

# Nonproliferation Export Controls<sup>1</sup>

*Comparing the Systems of the People's Republic of China and the United States*

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## Introduction

One of the few bright spots in an otherwise terrible year for advocates of nonproliferation, 1998 saw the People's Republic of China (PRC) continue to adopt new policies, regulations, and practices regarding controls on the export of military and dual-use items (i.e., goods, technologies, and services that have primarily commercial but also military applications) related to nuclear, chemical, biological weapons as well as missiles that can deliver such armaments.<sup>2</sup>

Although they do not manufacture as many proliferation-sensitive items as firms in the United States or the Russian Federation, Chinese enterprises can produce a wide range of goods and technologies of proliferation concern. Until recently, China had few export controls comparable to those adopted by Australia, Japan, the United States, all the major states of Western and Central Europe, and that many other countries had begun to incorporate, including Argentina, the states of the former Soviet Union, South Korea, and South Africa. By remaining outside of the mainstream on export controls, many governments viewed China as a potential or real source of proliferation-sensitive items, or a transit point for those items.<sup>3</sup> In contrast, as China implements its new export control policies and programs, it now contributes to a stronger multilateral effort to prevent or delay the proliferation of weapons of mass destruction (WMD) and their most menacing means of delivery.

Although narrowing almost daily, a considerable gap nonetheless remains between Chinese nonproliferation export control practices and multilateral standards. This gap often serves as a source of friction between China and a leading advocate of such policies, the United States. Representing the only truly

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<sup>2</sup> See Richard T. Cupitt and Yuzo Murayama, *Export Controls in the People's Republic of China 1998*, CITS/UGA Occasional Paper (forthcoming).

<sup>3</sup> According to a recent report, at least until the early 1990s, North Korea used PRC-Japanese joint ventures in China as a means of obtaining Japanese electronic systems, fuel fabrication technology and other items critical to its ballistic missile program, including the Taepo Dong I (a multistage version of the Taepo Dong I flew unannounced over Japan in September). See Hiroshi Hasegawa, "Testimony by a Former Secret Agent of North Korea: the North's Missile Is 'Made in Japan.'" AERA, October 5, 1998, pp. 28-32, in Japanese, FBIS-EAS-98-283, October 10, 1998.

global military and economic power, the United States government has an unmatched capacity to promote or enforce existing export control norms and rules, as well as develops new export control concepts. Comparing the two systems, therefore, may reveal more about the nature of current and emerging export control conflicts between the two countries, as well as point out opportunities for improving cooperation on export controls. While this comparison will not address all the major export control issues between China and the United States, such as the concerns over the use of US satellite technology to modernize Chinese ballistic missiles, it does respond to issues that have in the past escalated to injure overall efforts to improve the relationship between the two countries and issues that threaten to undermine multilateral nonproliferation endeavors.

### **PRC Export Controls: Integrating Multilateral Standards**

By making its system more compatible with international standards, the PRC reduces the channels through which end-users of proliferation concern can gain access to critical items. Using a ten-element, seventy-two weighted question survey, the Center for International Trade and Security at the University of Georgia (CITS/UGA) tracked the compatibility of PRC export controls from 1996 to 1998 (see Table 1). In several aspects of its policy, the PRC has become relatively compatible with international standards. The most obvious changes have come through the promulgation of new regulations controlling the export of chemical, nuclear, and military items, and the development of lists of controlled items that parallel those maintained by the Australia Group, the Zangger Committee, the Nuclear Suppliers Group (NSG), and, to some extent, the Missile Technology Control Regime (MTCR).

Less well-known but very important changes have taken place in the bureaucratic processes associated with PRC export controls. The National CWC Implementation Office, in conjunction with MOFTEC, has issued around 130 export licenses for sensitive chemicals in accord with the obligations of the PRC under the CWC, as well as adopted controls on ten items only found on the Australia Group list. The Export Control Division of the Science and Technology Department in MOFTEC has begun to process nuclear, nuclear dual-use and other export licenses in line with the new regulations. In a break from the past, the Ministry of Foreign Affairs has created a new department that has arms control and nonproliferation export controls as part of its mandate. In July, the General Administration of Customs (GAC) has began running an electronic net among the more than 300 Customs ports that will allow Customs agents in the field to work with the GAC Headquarters and the MOFTEC Export Control Division in Beijing to check questionable shipments. According to one source, the GAC already has stopped several shipments of machine tools to check if they fell on the NSG list of dual-use items (apparently, the items were not on the list).

Information sharing between the PRC and other governments, especially the United States, has increased significantly. As early as 1996, PRC officials began to participate in the Asian Export Control Seminars in Tokyo. In May 1997, PRC officials met with US officials in Beijing to reveal their planned controls on nuclear items (promulgated in September) and sat in on the Nuclear Suppliers (Zangger) Committee meeting as an observer, a precursor to the PRC joining the Zangger Committee that October. China and the United States now include export controls as a topic for the Joint Commission on Commerce and Trade (JCCT). The PRC also sent a large delegation to the United States in the Spring of 1998 to present their views on export controls. Beijing also hosted the first regional seminar for the Organization for the Prohibition of Chemical Weapons (OPCW). PRC officials did not limit their contacts to official channels, sending representatives to a CITS/UGA – Waseda University export control workshop in Tokyo in 1997, followed by delegations to the United States in 1998 sponsored by the Lawyers Alliance for World Security (LAWS) and the Asia Foundation.

### **US Export Controls: Pushing and Pulling the Multilateral System**

It is important to note that although the United States government plays the leading role in creating and setting multilateral standards, several other governments play active and significant parts in this process, especially officials from Australia, France, Germany, Japan, the Netherlands, and more recently Russia. In several of its practices, the United States stands alone; in others, the United States has followed rather than led. The nature of the methodology used here raises another key point: the assessment only directly measures *compatibility*, not *effectiveness*, of national systems.<sup>4</sup> Just because the United States system rates as more compatible than the Chinese does not make it more effective. In the 1980s, for example, Germany and Japan had relatively compatible systems that were notoriously ineffective. An effective *multilateral* system, however, depends on the compatibility of its component national systems. In addition, most of these standards represent widely accepted means through which countries with predominantly market economies can implement export controls effectively.

Not surprisingly, the United States system of export controls appears highly compatible with multilateral standards according to the 1998 CITS/UGA assessment (see Table 2). Unfortunately, the US system deviates from multilateral standards in a most lamentable way: the United States government can not craft an export control law to replace the Export Administration Act (EAA) of 1979 as amended, which grants authority to the Bureau of Export Administration in the Department of Commerce broad controls over dual-use items. In 1994, after a series of extensions, Congress failed to renew or transform the EAA. Through Presidential Executive Orders under the International Emergency Economic Powers Act (IEEPA), the United States

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<sup>4</sup> The assessment also only measures *commitment* indirectly, through the steps taken to design the system, allocate bureaucratic resources to it, and then implement its programs.

continues to exercise its basic export control policies.<sup>5</sup> While a broad consensus exists on the need for nonproliferation export controls, disputes over controls on items such as encryption software and hardware, high-performance computers, and satellites, the balance between economic prosperity and military security in the licensing process, limits on unilateral controls, the flexibility available to the executive in implementing controls, and several other issues have derailed successive legislative initiatives. This incapacity to shape a new EAA not only puts the United States in the embarrassing position of urging other governments to develop a legislative, rather than regulatory, foundation for their export controls, it undercuts efforts to strengthen multilateral export controls as governments look to the United States for leadership and instead see delay and discord.

Although the United States often takes the initiative in implementing new nonproliferation export controls, virtually every national export control system has aspects that, in response to local conditions, differentiate it from systems in other countries. Especially after the disassembling of the old Coordinating Committee for Multilateral Export Controls (COCOM), multilateral export controls have relied on “national discretion” to implement export control standards. The US system has many unique aspects of its own, reflecting arms export decisions made before World War II, other programs developed during the Cold War, and, in recent decades, a reorientation of its policies toward proliferation concerns. Much to the chagrin of many US officials, the complexity of US export controls, and the vast production capabilities it regulates, most often make it an inappropriate system for other governments to emulate.

In bilateral relationships, the differences in national export control systems often spawn friction. The many singular aspects of the US system, and the leadership role taken by the United States, make the tasks of coordination and cooperation particularly difficult. Consequently, even as the Chinese export control system converges with multilateral standards, it will not relieve several major Sino-American export control issues.

### **Differences Spawn Friction**

Many of the more well-known differences between the Chinese and US export control systems concern adherence to the guidelines and control lists of the four multilateral export control regimes: the Australia Group, the Missile Technology Control Regime (MTCR), the Nuclear Suppliers Group (NSG), and the Wassenaar Arrangement. The specific differences, from acceptance of “full-scope” safeguards to controls on M-11 missile technology, raise considerable

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<sup>5</sup> The United States maintains a separate system of controls for “munitions” (i.e., military goods, technologies, and services) under the Arms Export Control Act (AECA). Several other US laws help maintain controls over exports, including the Trading with the Enemy Act (TWEA), Atomic Energy Act, the Nuclear Non-Proliferation Act, and the National Defense Authorization Act (NDAA).

concern. Rather than focus on those issues, however, let us turn to two conceptual differences that affect the trust that rests at the foundation of long-term cooperation.

### *Verification*

Verification goes to the very heart of the issues of trust and compliance. Tracking the implementation of international obligations can take many forms, but generally the greater the trust between governments, and between governments and other elements of society, then the less pervasive and intrusive the verification regime. Capabilities and intentions, of course, affect both verification regimes and compliance levels as well. Some things may exceed the capacity of the international community to verify, while some governments may simply not have the resources to implement obligations or verify behavior of its own citizens, much less that of foreign government, companies, or citizens.

Chinese officials appear to rely on two means to verify the end-uses and end-users of its proliferation-sensitive exports:

- assurances from the government or reliable government agent of the prospective importer; and
- operations of treaty-based international organizations, including the IAEA, the OPCW, and appropriate bodies of the United Nations.

While these means reflect the limited resources available to the PRC, it also fits traditional PRC interests in sovereignty and restricting the influence of foreign powers in China.

The United States employs and highly values both of these means, but it uses other tool as well. The United States, along with its COCOM partners, began to use an Import Certificate / Delivery Verification (IC/DV) system or a variant thereof to track dual-use items as they go from the jurisdiction of one national export control system in the 1950s.<sup>6</sup> US officials also conduct pre-license checks (PLCs) to verify the legitimacy of the prospective end-user and end-use, as do the Japanese and officials from other countries. The United States also has an extensive program of post-shipment verification checks (PSVs) unlike that of any other country to establish the use of an item after it leaves the United States. Under its current Safeguards Verification program, for example, the Office of Export Enforcement initiates several hundred PLCs and PSVs each year (see Table 3). These activities target small random samples of exports, as well as exports where the potential for diversion or retransfer raises special concerns. The licenses involved represent a very small proportion of overall applications to export controlled items.

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<sup>6</sup> The exporter usually attaches an International Import Certificate from the government of the recipient when applying for a license, and the government of the importer returns a notice of Delivery Verification when the item moves into its customs territory.

Several countries, even former COCOM partners, view PSVs --- an on-site inspection of the exported item by US officials --- as an intrusion on their sovereignty. In most cases, a mode of implementation that respects both US security interests and the sovereignty of the host country emerges through bilateral negotiation. Although China and the United States signed a Memorandum of Understanding (MOU) on PSVs in the early 1990s, the two governments had not worked out an implementation procedure. Partly over concern about exports to China, the 1997 NDAA, Congress mandated that the Commerce Department conduct a PSV for each high-performance computer going to a "Tier 3" country after 17 November 1997, including China. This put immense pressure on both governments to resolve their differences. At the June Clinton-Jiang summit, Chinese and US officials reached agreement. Under the procedure US embassy personnel will suggest a PSV to MOFTEC, who will then, as time permits, conduct the PSV in conjunction with US officials. As of September, the two countries had conducted at least two PSVs in China, both related to high-performance computers. The number of PSVs US official initiate in China and elsewhere will increase under the demands of the NDAA.<sup>7</sup>

For the long-term, however, unwillingness or incapacity to monitor proliferation-sensitive exports from the PRC poses problems unless the PRC takes a very conservative approach to licensing. One or two sensitive exports going to projects of proliferation concern, much less a pattern of such exports, can prompt US Congressional opponents and others to restrict US-China trade, embarrass the PRC, and otherwise worsen relations between the two countries. Of course, a swift and cooperative enforcement response might actually show the strength of the Chinese export control system and its integration into the multilateral system of export controls. Unfortunately, the enforcement practices of the two countries also appear to differ considerably.

### *Enforcement*

As the PRC moves from an export control system based on unpublished rules and regulations, its officials now face the challenge of enforcing the new system. Under Article 40 of its Foreign Trade Law, Beijing can institute criminal and other penalties for violations of its export control regulations. The penalties differ from regulation to regulation. For chemical items, the local chemical industry authority may confiscate the income from illegal trade, impose a fine between 100 and 200 percent of the volume of the business, and impose a 50,000 Yuan fine on those that attempt to hide their activities. Beijing may initiate criminal prosecutions through the Security Administration Punishment regulations. The military

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<sup>7</sup> In the 1998 NDAA, passed in October, the Congress required that the President certify every individual missile technology license to China, in addition to returning satellites and satellite technology to the Munitions List overseen by the State Department rather than the Commerce Control List overseen by the Commerce Department. It seems likely that this will result in even more PSVs and perhaps a future provision of the NDAA will mandate that the United States conduct PSVs in each case as well.

regulations allowed the State Military Articles Trade Bureau (now defunct) to order or warn enterprises companies to take “corrective measures” regarding provision of documents and information. In case of noncompliance, Beijing can suspend the export privileges of the exporter. Violators may also fall prey to criminal prosecution. Transfers in violation of the nuclear or nuclear dual-use regulations face several similar punishments. If acts constitute a crime, then criminal penalties apply; in other instances punishments under the Customs or Foreign Trade laws may apply.<sup>8</sup>

According to Chinese sources, no violations of nuclear export controls or other regulations have occurred so far. This may reflect a low volume of sensitive exports, involving less than two hundred licenses, and tight management on the few enterprises with the right to trade in such items. In addition, customs agents may impose fines and other penalties for “smuggling” on the spot, so Chinese officials may not treat these incidents as violations. Nonetheless, its not certain how many investigators, if any, have this as their permanent assignment.

In contrast, the US government routinely investigates and prosecutes a large number of export control violations each year, many related to nonproliferation, The Office of Export Enforcement alone has more than 160 professionals, and its numbers have gone up while many other units have suffered cuts. In 1997, the Office of Export Enforcement participated in more than 1700 cases, resulting in \$1.6 million in civil fines and \$2.9 million in criminal fines. Commerce and the Department of Justice also indicted or charged twenty individuals and eight companies. Twenty parties lost their trading privileges. Most cases involve “self-reported” violations, however, which almost always result in a simple warning letter. The office also makes it a practice to issue a press release with every charging letter, as a means of highlighting the consequences violators face.

OEE Special Agents conduct on-site inspections at US ports for selected Shipper’s Export Declarations (SEDs) from a systematic review of all SEDs. Its agents also conduct PLCs and PSVs, which may also uncover violations. The OEE also works with other enforcement agencies in the United States (mainly Customs and Justice) and abroad. Cooperation with Japanese authorities, for example, led to arrests in the investigation of the sarin nerve gas attack in Tokyo. In that case, US officials found that a US company had exported gas masks without an export license to a Japanese company associated with Aum Shinrikyo, leading to arrest of company officials.

As important, several US laws call on the government to punish foreign companies and individuals for their alleged proliferation activities. These punishments range from prohibiting contracts with US government agencies, license denials, denying visas, usually for a period of two years. This has proven

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<sup>8</sup> Article 17 of the Regulations of the People’s Republic of China on Control of Nuclear Exports and Article 18 of the Regulations of the People’s Republic of China on the Export of Dual-Purpose Nuclear Goods and Relevant Technologies.

particularly controversial, but it reflects the general US belief in the need to punish openly individuals and other entities to deter potential violators and raise corporate and public awareness of export controls and the rationales behind them. A host of Indian and Pakistani entities, for example, will go on the US “Entities List” as a result of the nuclear tests. This prohibits those parties from getting US government contracts, trading with US entities, and suffer other penalties. The Nuclear Non-Proliferation Act, moreover, prohibits the export of all controlled nuclear and missile items to India and Pakistan as a consequence of the tests, with no time limit on the sanctions.

The national and international dimensions of US enforcement efforts, and the very public nature of the punishments, indicates the seriousness with which US officials approach enforcement. They also know that violations take place in even the most law-abiding countries, such as Japan. Consequently, Chinese claims that no violations have taken place raise suspicions in the United States. They also note that no reports of penalties or violations appear in the Chinese media. If US officials detect suspicious transactions involving Chinese enterprises, the executive branch will come under strong pressure to sanction very publicly those entities and individuals with cooperation from Beijing if possible, but unilaterally if necessary.

### **Summary and Conclusions**

Certainly, Chinese nonproliferation export controls have become increasingly compatible with multilateral standards. Nonetheless, at this early stage in its development the export control system of the PRC still differs considerably from those standards. At the same time, the US system, although closely tied to multilateral standards and a leading advocate of export controls, has unique qualities that exacerbate Sino-American tensions on export controls. Most problematic, the PRC and US systems reflect several critical conceptual differences, such as in the area of verification and enforcement.

The dynamic nature of multilateral standards also suggests that the US and PRC systems will diverge over new conceptual and practical issues before resolving their current differences. The emergence of “catch-all” controls marks only the forefront of several new standards in encryption controls, controls on broker services, “deemed” export rules, intensified reviews of visas by export control officials, the role of intelligence in nonproliferation and anti-terrorism, and more. While distressing, however, these differences also offer opportunities for cooperation.

In particular, Customs and other enforcement agencies in China and the United States might start a dialogue to prepare for closer cooperation. Sharing evidence and witnesses in investigations and in prosecutions is often very hard, even for agencies with years of cooperation in their background. Joint training exercises in license verification practices also could ease tensions related to PLCs and

PSVs. Finally, the governments might undertake a joint program to share information with enterprises in both countries about the regulations, rules, and practices of each system of export controls and what that implies for joint-venture and foreign subsidiary activities. In the addressing differences that divide the two countries, both sides can lay a stronger foundation of trust lacking in the current relationship.

**Table 1**  
**Elements of the PRC System of Nonproliferation Export Controls**  
**Fall 1996 and Fall 1998**  
**(Raw Score/Weighted Score)**

<i>Control Element</i>	<i>1998</i>	<i>1996</i>
Licensing (6/7.47)	5.5/6.8	5/6.2
Lists (3/6.34)	2.5/5.3	2/4.2
Regime Adherence (12/3.2)	5/1.3	2/0.5
Catch-All Controls (3/1.2)	0/0.0	0/0.0
Training (9/3.87)	3/1.3	1/0.4
Bureaucratic Process (6/3.47)	5/2.9	4.5/2.6
Customs Authority (6/6.6)	4/4.4	3/3.3
Verification (9/3.67)	5/2.0	3/1.2
Penalties (6/1.8)	4/1.2	4/1.2
Information Sharing (12/4.2)	8/2.8	3.5/1.2
<b>Totals (72/41.82)</b>	<b>42/28.1</b>	<b>27.5/20.9</b>
<b>Percent of Total (100/100)</b>	<b>58.3/67.2</b>	<b>38.2/50.1</b>

**Table 2**  
**Elements of the US System of Nonproliferation Export Controls**  
**Fall 1998**  
**(Raw Score/Weighted Score)**

<i>Control Element</i>	<i>1998</i>
Licensing (6/7.47)	5.5/6.8
Lists (3/6.34)	3/6.34
Regime Adherence (12/3.2)	12/3.2
Catch-All Controls (3/1.2)	3/1.2
Training (9/3.87)	9/3.87
Bureaucratic Process (6/3.47)	6/3.47
Customs Authority (6/6.6)	6/6.6
Verification (9/3.67)	9/3.67
Penalties (6/1.8)	6/1.8
Information Sharing (12/4.2)	12/4.2
<b>Totals (72/41.82)</b>	<b>71.5/41.1</b>
<b>Percent of Total (100/100)</b>	<b>99.3/98.3</b>

**Table 3**  
**Verification Activities by BXA**

<i>Year</i>	<i>Pre-License Checks Completed (Applications Rejected)</i>	<i>Post-Shipment Verification (Further Enforcement Required)</i>	<i>Total License Applications Received</i>
1997	379 (54)	285 (10)	11,472