kensuke Ebata is a member of the Japanese Security Export Control Committee and a defense and military affairs consultant in Tokyo. Matthew Stephenson is a scholar in the East Asian Studies Department at Harvard University and the Managing Editor of the Harvard International Review.

The political, economic, and technological conditions of the post-Cold War period make problems of proliferation more challenging than ever before. Not only are the challenges greater, but these same post-Cold War conditions undermine the effectiveness of traditional approaches to nonproliferation. One of the most common and important techniques used to control the spread of advanced military technology is the use of supply-side export controls. Traditionally, these controls have been adopted unilaterally or multilaterally by advanced industrial nations in an effort to prevent their technology from falling into the hands of actual or potential enemies. However, rapid changes in the nature of both the international system and military technology require a more comprehensive approach.

In response to these international and technological changes, Japan, one of the world's leading industrial powers, has adopted a number of creative approaches to the problem of controlling the export of militarily sensitive technologies. While Japan's policies on export control are tailored to meet Japan's unique needs, and many of these policies are limited in scope, they are indicative of the kinds of initiatives that must be adopted if export control is to continue to be a viable element of broader nonproliferation and security-enhancing strategies. After a brief review of current export control challenges, this article examines the establishment of Japan's export control system during the Cold War, as well as some of the violations that occurred during that period. The article goes on to describe and analyze reforms enacted in Japan since the late 1980s to improve the effectiveness of the export control system both within and beyond Japan's borders. The recent Japanese experience may provide some useful guidelines to other states seeking to devise more efficient systems to deal with the conditions of the post-Cold War high technology export control environment.

## THE POST-COLD WAR SETTING FOR EXPORT CONTROL

During the Cold War, the Western allies established a multilateral export control regime known as the Coordinating Committee for Export Controls (COCOM) in order to maintain their technological advantage over the communist countries. The items controlled by COCOM mainly included high technology industrial machinery, nuclear-related materials and equipment, and weap-

ons. A COCOM list catalogued detailed specifications for each controlled item. Export approvals were made by unanimous agreement, and every member of the regime could veto a proposed export by another member state. Additionally, COCOM employed a "no undercut" rule which prohibited COCOM members from exporting an item or technology that another member had unilaterally decided not to export.

When the Cold War ended, COCOM's relevance diminished. The member states agreed to disband COCOM on November 16, 1993, and the regime officially terminated its 45-year history on March 31, 1994. COCOM members nevertheless recognized that the spread of advanced military technology remained a significant concern in the post-Cold War world and intended to establish a new multinational export control regime immediately following the termination of COCOM. However, disagreements over which nations should be included in the regime and what equipment and materials should be controlled, and the problem of accommodating the Russian Federation in the post-COCOM agreement, meant that a new regime did not materialize immediately. Finally, at a high-level meeting held in September 1995, representatives of 28 advanced industrial nations agreed to a basic framework for the new regime, which came to be known as the "Wassenaar Arrangement."2

Although COCOM served as the initial model for the new agreement, there are significant differences between COCOM and the Wassenaar Arrangement. First, the Wassenaar Arrangement leaves all export decisions up to individual governments.

Unlike COCOM, Wassenaar lacks a "no undercut" rule, and regime members do not have the power to veto the export decisions of other members. Because the agreement has no formal enforcement provisions, compliance is voluntary and based solely on the principle of good faith. In addition, while COCOM regulated exports specifically to communist bloc countries, Wassenaar does not explicitly single out "countries of concern." The United States reportedly wanted a list of specific "rogue nations," including Iran, Iraq, Libya, North Korea, Cuba, Sudan, and Syria, but other member nations were reluctant to list the names of countries subject to the controls; by unwritten agreement, Iran, Iraq, Libya, and North Korea would be barred from buying sensitive equipment from member nations.

The Wassenaar Arrangement is clearly a much weaker, less focused regime than COCOM, and cannot by itself effectively regulate the transfer of sensitive equipment and technology. The problems of the Wassenaar Arrangement reflect general changes in the pattern of military technology transfers. These changes reduce the likelihood for success of any control regime that relies entirely on national-level export control mechanisms in a handful of established suppliers of arms and military technology.

First, as has already been pointed out, the main objective of export controls has changed significantly since the Cold War. COCOM was intended primarily to keep advanced Western technology out of the hands of communist countries. Today, however, the primary purpose of export controls is to prevent the

spread of advanced, potentially destabilizing, military technology to regional trouble spots and countries of concern. While the parties to the Wassenaar Arrangement tacitly agreed that exports to Iran, Iraq, Libya, and North Korea ought to be controlled, determinations as to particular exports often require subjective judgments of whether the transfer could pose a threat to international security. Making these sorts of judgments is much more difficult than operating under a specific decision rule for determining which countries are illegitimate recipients.

A second problem is the increasing military importance of commercial technologies: advanced materials and material processing technology, lasers, sensors, propulsion and navigation systems, computers, and electronics. Because dual-use items cannot be classified as strictly military technologies, they are much more difficult to regulate. The sheer number of such technologies, and the fact that they have legitimate commercial applications, complicates the export decisionmaking process and renders the compilation of a comprehensive list of controlled items and technologies far more difficult.

Third, the governments of supplier nations are under growing economic pressure to loosen export control regulations. The importance of dual use technologies and the intense international competition in high technology products compound this problem. Companies and national governments worry that stringent export control regulations may cause their countries to lose legitimate, lucrative high technology export opportunities to foreign competitors. Therefore, maintaining

strict national export controls is becoming more difficult politically. In addition, recipient states, particularly those in the developing world, often view export controls with skepticism, perceiving them as a means by which industrialized nations can hinder the economic and technological advance of less developed states. Therefore, national governments in advanced countries will be increasingly subjected to international, as well as domestic, political pressure to loosen export restrictions.

Finally, the traditional "supplier cartel" approach to export controls is being undermined by the emergence of new suppliers, many of which lack strong export control systems and are not members of multilateral export control regimes. While nuclear weapons-related material and technology are still generally concentrated in the hands of a small number of suppliers, many newly industrialized countries have the capability to produce and export advanced military and dual use technologies. Therefore, multilateral regimes that do not include these newly industrialized countries are not likely to succeed in the long run. Similarly, the adoption of national export controls in advanced industrialized countries is insufficient unless the newly industrialized countries adopt similar measures.

Under these circumstances, Japan, as the world's second largest economy and a major supplier of high technology goods, has a particular interest in addressing these new uncertainties for export control.

The evolution of Japan's export control policy both reflects emerging dilemmas for traditional methods of export control and suggests some of the ways national governments might cope with these challenges.

## JAPANESE EXPORT CONTROL POLICY

## **The Three Principles**

Japan has a long history of controlling exports of weapons and sensitive military technology. On April 21, 1967, Prime Minister Eisaku Sato introduced a Japanese government policy of "Three Principles" for restricting arms exports, and these principles continue in effect to this day. These guidelines state that Japan shall not export weapons to communist countries, to countries subject to an arms embargo authorized by the U.N. Security Council, or to countries engaged in, or likely to be engaged in, international conflict. The arms subject to these principles are defined as "items employed by military forces and utilized for direct combat purposes" and specified by the Export Control Order Annex List 1, Item 1.4

The government of Prime Minister Takeo Miki reaffirmed and strengthened the Three Principles on February 27, 1976, through a consolidated arms export policy. Prime Minister Miki announced the Government Policy Guideline in the Diet:

The Government, in keeping with Japan's position as a peace-loving nation, has been dealing carefully with arms exports so as to avoid any possible contribution to international conflict. The Government will continue to do so in accordance with the following Policy Guideline and shall not promote

arms exports;

(a) Arms exports to areas specified in the Three Principles shall not be allowed; (b) Arms exports to other areas shall be avoided, in conformity with the spirit of the Japanese Constitution and the Foreign Exchange and Foreign Trade Control Law; and

(c) Exports of arms production-related equipment (e.g., Item 1 of the Annex List 1 of the Export Trade Control Order) shall be dealt with in the same manners as arms.

The strengthened policy not only forbids the export of arms to the countries specified by the Three Principles, but also introduced a new policy of restraint on exports which do not fall within the categories of the Three Principles.

Thus, arms exports have been virtually prohibited in Japan since the mid-1960s. Of course, there have been some exceptions, including modified or dual use civilian aircraft.<sup>5</sup> But, generally speaking, Japan has tried to stop exports of any weapons or weapons-related materials and equipment, such as air defense radars, military communication systems, or military-specification ships.<sup>6</sup>

It is important to note that neither Japanese laws nor the Three Principles prohibit exports of weapons or weapons technology to the United States. Japan produces numerous weapons, some of which are used by U.S. forces. More importantly, the United States and Japan work closely and exchange information and know-how on the development of weapons systems. Examples of this collaboration include work on the F-15J and FSX fighters and the Aegis-class warships. Discussions are currently underway for Japan and the United States to work together

in the development and deployment of next-generation theater missile defense systems.

## Japanese Law and Export Controls<sup>7</sup>

Japanese law contains a number of specific provisions regulating the export of military and dual use technology. According to the "Japanese Foreign Exchange and Foreign Trade Control Law" (Law No. 228; the "Trade Law"), which came into effect on December 1, 1949, it is necessary to get the permission of the Ministry of International Trade and Industry (MITI) for the export of arms or arms production-related equipment. Today, such permission is also required to export the cargoes and technologies specified in nonproliferation regimes to which Japan is a party. Article 48, Paragraph 1 of the Trade Law, stipulates that it is necessary to acquire export licenses from MITI to export commodities of specified categories to specified destinations. In order to prevent circumvention, Article 48, Paragraph 2 of the law requires licenses for exporting specified categories of goods to unspecified areas, and Paragraphs 1 and 2 of Article 25 require an export license from MITI in certain technology service transactions.

Article 69 of the Trade Law specifies penalties for violations of Articles 25 and 48. The maximum term of imprisonment is five years, and the maximum fine is two million Japanese yen (about \$20,000). If five times the value of the illegally exported commodities or technologies exceeds two million Japanese yen, then the maximum fine is five times the value of the export. According to Article 48, Paragraph 12, attempted violations are subject to

punishment as well. Attempted violations are defined as occurring during the period prior to the actual export. The determination of this follows the Customs Law: exports begin when the cargo arrives in the customs bonded area and the customs declaration is presented. MITI can also impose administrative sanctions on Trade Law violators by banning any export activities for up to three years, as stipulated in Article 53 of the Trade Law.

The Trade Law, the Export Control Order, and the Foreign Exchange Order specify those items and technologies subject to control. The controlled items fall into the following categories: arms and arms components; equipment and materials related to weapons of mass destruction (WMD); and items provisionally controlled by the post-COCOM Wassenaar Arrangement (the same items as those controlled by COCOM).8 WMD equipment, arms, and arms components require export licenses wherever they are exported. In the provisional post-COCOM regime, the member nations have unofficially agreed to require licenses for exports to four countries: Iran, Iraq, Libya, and North Korea. In Japan, the export of the items controlled by the provisional post-COCOM regime to other countries also requires an export license in order to prevent circumvention, although exports to member countries do not require licenses. The socalled "sensitive items" of the COCOM list require export licenses for any area of the world except member countries. The delivery of technologies related to the above items is subject to the same requirements.

According to Article 69, Para-

graph 4 of the Trade Law, MITI may ask the Ministry of Foreign Affairs for its opinions on issuance of a certain export license when necessary, and the Foreign Ministry may express its opinions to MITI. When the Foreign Ministry considers it necessary for maintaining international peace and security, it may also express its opinions to MITI in terms of MITI's implementation of export controls. However, no formal interagency consultative mechanism exists.

Exporters must judge for themselves whether their exports are controlled by the Trade Law before completing customs declarations. The Export Inspection Officers of MITI accept consultation requests from the exporters regarding the technical specifications of the controlled cargoes. The exporters are requested to present the technical data of the cargo to the Inspection Officers. All exports pass the customs inspections with Export Declaration documents (E/D). Customs checks all cargoes to assure they are handled by the appropriate procedures before being exported. Thus, Customs confirms that the items subject to security export controls have been granted approvals by MITI before the cargoes leave Japan.9 If commodities or technologies are subject to controls under the Trade Law, the exporter should, following customs procedure, prove that the export has already been licensed by MITI, according to Article 70 of the Customs Law. If the exporter fails to prove this, then the commodities or technologies cannot be cleared through customs.

If it is proved at customs that controlled commodities or technologies were to be exported without export licenses or with false export licenses, Customs officials can detain them according to Articles 119, 121, and 123 of the Customs Law, but these officials cannot confiscate them. A Chief Customs Inspector has the authority to order ships or aircraft to load or unload foreign cargoes and to suspend the customs procedure at a bonded area, if necessary. The inspector can also order ships or aircraft to postpone their departure or to stop their further navigation. The criminal penalty for the violation of these restrictions is imprisonment for up to three years and/or a fine up to 300,000 Japanese yen, as stipulated in Article 111 of the Customs Law.10

# EXPORT CONTROL VIOLATIONS IN JAPAN

Many commercial products can be used for military purposes. Japan is one of the most industrialized countries in the world and exports a significant number of dual use technologies. A wide range of Japanese commercial products have been used by military forces all over the world. Civilian trucks exported to North Korea were reportedly modified into self-propelled rocket launchers, and large numbers of Japanese commercial four-wheel drive automobiles (4WDs) have also been used for military patrol by many countries, as well as by the United Nations. Some of the 4WDs have been equipped with machine guns or recoilless rifles. Off-road motor bicycles exported from Japan are also used by the South African Army for reconnaissance and patrol.

In addition to these cases, there have been several more serious incidents regarding the illegal export of advanced technology or equipment with military applications. Most of these incidents violated COCOM regulations, although actual export control under COCOM was conducted by each member country's internal laws. Japan has been a member of several multilateral export control regimes, as well as a member of COCOM and its follow-up regime, but Japanese companies have violated the letter or spirit of those regimes a number of times in the past.

## **Floating Dock Export**

In the early 1970s, for instance, one of Japan's major companies, Ishikawajima-Harima Heavy Industries (IHI), exported a giant floating dock to the Soviet Union. The dock could accommodate merchant ships of up to 80,000 dead-weight tons or warships larger than 40,000 displacement tons. At that time, floating docks were not banned by the COCOM list, but the U.S. Department of Defense criticized the transaction in the early 1980s, saying that the dock was used for repairing Kiev-class aircraft carriers in East Asia and was of considerable importance to the operation of the Soviet Pacific Fleet.<sup>11</sup>

A floating dock can be used for repairing any type of ship, civilian or military, but in this case the dock had clear military significance. Building dry docks capable of accommodating Kiev-class carriers on the Soviet Union's east coast is difficult due to geological and topographical conditions, and the construction cost of such dry docks is enormous. Japan is one of a limited number of countries capable of building floating docks large enough

to accommodate Kiev-class carriers, and towing large floating docks from Europe to East Asia is a very difficult operation, so it made sense for the Soviet Union to buy from Japan.

## **Toshiba Machinery Case**

An even more serious technology transfer incident was the so-called "Toshiba Machinery Incident," disclosed in 1987. In 1982, the Toshiba Machinery Corporation, a subsidiary of the Japanese electronics giant Toshiba, sold the Soviet Union nineaxis and five-axis computer-controlled milling machines. The transaction was illegal; according to Japan's Trade Law, exports of such high-performance milling machines required an export license from MITI (and the export of such machines to communist countries was prohibited). These high-performance machines were delivered and installed at the Soviet Union's Baltic Naval Shipyard with the computer-control software developed and supplied by the Norwegian government-owned company Kongsberg Vaapenfabrikk. The contract, which violated the COCOM regime, reportedly enabled the Soviets to more quickly develop quieter submarine propellers. These advanced propellers have a more complex shape than ordinary ones, and they require lengthier manufacturing processes with more sophisticated milling equipment. The new technology allowed the Soviet submarine fleet to considerably lower noise levels by introducing the advanced propellers not only for newly built submarines, but for older submarines as well. Since the primary means of detecting submarines underwater is acoustic, the quieter propeller systems made Western

anti-submarine warfare (ASW) operations more difficult.

The U.S. Department of Defense's annual publication *Soviet Military Power 1988* told the story:

Continued erosion of the West's lead in technology underscores the importance of preventing additional illegal Soviet technology acquisitions. By illegally acquiring technology, the Soviets are able to forgo the substantial investment costs in the basic and applied research and development. They are also able to keep up with those technologies that might alter the character of conflict and thereby represent a greater threat to them. For example, the illegal Soviet acquisition of sophisticated machinery for producing quiet-running propellers illustrates the impact that technology acquisition and espionage can have on the West's collective security. The Soviets spent less than \$25 million to acquire this technology, a small price to pay for a capability to make their submarines much harder to detect.12

It is impossible to determine the damage to Western interests caused by this illegal transaction. Some estimated at the time that \$30 billion of research and development funding would be required to recapture the West's technological advantage over the Soviets in ASW and submarine silencing.<sup>13</sup> If one considers the cost of re-surveying the noise signature of every Soviet submarine, the figure would have been even larger.

## JAE-Iran Case

Beginning in the late 1980s, the Japan Aviation Electronics Industry Corporation (JAE) transferred components produced under license for U.S.-developed AIM-9 Sidewinder (air-to-air missile) and the F-4 Phantom fighter to Iran. The Iranian Armed Forces were mainly equipped with U.S. weapon systems purchased before the Iranian Revolution in 1979-80, and spare parts and repair technology to support the U.S. equipment were desperately needed. Although the United States did provide some spare aircraft parts and even some weapons to Iran during the Iran-Iraq War (that later became part of the Iran-Contra Affair), trade relations between the United States and Iran under the Khomeini regime were frozen. As a result of investigations and court proceedings in the United States and Japan in 1991 and 1992, it was revealed that during the Iran-Iraq War, JAE transferred U.S.-licensed military equipment and technology to Iran through trading companies based in Florida, Singapore, and Hong Kong. Specifically, JAE illegally exported 12 gyroscopes and one accelerometer to Iran for use in F-4 navigation systems between 1982 and 1984, and 1,300 stabilizing flywheels for Sidewinder missiles between 1988 and 1989. JAE pleaded guilty to violating both Japanese and U.S. export control laws, as well as the terms of the U.S.-Japan licensing agreement. JAE was fined a total of \$15 million in the United States—a record for a violation of federal export control laws—and was barred by the State Department from receiving any U.S. export control licenses for one year. In comparison, Japanese courts imposed a fine of \$37,000 and gave four JAE employees two-year suspended sentences for their role in the deals, while MITI imposed an 18month export ban on JAE. In addition, JAE participation in the ongoing co-development program for the U.S.-Japan FSX fighter was discontinued.<sup>14</sup>

## Lack of security awareness

These violations can be traced in part to a general lack of awareness in Japan about military affairs and international security concerns. For example, JAE undoubtedly knew Iran was behind the contract when they were contacted by the Singapore agent, since the countries operating Sidewinders and Phantom fighters were known and limited. JAE would have also realized that repairing a third country's U.S.made weapons and components violated agreements between Japan and United States. decisionmakers at JAE knew that this contract violated these rules and agreements, but they were probably not aware of the magnitude of the transaction's impact on international security.

Similarly, the people who engaged in the Toshiba Machinery transaction certainly realized the contract was against the law. But if they had known about the military implications of the transaction or had been more concerned with global security issues, they might not have fulfilled the Soviets' request. In the case of the floating dock sale, if IHI had realized the strategic significance and security implications of selling the floating dock to the Soviet Union, it might have consulted with the Japanese government before concluding the contract. The government would then have consulted with other COCOM member countries, and they probably would have advised Japan and IHI not to export such a strategically important item to the Soviet Union. Similar, though less sensitive, examples can be found throughout Japanese trade history. In most cases, the people involved in an illegal transaction realized they were violating the law, but they were not aware of or did not concern themselves with the consequences for international security.<sup>15</sup>

## RECENT JAPANESE EXPORT CONTROL INITIATIVES

Since 1987, when the Toshiba Machinery incident was disclosed, the Japanese government has implemented several measures to improve the country's security export control systems. Japan has started to take a more active role in export control efforts, and MITI has launched a large-scale program for improving security export control at national and multilateral levels. This program covers not only the government export control system but also civilian companies, and encompasses several major initiatives.

#### **New Institutions**

#### **CISTEC**

In 1989, shortly after the disclosure of the Toshiba Machinery Incident, MITI created an affiliated research organization for security export controls. This new agency was called the Center for Information on Security (later Strategic) Trade Control (CISTEC). The purpose of CISTEC is to:

establish an effective and efficient export control system in Japan and promote voluntary export control by industry through the gathering and analysis of relevant information on security export control issues such as strategically important technologies, and providing that information on a broad scale to governmental and industrial communities, in cooperating with the government and industrial circles.<sup>16</sup>

One of the principal organizational units of CISTEC is the Executive Research Committee, which houses specialized research advice and technical expertise in six major committees and 18 subcommittees. The committee is responsible for the evaluation of the strategic implications and foreign availability of different technologies, as well as trends and developments in technology related to nonproliferation regimes. Based on its evaluation, the committee attempts to determine appropriate guidelines for export controls and to craft rational, efficient procedures for export licensing and security export control. The committee presents suggestions and requests to the Japanese government.

One of CISTEC's most important functions is to help civilian companies develop their own export control arrangements. CISTEC gives advice to assist civilian companies in establishing their own compliance programs (see below) and accepts consultations for civilian companies on their trade projects, contracts, and operations. To make the export control system more rational and efficient, CISTEC is developing an on-line computer system for export license applications in cooperation with the Japan Machinery Export Association. Computer search and evaluation systems for controlled cargoes are also being developed. CISTEC also publishes the bimonthly CISTEC Journal and the periodical CISTEC Express News, as well as various books, guidance manuals, and reference materials on security export control to provide

information on laws related to security export control and offer useful information for civilian companies' operations. CISTEC also consults on specific export contracts as well as on more general technical inquiries.

In addition, CISTEC collects a wide range of information on security export control, including the technological level, general development level, and production capabilities of countries in the developing world, as well as the foreign availability of different technologies. CISTEC publishes the Security Trade Review every month, which contains information provided from foreign surveys and research organizations. CISTEC also studies multinational export control systems and regulations to improve the harmonization of its export controls.

Another important function of CISTEC is to hold various educational seminars and courses for export control staff, not only from Japanese civilian companies but from foreign governments as well. The programs include instruction on changing laws, educational meetings concerned with nonproliferation export control, and seminars for export control experts. CISTEC also dispatches lecturers to export control schools held by civilian companies and organizations and holds information and opinion exchanges with foreign research institutes.

In 1992, an Export Control Policy Committee was formed under the Executive Research Committee of CISTEC. The committee has two major subcommittees. The first subcommittee—known as the Nonproliferation Export Control Committee—deals with nationallevel nonproliferation export control systems. It examines the export control systems of other advanced industrial states (including the "List-Control," "Catch-all Control," and U.S. export control systems), analyzes current problems within the Japanese export control system, and proposes reforms. The second subcommittee—the Technology and Strategic Trade Information Subcommittee—focuses on internal controls in private firms, systematically surveying methods for customer controls and certification of end-use to establish self-control guidelines for companies exporting sensitive technologies.

# The Security Export Control Committee

In September 1992, MITI established a Security Export Control Committee under the Industrial Structure Council to offer basic policy advice and guidelines for future export control in Japan. The committee, which consists of 19 members from various fields such as industry, law, academia, and journalism, presented its first report to the minister of international trade and industry in March 1993 after intensive debate on the future of security export policy. This was the first time an activity of this kind took place in Japan concerning security export control.

The first meeting of the committee in September 1992 was organized mainly to discuss general issues relating to security export control after the Cold War. The second meeting of the committee, held in March 1995, addressed issues involving export controls of conventional weapons and dual use technology. Another round of meetings was held in October 1995, and more meetings are planned. This initiative represents a much needed

effort to create closer links among government, industry, and analysts and to broaden public awareness of export control issues.

## **Internal Company Controls**

The Domestic Compliance Program

MITI has requested that Japanese civilian companies which produce and/or export high technology products establish a self-regulating system known as a compliance program (CP).17 A CP established by a company is presented to MITI for inspection, and, if it adheres to the guidelines of the ministry, MITI will certify that the CP satisfies MITI's request. A company that does not operate with a CP will more than likely have shipments delayed, although no regulations state this explicitly. The CP system was introduced in January 1988 as one of the measures to improve Japanese export control in the wake of the Toshiba Machinery incident. The system of certification and consultation was launched in February 1988. In April 1988, Japan established the Office of the Strategic Material Export Inspector (the name was changed to the Office of Security Trade Inspector in April 1995), and inspectors began visiting civilian companies in October 1988.

The CP varies depending upon a company's size, its field of business, and products, <sup>18</sup> but MITI requests that companies provide the following information in their CPs:

- 1. standard company principles for export control; 2. control and responsibility systems in the company or-
- ganization;
  3. company procedures for determining export propriety;
- 4. shipping control system;

- 5. internal inspection system:
- 6. education and training system for employees;
- 7. document control system; 8. guiding system for subsidiary companies and associated companies; and 9. penalties for breaches of company regulations.<sup>19</sup>

On June 24, 1994, MITI notified about 150 companies, groups, and organizations engaged in export activities that it would review their regulations relating to compliance with export control laws in light of the rapidly changing post-Cold War world situation. MITI announced its ongoing effort to establish a new export control regime to deal with conventional weapons and related equipment and materials. It also emphasized the importance of existing multinational export control regimes for WMD and missile technologies. The notification requested that each company review its CP to account for the changing international situation and to establish a CP if it did not have one. MITI also emphasized the importance of defining the endusers of cargoes, rather than just the technical specifications of cargoes. The notification suggested that the president of the company, rather than his subordinates, should be the person chiefly responsible for export control. By June 1996, a total of about 950 Japanese companies had established CPs.20

#### **Problems and Concerns**

Civilian companies internationally have expressed concern about national export control systems and the emerging Wassenaar Arrangement, particularly with regard to the need to know the end-users and final purpose of their exports. The European Union uniformly introduced domestic export control leg-

islation called a "catch-all" system. It operates by asking companies to seek an export license if they believe their exports are destined for military use, even though the exported good may not appear on any list of controlled items. Japan and the United States consider the catch-all system too stringent and complex, and both nations use a different system often called a "know" system.<sup>21</sup>

The know system defines the goods subject to control. Companies that know their exports might be used for military purposes must consult with the government and apply for an export license. Most goods without a specific military use are specified as uncontrolled goods. In Japan, another category of goods is subject to control, under requirements that bind the exporter to seek an export license or report to MITI promptly if "the exporter knows the cargoes which are to be exported to the countries or areas subject to control might be used for the development of nuclear and other weapons."22 As of the spring of 1996, MITI did not plan to implement the know system through formal regulations, but rather as "government (enforced) directions."

The know system lacks specificity, which leads to uneasiness among Japanese companies as to how much they are expected to know. Japanese industries are concerned that if a company does not know which exports will be used for weapons and unintentionally fails to control its exports strictly enough, the company will be punished. Companies want the government to tell them how much they should know and how much caution they should exercise, and they also want to know how the government will determine whether

they have taken all practical precautions for export transactions.

Civilian companies would ideally like the government to establish clear standards for export control that can be universally applied to all transactions. Companies would prefer the government to clarify or openly announce countries of concern, the criteria for defining countries of concern, a firm list of goods not subject to control, standards of end-users and end-use, the responsibilities of civilian companies, and (in the case of Japan) the names of companies given CP certification. However, it is difficult, if not impossible, for governments to make all of these clarifications. Extensive, detailed guidelines and information from the government would ease the burden on civilian companies. But drawing up, monitoring, and updating such information is extremely difficult given current conditions in Japan and in export markets in the world today.

Companies are also concerned with the cost of implementing a comprehensive internal control system. Most Japanese civilian companies will cooperate with a nonproliferation security export control system that demands certain responsibilities from the companies, including internal checking of customers. But the competitive demands of the market often limit the capabilities of civilian companies to meet these obligations. Companies pressure the government to lighten the burden of security export control as much as possible. In Japan, MITI told the Security Export Control Committee that the government would try to minimize the cost of company-level security export controls. MITI also explained that the cost of export control for civilian companies would not be very high, even though at the time MITI had not conducted any research on the cost of implementing such systems.

To monitor their own exports, companies must conduct extensive surveys and establish their own security databases on customers and countries, which is often very difficult for small- or medium-sized companies to accomplish. Even large companies find it difficult to research and investigate all transactions. For example, Sumitomo Trading Corporation, one of the largest trading companies in Japan, deals in over 50,000 different items with 70,000 companies overseas. The company specifies 30 "countries of concern," and about 6,000 items require further inquiries before transaction contracts can be concluded. In one three-year period, more than 10,000 transactions were checked internally.23 Although smaller companies tend to deal with fewer goods, they also have fewer employees assigned to work on export control.

Furthermore, determining the end-users and end-use of certain products presents difficulties and is sometimes impossible. For instance, carbon fibers were originally used strictly in aircraft and missiles but are now widely used in civilian goods such as tennis racquets and fishing rods. Carbon fibers are usually not sold directly to the end-users but to domestic and foreign wholesale firms that sell to smaller wholesale stores or to the end-users. It is therefore often very difficult to identify the end-use of the fibers. Similarly, it is difficult to determine the end-users of raw materials with a wide variety of applications because such materials are processed by a number of intermediate manufacturing companies that use the materials. Many such small- to medium-sized firms and wholesale stores in the developing world do not prepare brochures or catalogues of the company and its products, making it difficult for exporters to judge the nature of certain transactions and businesses. Making those judgments will often require an extensive security and export control database. Preparation of such a database, to the extent it is feasible at all, would demand close cooperation between government and industry.

MITI hopes to make the know system as simple as possible for companies. Exporters are supposed to report to or consult with MITI if they feel something unusual has occurred or if they learn of unusual circumstances during the course of negotiations. But, exporters do not have to investigate or survey the behavior of customers actively. However, the vague requirement of "knowing" about unusual circumstances still presents problems. Both government and industry in Japan are concerned that the lack of specificity of the know system might lead to an overwhelming number of inquiries and requests for clarification to MITI, unduly lengthening the export control licensing process.

Finally, internal company export control systems raise concerns over education and training. In order for such a system to work, practically every company employee, from top to bottom, must understand the importance of the security export control system. Without such understanding, even the most extensive, self-imposed export screening system could be breached, intentionally or otherwise. It is also neces-

sary to train specialists in security export control. But, as discussed earlier, the lack of general knowledge on the military and on weapons in Japan makes this such a task difficult.

# **Improving Efficiency in Problem Areas**

One persistent concern in both the public and private sector is the impact on export competitiveness and trade for a country that introduces an effective but stringent security export control system, especially if other countries do not exercise similarly stringent controls. Strict export control laws may hinder legitimate commercial exports. For example, in many newly industrializing countries, such as Thailand, Indonesia, and China, major industries are established and operated by joint civilian-military enterprises. Some industries are operated solely by the military but primarily produce civilian or consumer goods. If an export license were required just because the end-user is in the "military-industrial complex," many legitimate export transactions would be hampered.

One way to cope with the problem of reduced competitiveness against nations with less stringent export controls is to streamline and accelerate the process of export licensing. To this end, MITI introduced the Specific Comprehensive Export Licensing System in April 1994 to simplify the process of export licensing for companies that have effective export control systems. The new system grants a comprehensive export license to a company if two conditions are satisfied: first, the company must have a stringent export control system of its own, that is, a certified CP; and second, there must be no financial relationship between the exporter and the end-user. The comprehensive export license allows the company to export even to non-member nations of international export control regimes without consulting MITI.

Another proposal for making the process of acquiring an export license more efficient is the use of computer-aided examination or judgment systems. Computerized decisionmaking can ease the complicated and exhaustive work of export licensing, shortening the time needed to grant export licenses. MITI is now seeking to introduce such a computerized export control system, and CISTEC is currently building an extensive database on the security credibility of customers worldwide. Information on suspicious transactions and worrisome projects in other nations is systematically collected from open sources and used to provide information with which to assess foreign companies.

However, this kind of computer decisionmaking system demands an extensive, updated database of information and analysis related to export controls. It will not be possible for any single country to construct an effective database without cooperation and information exchange with other countries. Japan's position is exceptionally difficult because there is no law to protect national secrets and no efficient Japanese intelligence system, especially in the field of defense-related export controls. Japan, therefore, has to rely largely on information provided by the United States, such as: High-Risk Profiles, Red-Flag Lists, Table of Denial Orders, and Lists of Specially Designated Nationals.<sup>24</sup> However, because the particular situation of each country is different, U.S. information cannot always be usefully applied to the Japanese export control system.

## **International Initiatives**

Japan also recognizes that addressing export control problems on its own or solely in conjunction with other advanced industrial states is insufficient. Many developing countries have successfully created a high technology base in electronics, advanced materials, and aviation industries, and today many newly industrialized nations produce and export a wide range of high technology goods. Asian nations in particular have been rapidly developing their own high technology industries. Because similar types of advanced dual use technologies are now available from a number of different suppliers, an export control regime can only be effective if all industrialized countries, both highly and newly industrialized countries, introduce the same or similar security export control systems.

Additionally, strict export controls can be circumvented if high technology products are first exported to a country with a less stringent export control system, and then re-exported to the final destination. Under the COCOM system, there were cases where high technology products were exported first to a non-communist country and then re-exported to a communist country. For instance, high-performance computer systems exported to Singapore were actually destined for mainland China. Similar problems have been pointed out with regard to export controls in the European Union.<sup>25</sup> This problem again underscores the need for all industrialized countries to have similar and integrated export control systems.

For these reasons, Japan actively encourages its neighbors in Asia to join multinational export control regimes and to establish effective security export control systems of their own. Unfortunately, many newly industrialized countries do not understand the importance of security export controls, and skeptical nations may believe that advanced countries only wish to undermine their international competitiveness or delay their high technology industrialization. To avoid these perceptions. educational efforts. discussions, and active promotion of export control norms are therefore indispensable if an effective international export control system is to be established. In this regard, MITI and CISTEC have been holding bilateral discussions on these issues with their counterparts in Asia, including those in South Korea, Taiwan, China, Singapore, Malaysia, and Indonesia.

In addition to bilateral talks, Japan is engaged in a number of educational programs to promote international export controls throughout Asia. CISTEC has taken an increasingly active role in implementing training courses for export control staffs of other Asian nations as a part of MITI's Asian Export Control Initiative, established in 1991. CISTEC has also been conducting two seminar series, the "Asian International Export Control" seminars and the "Russian Regional Policy Reform" seminars, under the auspices of MITI since fiscal year 1993. The "Asian International Export Control" seminars,

which have attracted participants from governments throughout Asia, are designed to inform nations in Asia of the importance of export control in the post-Cold War era, to provide education for export control officers of Asian countries, and to help those nations establish effective export control systems. The United States and Australia have cooperated with these seminars, mainly providing teachers and lecturers on export control.

Responsibility for the Russian regional seminar was at first divided between the United States, which was responsible for Russia and Eastern Europe, and Japan, which was responsible for Commonwealth of Independent States (CIS) countries other than Russia. Japan now takes responsibility for all CIS nations, including Russia, as well as Eastern Europe. MITI and the Japanese Foreign Ministry jointly held three Russian seminars between fiscal year 1993 and September 1995. MITI hopes to increase the number of Asian, CIS, and Eastern European nations participating in export control seminars, not only in Japan but also in their own countries. The budget for the programs will likely increase in coming fiscal years.<sup>26</sup>

## **CONCLUSION**

While the Japanese export control system employs traditional legal provisions to restrict sensitive exports, Japan's more recent initiatives reflect the reality that the power of national governments to restrict exports is limited. In addition to establishing legal restrictions and appropriate enforcement mechanisms, national governments must promote programs that encourage

broader participation in developing an appropriate "culture of control" among other actors, both domestically and internationally.

Domestically, the government must implement programs for civilian companies to police themselves. Government incentives and mandates to this end are important, but the Japanese experience also suggests that, for such internal control systems to be successful, government support is essential. Not only must the government provide consultation and information to companies, but the government must also find ways to streamline the export process and thus reduce possible competitive disadvantages faced by companies that implement stringent export controls. In addition, the government should assist in strengthening the culture of control within the company through education and training. This is particularly true in countries like Japan, where, owing to long-held taboos and avoidance of sensitive military-related issues, average citizens may be less aware of international military and security concerns.

Internationally, the emergence of new potential suppliers means that traditional and newly emerging suppliers of high technology should take steps to expand and discuss norms of export control and seek common ground on ways to monitor and regulate the diffusion of militarily relevant technologies and weapon systems. Newly industrializing countries should be encouraged to take part in multilateral export control regimes and in programs designed to assist in the development of national export control systems. In addition to these formal government-to-government efforts, education and training programs, such as those conducted by Japan in Asia, may help build and diffuse more widely accepted norms and approaches to addressing challenges presented by arms and technology proliferation. Nongovernmental institutions, research centers, and think tanks in Japan and elsewhere also have an important contribution to make in promoting and refining these concepts.

Export controls are no panacea to the international arms trade and the spread of militarily relevant technology. Nevertheless, export controls are an important part of a broader nonproliferation strategy. However, rapid changes in the character of the international arms trade and the nature of military technology are undermining traditional approaches to export control. If export control systems are to remain a viable element of international nonproliferation efforts, they must adapt to new challenges. Japan's recent export control initiatives suggest some of the ways governments might respond to these changes and complement nationallevel export control regimes and multilateral supplier cartels with a broad-based strategy of encouraging a domestic and international culture of export control.

Turkey, the United Kingdom, and the United States. For more details on the Wassenaar Arrangement, see Ian Anthony *et al.*, "Multilateral Arms Export Control," *SIPRI Yearbook 1996* (Oxford: Oxford University Press, 1996), pp. 537-545.

<sup>3</sup> "Military Export Controls Will Be Loosened," *International Herald Tribune*, September 21, 1995, p. 5.

<sup>4</sup> The term "arms" is defined by Japan's Self-Defense Forces Law as "machines, apparatuses and equipment with purposes of directly killing or harming persons, or destroying materials as a means of armed conflict, such as firearms, explosives, and swords." It is a reflection of Japanese aversion to military matters that bureaucrats and politicians tend to favor the somewhat softer term *buki* when referring to arms rather than the term *heiki*, which incorporates the World War II term for "soldier."

<sup>5</sup> For example, eight Kawasaki KV-107 helicopters manufactured under license from Boeing Vertol Corporation of the United States were exported to Sweden between 1972 and 1973. The helicopters were delivered without engines or antisubmarine warfare (ASW) equipment and therefore could not be classified as weapons, but, after delivery, the Swedish Navy modified the helicopter with British engines and ASW equipment. The delivery contract was concluded with the permission of Boeing Vertol and the U.S. government. Sixteen more KV-107s were delivered to the Royal Saudi Arabia Air Force in 1978-79 for "transportation," mainly for VIPs. (On the export of KV-107s to Sweden and Saudi Arabia, see John W. R. Taylor, ed., Jane's All the World's Aircraft, 1984-85 (London: Jane's Publishing Co., Ltd., 1984), pp. 159-160.) In addition, in December 1985 the Mitsubishi Heavy Industries "Diamond II" business jet program was sold to Beech Aircraft Corporation of the United States. Beech Aircraft sold a few dozen of the aircraft as the Beechjet, but then the U.S. Air Force selected the plane as an advanced trainer, and a total of 211 Beechjets were delivered as the T-1A Jayhawk. (See Paul Jackson, ed., Jane's All the World's Aircraft, 1995-96 (Coulsdon, Surrey: Jane's Information Group, 1995), p. 637.)

<sup>6</sup> A few exceptions include the 2,378-ton (standard displacement) LST (Landing Ship-Tank) which was built by Sasebo Heavy Industries and delivered to the Indonesian Navy in June 1961 as a part of Japanese World War II compensation. Japan has delivered some World War II compensation ships to other Asian countries as well as several small vessels for foreign coast guards.

<sup>7</sup> Information for this section is drawn from the CISTEC export control seminar guidebook, *Wagakunino Annzenhoshou Yusyutsukanriseido* (*Japanese Security Export Control System*), December 1994 edition (written in Japanese, author's translation).

<sup>8</sup> Controlled technologies are those related to the design, manufacture, and use of the items controlled. Technology controls also cover the delivery of data, software, and technical support.

<sup>&</sup>lt;sup>1</sup> The authors wish to thank the Nissho Iwai Foundation for supporting this research. Much of the information in the article draws on authors' conversations between September 1995 and June 1996 with Ministry of International Trade and Industry (MITI) and Center for Information on Strategic Trade Control (CISTEC) officials responsible for export control programs.

<sup>&</sup>lt;sup>2</sup> The states at the September 1995 meeting included Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland, the Russian Federation, the Slovak Republic, Portugal, Spain, Sweden, Switzerland,

<sup>&</sup>lt;sup>9</sup> Japan is divided into nine customs areas, each

- headed by a bureau-level office. In addition, the Customs service has a total of 69 branch offices, 139 sub-branch offices, and six surveillance posts. There are 88 seaports and 19 airports designated as the ports for foreign trading ships and aircraft, and each port has a bureau office, branch office, or sub-branch office.
- <sup>10</sup> Foreign Ministry of Japan, document FGM15687-06 ("Concerning Export Controls on Chemical and Biological Weapons"), provided to Stockholm International Peace Research Institute, October 21, 1992.
- <sup>11</sup> The Kiev-class ships carried a complement of vertical/short takeoff and landing aircraft (V/STOL), as well as helicopters, and were heavily armed with guns and missiles unlike the U.S. aircraft carriers. A total of four Kiev-class ships were built in the 1970s and 1980s. Two of them, the *Minsk* and the *Novorossiisk*, were assigned to the Soviet Pacific Fleet.
- <sup>12</sup> U.S. Department of Defense, *Soviet Military Power 1988* (Washington, D.C.: U.S. Government Printing Office, 1988), pp. 142-143.
- <sup>13</sup> "U.S. May Demand Compensation," *Japan Times*, July 16, 1987, p. 1.
- <sup>14</sup> "Japan," in *Defence Industry Digest* (December 1991), p. 12; "Japanese Defense Company Pays Record Fine in Export Case," *Aviation Week & Space Technology*, March 16, 1992, p. 11; and "Japan Defense Firm Found Guilty on Iran Exports," *The Wall Street Journal*, April 24, 1992, p. A12.
- <sup>15</sup> Authors' discussions with MITI and CISTEC officials familiar with these cases. Also, see Susumu Awanohara, "Son of Toshiba," *Far Eastern Economic Review*, September 19, 1991, pp. 10-11; "New Breaks," *Aviation Week & Space Technology*, September 9, 1991, p. 19.
- <sup>16</sup> CISTEC, Activities of the Center for Information Strategic Trade Control (Tokyo: CISTEC, November 24, 1992) (in Japanese, authors' translation).
- <sup>17</sup> A compliance program is not an obligation specified by law. But in Japan it is generally understood and accepted by most companies that a "request" by the government is almost equal to an "order." Not all, but many companies who produce and export high technology products have a CP today. CISTEC consults free of charge with companies on the establishment of a CP. A CP is officially called "Internal Regulations Concerning Compliance with the Laws Related to Export," but is normally known in Japanese by a term similar in pronunciation to the English: "Konpuraiansu Puroguramu."
- <sup>18</sup> Some companies' CPs are very extensive. For example, the *Strategic Materials Control Manual* of Tohre Corporation, which produces a large share of Japan's, and thus the world's, carbon-filament, is 70 pages. It contains general explanations of the control system of the company, procedures for inspections, judgments, procedures for drafting contract documents, processing information, modifications (according to customer requests), punishments, training and education courses, reporting and recording procedures, inspection procedures, and many additional rules,

- data, and materials. Other companies' CPs are less detailed.
- <sup>19</sup> Information on the scope and suggested contents of CPs is drawn from materials provided by MITI to the Japanese Export Control Committee, fall 1992.
- $^{20}$  Authors' discussions with CISTEC officials, June 1996.
- <sup>21</sup> Information on the "know" system provided in this article is drawn from debates and presentations made in meetings of the Japanese Security Export Committee in March and October 1995. See also, "MITI to Regulate Military Convertible Exports," Kyodo News Service, December 5, 1995; in FBIS-TAC-95-007 (December 27, 1995), pp. 17-18.
- <sup>22</sup> Ministry of International Trade and Industry, Supplement to Export Control Regulations for the Non-Proliferation of Mass-Destruction Weapons and Other Weapons [draft] (Tokyo: MITI, August 1995).
- <sup>23</sup> Materials presented by Sumitomo Trading Corporation to the Security Export Control Committee, November 24, 1992.
- <sup>24</sup> High-Risk Profile, Red-Flag Lists, and Table of Denial Orders are published by the U.S. Commerce Department. High-Risk Profile is a checklist for surveying indications of illegal resale of exported products and technologies; Red-Flag Lists provides guidelines for U.S. companies to assess potential customers; the Table of Denial Orders lists the persons and companies subject to administrative measures for violations of the U.S. export control laws. The List of Specially Designated Nationals, released by the U.S. Office of Foreign Asset Control, is a list of companies acting as the government agencies and proxies of the countries under embargo by the U.S. government.
- <sup>25</sup> Trevor Taylor and Paul Cornish, "The Single European Market and Strategic Export Controls," paper presented at the Conference on the Single European Market, Exeter University, September 8-11, 1994. The paper states, "Licence-free trade in dual-use technology within the EC, without all the countries of the Union having comparable export policies and standards of implementation, could enable unscrupulous exporters to evade controls in their home state by exporting first to a customer in an EU state with lax controls before re-exporting to the final, perhaps otherwise proscribed, destination."
- <sup>26</sup> Authors' interviews with CISTEC officials, September 1995.