

Current and Future Challenges for Asian Nonproliferation Export Controls

Scott A. Jones

INTRODUCTION

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. Countries of concern 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, 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 concerned 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.

Export controls represent one of the key elements of a comprehensive nonproliferation strategy. They include procedures adopted by countries to regulate and monitor trade in weaponry and weapons-related (dual-use) technologies. However, the effectiveness of export control as a tool for limiting the spread of sensitive technologies and weaponry has been called into question by globalization and a complex array of international developments. For example, the distinction between military and commercial products has become less clear. Therefore, it is likely that export control policies and institutions need to be continually adjusted if they are to serve international security objectives.

How countries in the Asia region respond to the relentlessly changing nature of the proliferation challenge will affect profoundly the shape of global security for many years to come.²⁾ In many instances, the countries of the region are major transshipment and assembly points for critical strategic dual-use goods and technologies. Some of these countries are already major producers of strategic items, while others have potential to become suppliers.³⁾

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.

2) For the purposes of this paper “Asia region” defined as: Australia, Brunei, Cambodia, East Timor, India, Indonesia, Japan, Laos, Malaysia, Mongolia, Myanmar, Pakistan, People’s Republic of China, Democratic People’s Republic of Korea, Philippines, Taiwan, Republic of Korea, Singapore, Sri Lanka, Thailand, Vietnam. For reasons of length, India and Pakistan were not included. For such studies, see, Seema Galhaut, “India,” in Michael Beck, Richard Cupitt, Seema Galhaut, and Scott Jones, eds., *To Supply or To Deny: Nonproliferation Export Controls in Five Key Countries* (New York: Kluwer, 2003).

3) See Richard Cupitt, “Nonproliferation Export Controls in East Asia,” *The Journal*

This paper examines the current state of export control system development in the greater Asia region, with particular emphasis on the economic and security environment in which these systems operate. Identification is then made of the gains and remaining deficiencies in export control development. Lastly, the study concludes by speculating on a possible future trajectory for Asian export controls.

THE ECONOMIC CONTEXT: GREATER REGIONALIZATION AND INTERDEPENDENCE

Increasing regionalization—regionalization being the complex network of flows across state boundaries, involving the movement of goods and services, capital, technology, information and people—best characterizes the Asian economic context. Intra-Asian trade now accounts for about 45 percent of East Asia's total trade. In addition, trade throughput via the region has increased dramatically since the late 1960s.⁴⁾ Currently, 11 of the top 20 “megaports” are in Asia (see Table 1).⁵⁾

Between 1990 and 2001 Asia's share of global merchandise and commercial services exports rose from 21.8 percent to 25 percent and 16.8 percent to 20.8 percent respectively. During the same period the comparable share for the Association of South-East Asian Nations (ASEAN) countries rose from 4.2 percent to 6.4 percent. Chinese share of global exports rose from 1.8 percent to 4.4 percent.⁶⁾ In the case of China, the last few years have seen much higher levels of economic

of East Asian Affairs, Vol. 11, No. 2 (Summer/Fall 1997), pp. 452-480.

4) World Trade Organization, *International Trade Statistics 2002*

5) According to U.S. Customs, over 200 million cargo containers per year move between these ports [<http://www.customs.gov/xp/cgov/newsroom/highlights/csi/>].

6) Trade statistics culled from World Trade Organization's web site [http://www.wto.org/english/res_e/statis_e/statis_e.htm].

Table 1. World Megaports*

1.	Hong Kong	11.	Antwerp
2.	Shanghai	12.	Nagoya
3.	Singapore	13.	Le Havre
4.	Kaohsiung	14.	Hamburg
5.	Rotterdam	15.	La Spezia
6.	Pusan	16.	Felixstowe
7.	Bremerhaven	17.	Algeciras
8.	Tokyo	18.	Kobe
9.	Genoa	19.	Yokohama
10.	Yantian	20.	Laem Chabang

*Bold indicates ports in Asia.

interaction with the rest of Asia. Sino-Japanese trade reached \$53.9 billion in 2002, and exports from China to Japan increased by 3.1 percent to \$25.7 billion and imports from Japan rose 14.5 percent to \$28.2 billion. Japan is now China's second largest trading partner, while China became the largest importer of Japanese goods and services in the first half of 2002. Hong Kong, Taiwan, South Korea, Singapore and Thailand are also among China's top ten trading partners. Taiwan is now China's fifth-largest trading partner. Since 1987, trade between mainland China and Taiwan has totaled almost \$2 trillion; it grew at a 7 percent annual rate in 1999.⁷⁾

The regional concentration of trade is but one of several indicators of regionalization. Underlying much of the rapid expansion of intraregional trade in recent years has been a massive expansion in foreign direct investment (FDI) flows in the region. Trade policy reform has figured prominently in the rising importance of trade and

7) In 1977, bilateral trade amounted to \$77 million. It is now over several billion per year. M. Dutta, *Economic Regionalization in the Asia-Pacific: Challenges to Economic Cooperation* (Cheltenham: Edward Elgar Publishing, 2000). See also, Greg Mastel, "WTO Means more than Trade to China," *Journal of Commerce*, April 28, 2000.

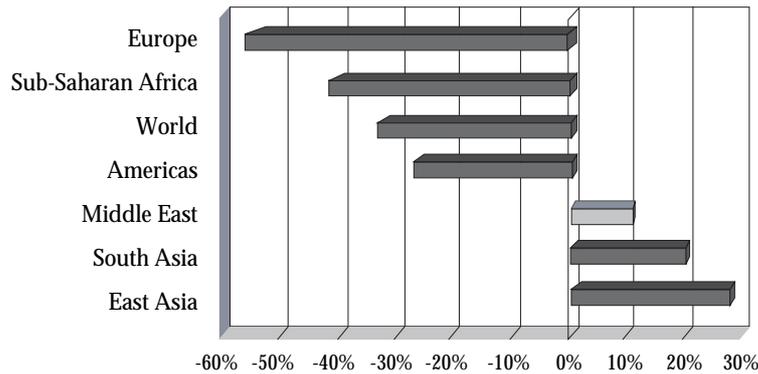
FDI in the region. Unilateral liberalization of tariff and non-tariff barriers took place in Indonesia, Malaysia, the Republic of Korea and Thailand during the 1990s.⁸⁾ Of particular significance has been the accelerated relocation of Japanese production in different parts of Asia, thereby establishing Japan as the undisputed leader in Asia in terms of technology transfer, capital goods and economic aid.⁹⁾ Having achieved a secure foothold in Korea and Taiwan, Japan has since rapidly expanded its stake in the ASEAN economies, and is now developing a substantial presence in China and Indochina. The relocation and off-shore model of production ensures a greater diffusion of technology.

The interpenetration of national economies is also stimulated by the exponential growth of financial flows across national boundaries, coupled with the increasing dominance of intra-company as a proportion of bilateral trade. The degree of financial interdependence was evidenced by the 1997 financial crisis, which resulted in the Chiang Mai Initiative.¹⁰⁾ Intra-company trade currently accounts for nearly four-fifths of Japan's total exports and half of its imports. Complementing and reinforcing these transnational production structures is the emergence of such regional economic zones as the

8) United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), ESCAP Secretariat, Trade and Investment Division, "New Approaches to Trade and Investment Policies in Asia and the Pacific," *Occasional Papers* (2001), [http://www.unescap.org/itid/publication/chap2_2126.pdf].

9) Glenn Hook, *et al.*, "Japan and the East Asian Financial Crisis: Patterns, Motivations and Instrumentalization of Japanese Regional Economic Diplomacy," *European Journal of East Asian Studies*, Vol. 1, No. 2 (2002).

10) As a consequence of the 1997 financial crisis, the finance ministers of ASEAN+3 countries (China, Japan, and South Korea) reached agreement on the "Chiang Mai Initiative," which was the first significant regional financing arrangement to enable countries to cope with disruptive capital flows and maintain exchange rate stability. The Chiang Mai Initiative has contributed to improving exchange rate stability and in doing so may also have contributed to closer regional economic and financial integration. Eiji Ogawa, "Monetary Integration in East Asia," *The Journal of East Asian Affairs*, Vol. 15, No. 2 (Fall/Winter 2001), pp. 344-365.

Table 2. Military Expenditure (% Change 1988-97)

Johor-Singapore-Riau growth triangle, the Indonesia-Malaysia-Thailand Growth Triangle, the East Asia Growth Area (BIMP-EAGA), the Southern China growth triangle, and the Tumen River Delta Economic.¹¹⁾ Finally, mention must be made of the increasing mobility of labor, with the strongly performing economies of the region attracting large numbers of legal and illegal immigrants, some of whom may have links to terrorist organizations.¹²⁾

There are nevertheless clear limits to the extent, intensity and efficiency of these economic and functional linkages. There are many states (Cambodia, Laos, North Korea, several of the Pacific island states) and many areas within states (e.g., non-coastal areas of China, parts of Myanmar and the Russian Far East), where these linkages are non-existent or at best tenuous. Moreover, many of the linkages which are said to contribute to regional interdependence (e.g., Japan-ASEAN trade and investment flows) are acutely asymmetrical, and to that

11) Richard Stubbs, "ASEAN Plus Three: Emerging East Asian Regionalism?" *Asian Survey*, vol. 42, no. 3 (2002).

12) Byeong Hae Sohn, "Regionalization of Trade and Investment in East Asia and Prospects for Further Regional Integration," *Journal of the Asia Pacific Economy*, Vol. 7, No. 2 (2002).

extent likely to promote social and political tensions both within and across national boundaries.

THE SECURITY CONTEXT: MILITARIZATION & PROLIFERATION

During the last decade, the top three regions for arms imports--Western Europe, the Middle East, and East Asia--accounted for 78 percent of the world's arms imports. Of the top five arms importing countries in 2000, two are in East Asia--Japan and Taiwan. Military spending, armed forces, and arms acquisition are all rising in Asia. Between 1988 and 1998, as global military expenditures fell by 35 percent, those in East Asia and the Pacific actually increased by 38 percent. (South Asia increased its military spending by 25 percent.) The figures from the Stockholm International Peace Research Institute note that military expenditures declined worldwide from \$1.066 trillion in 1988 to \$719 billion in 1998. But in Asia, they climbed from \$95 billion to \$130 billion.

Japan, China and the Koreas have accounted for the majority of the region's military spending during the past decade, while the arms race between India and Pakistan has swelled South Asia's military budgets. Less visibly, military expenditures in ASEAN countries increased by 52 percent in real terms between 1988 and 1997. This increase, greater in both absolute and percentage terms than that of any other region, occurred as the world as a whole cut military spending by more than one-third (see Table 2).¹³⁾

The increased spending is going in large part to the acquisition of

13) This high level of military spending was somewhat curtailed by the Asian economic crisis, which resulted in overall reductions in government expenditures as well as currency depreciation that made some arms imports prohibitively expensive. Still, even though the strong growth in Asian military expenditures slowed, overall expenditures have still not started to decline even

technologically advanced conventional weapon systems: combat aircraft, ocean-going naval ships, tanks, armored vehicles, armed helicopters, and missiles and related dual-use components and technologies.¹⁴ Moreover, much new acquisition is through domestic arms production. China, Japan, South Korea, India, and Taiwan are all pursuing the development of national arms industries that could eventually make them, in theory, fully independent of foreign imports.¹⁵

Proliferation continues to pose a particular threat to the security and stability of East Asia, where several states already have nuclear weapons and ballistic missile capabilities, and others have the technical expertise necessary to develop weapons of mass destruction.¹⁶ For example, the U.S. Central Intelligence Agency contends that throughout the second half of 2001, North Korea continued to export significant ballistic missile-related equipment, components, materials, and technical expertise to the Middle East, South Asia, and North Africa.¹⁷ Pyongyang attaches high priority to the development and sale of ballistic missiles, equipment, and related

in East Asia, which was most affected by the economic crisis. While the volume of arms procurement has been scaled down significantly due to the reduced purchasing power of these governments' currencies, the domestic burden of the military expenditure is not declining.

14) In Southeast Asia, most nations have relatively small military budgets and small armed forces; but here, too, imports of major weapons and military spending are on the rise, contributing to the increased militarization of the Asia-Pacific region.

15) *SIPRI Year Book 2002: Armaments, Disarmaments, and International Security* (Stockholm: SIPRI, 2002).

16) See Joseph Cirincione, "The Asian Nuclear Reaction Chain," *Foreign Policy* (Spring 2000).

17) North Korea began its development of ballistic missiles by reverse-engineering Soviet-made Scud Bs. The Soviet Union, however, did not supply Scud-type missiles to North Korea. In the late 1970s, North Korea acquired a number of Scud Bs from Egypt, in return for its assistance to Egypt during the 1973 Yom Kippur War. Seung-Ho Joo, "Military Relations between Russia and North Korea," *The Journal of East Asian Affairs*, Vol. 15, No. 2 (Fall/Winter 2001), pp. 297-323.

technology.¹⁸⁾ Exports of ballistic missiles and related technology are one of the North's major sources of hard currency, which fuel continued missile development and production.¹⁹⁾ In addition, in a provocative decision, North Korea announced December 12, 2002 that it was restarting nuclear facilities that had been frozen since 1994, and it ordered international monitors to leave the country. As international concern grew that Pyongyang was resuming its nuclear weapons program, North Korea announced January 10, 2003 that it was immediately withdrawing from the nuclear Nonproliferation Treaty (NPT). Shortly thereafter, it began a series of provocative missile tests, culminating in a test during the inauguration of the South's new president.

For its part, Beijing has taken steps to address U.S. and other concerns and increase its partial participation in international nonproliferation regimes since 1991.²⁰⁾ Nevertheless, China is not a

18) The DPRK also stands accused of exporting nuclear technology to the gas centrifuge enrichment plant in Natanz, Iran. Glenn Kessler, "Iran's Nuclear Program Speeds Ahead," *The Washington Post*, March 10, 2003.

19) Office of the Director of Central Intelligence, "Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions," (July 1-December 31, 2001), [http://www.cia.gov/cia/publications/bian/bian_jan_2003.htm]. In particular, for Washington, the North Korean missile problem has proved to be even more vexing since it has to also take into consideration South Korea's overall response strategies and the fallout from pursuing a regional Theater Missile Defense (TMD) system. In response to North Korea's accelerated missile programs, South Korea has insisted that it should be able to develop medium-range missiles with the capability to hit most targets in North Korea. Although the United States agrees, in principle, to South Korea's proposal that it should have, in response, the leeway to develop its own missile arsenal with a range up to 300 km, Washington is concerned that such a move could fuel a new arms race in the region. China is keenly concerned about a U.S.-sponsored TMD archipelago running from Taiwan to South Korea. See, Don Kirk, "U.S. and Japan to Join in Missile Defense to Meet Pyongyang Threat," *International Herald Tribune*, July 29, 1999 and Andrew Browne, "China Says US Missile Defense Plan 'Last Straw,'" *Taiwan Security Research*, March 5, 1999.

member of the Missile Technology Control Regime (MTCR), Nuclear Suppliers Group (NSG) (requires full-scope safeguards), nor Australia Group (AG) (on chemical and biological weapons). PRC weapons proliferation has persisted, aggravating trends that result in more ambiguous technical assistance, longer range missiles, more indigenous capabilities, and secondary (re-transferred) proliferation. The Director of Central Intelligence (DCI) noted that, for July-December 1996, "China was the most significant supplier of WMD-related goods and technology to foreign countries." The 1998 report of the Rumsfeld Commission identified China's weapons proliferation as a "threat." The DCI's semi-annual reports have named the PRC (plus Russia and North Korea) as "key suppliers" of dangerous technology.²¹⁾

Finally, there is the looming threat of terrorism. For example, in a recent report on the threat of terrorism in South East Asia, the

20) For example, China promised to abide by the Missile Technology Control Regime (MTCR) in 1991-1992 and reaffirmed that commitment in a October 4, 1994 statement. Also, China acceded to the Nuclear Nonproliferation Treaty (NPT) on March 9, 1992. China signed the Chemical Weapons Convention (CWC) in January 1993. In November 1995, China issued its first public defense white paper, which focused on arms control and disarmament. On May 11, 1996, the PRC issued a statement promising to make only safeguarded nuclear transfers. China, on July 30, 1996, began a moratorium on nuclear testing and signed the Comprehensive Test Ban Treaty (CTBT) in September 1996, but (like the United States) has not ratified it. On April 25, 1997, China deposited its instrument of ratification of the CWC, before it entered into force on April 29, 1997. Premier Li Peng issued new nuclear export control regulations on September 10, 1997. On October 16, 1997, China joined the Zangger Committee (on nuclear trade). Finally, China issued regulations on dual-use nuclear exports on June 17, 1998.

21) Shirley Kan, "China's Proliferation of Weapons of Mass Destruction and Missiles: Current Policy Issues Updated July 1, 2002," *Issue Briefs for Congress*, Congressional Research Service (The Library of Congress). See also, 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, pp. 209-233; and Yuzo Murayama, "China's Export Control Policy in East Asian Context: Implications from Economic Perspectives," paper presented at

government of Singapore said that while some of these groups existed before al-Qaeda and have local agendas, their link-up with Osama bin Laden's organization had made them more deadly. The report further noted that although the U.S.-led military strikes on Afghanistan had disrupted al-Qaeda bases, bin Laden's network could still tap alliances in Asia, including Jemaah Islamiah, to stage more attacks: "With their radical agenda and their enhanced skills acquired from al-Qaeda, these groups if left unchecked will pose a grave threat to the security of South-East Asia for a long time to come."²²⁾

In summary, growing trade interdependence, increasing indigenous design and production capabilities (i.e., a growing pool of potential and actual sensitive technologies suppliers), expanding military budgets, intensified technology transfers to and from the region, and an ever-expanding share of the cargo trade market represent the regional challenges to the configuration and effective execution of nonproliferation export controls.

At the global level, governments are also confronted with several challenges to practicing effective export controls. Globalization presents several challenges to export control, such as the transnationalization of the defense industry, the rapidly blurring distinction between civilian and military technologies, the increasing intangibility of technology and its transference, and the incessant need to update control lists because of the brisk turnovers in technological developments. The mercurial threat of terrorist use of WMD amplifies these difficulties.²³⁾

Overall, the abiding export controls challenge for any government is identifying, then striking, the proper balance between trade and security. The very name of this nonproliferation tool is

the Sixth ISODARCO Beijing Seminar on Arms Control, October 29-November 1, 1998, Shanghai, China.

22) In addition to Jemaah Islamiah, similar groups include the Abu Sayyaf Group and Moro Islamic Liberation Front in the Philippines and the Kumpulan Militan Malaysia in Malaysia.

imprecise--export control--with the connotation being that trade comes at the expense of security. The nexus of trade and security cuts to the heart of the matter in Asia, where national economies are profoundly dependent on trade, as they are on regional and international security. The internal challenge for countries of the Asia region is to develop systems compatible with their political, economic, and security needs while addressing the overall threat posed by the proliferation of weapons of mass destruction. The next section examines the gains made by and deficiencies in the nonproliferation export control systems of the Asian region.

CURRENT ASIAN EXPORT CONTROL DEVELOPMENTS: GAINS AND DEFICIENCIES

In terms of export control development, the Asian region represents a wide array of stages. However, that being said, one of the most significant characteristics of export control policies in East Asia is the strong correlation between levels of economic growth and implementation of multilateral export control measures; that is, a country that started economic growth in an earlier period and has high GDP level tends to implement more complete measures of export controls.²⁴⁾ For example, Japan has one of the most sophisticated export control systems in the world.²⁵⁾ Japan has also been active in

23) Regarding the emerging trend of radicalized religious groups and WMD use, noted terrorism expert Bruce Hoffman argues that "the growth of religious-inspired terrorism has already contributed to international terrorism's increasing lethality and also that many of the constraints (both self-imposed and technical) that previously prevented terrorist use of WMD are eroding as well. In this respect, the different characteristics, justifications, and mindsets of religious and quasi-religious—as compared to secular terrorists—suggest that religious-inspired terrorists will be the most likely non-state perpetrators to use WMD." Bruce Hoffman, "Terrorism and WMD: Some Preliminary Hypotheses," *The Nonproliferation Review* (Spring/Summer 1997), pp. 45-53.

nonproliferation export control regimes, having been a founding member the Australia Group, the Missile Technology Control Regime (MTCR), the Nuclear Suppliers Group (NSG) and the Wassenaar Arrangement.

In addition, the Japanese government has played a key leadership role in nonproliferation export controls by establishing basic guidelines that include nonproliferation factors in providing official development assistance (e.g., Official Development Assistance Charter implemented in 1991) and by disseminating information on export controls through multilateral seminars (e.g., Asian Export Control Seminar started in 1993), bilateral talks and training programs.²⁶⁾ In 1994, Japan also introduced a General Bulk License comparable to similar procedures in the United States and Europe. The procedure rewards Japanese trading partners for setting up export control programs by simplifying and shortening licensing procedures. In the region, Hong Kong (April 1994) and South Korea (October 1994) were the first to receive this status. Since more than 64 percent of Japanese exports of the items formerly controlled by the Coordinating Committee on Multilateral Export Controls (COCOM) go to countries

24) See Richard Cupitt, S. Grillot, and Y. Murayama, "Determinants of Nonproliferation Export Controls: A Membership-Fee Explanation," *The Nonproliferation Review*, Vol. 8, No. 2 (Summer 2001), pp. 69-80.

25) Japan joined COCOM in 1952 and adopted IC/DV (Import Certificate/Delivery Verification) system that was similar to the ones adopted by other COCOM countries and adhered strictly to COCOM rules, such as implementing controls over re-exports and end-user checks. In 2001, Japan enacted catch-all legislation.

26) Security Export Control Council, Industrial Structure Committee, Ministry of International Trade and Industry, *The Future of Security Export Controls*, March 25, 1993 (Tokyo), pp. 1-3. Based on this recommendation, Japan launched its "Asian Export Control Initiative" to promote and coordinate the adoption of nonproliferation export controls in the region. The Japanese Industrial Structure Council reported that "[r]einforcing export controls... to achieve world peace is an area in which it is most appropriate for Japan to play a role commensurate with its status as a major economic power" and that "appropriate export controls on dual-use items" are important in meeting the proliferation threats.

in the region, all of which require licenses, the Japanese government hopes this will help induce more of its regional neighbors to adopt complementary export control systems.²⁷⁾ For example, Japan received a South Korean task force team of export control officials in September 2002 to assist the introduction of catch-all controls in South Korea.

In other states of the region, export control developments varied in 2002. For example, China passed a raft of legislation related to nuclear, chemical and biological, missile and military exports.²⁸⁾ Taiwan updated its export regulations with regards to Mainland trade. South Korea implemented a catch-all regulation. And Singapore passed legislation strengthening state control over the export of strategic goods, including munitions and related dual-use goods.²⁹⁾ Other states, such as Laos, Myanmar, and Malaysia, have made only minor, primarily legislative, changes, most of which are superficial.

While other control systems in the region may not be as comprehensive as Japan's, it is important to consider that individual economic and political profiles are relevant to the form of the export control system. To use the Japanese example again, Japan is a key supplier country, a major economic and political power, as well as a transshipment point. Comprehensive licensing, enforcement, and regime adherence elements are appropriate to its political and economic particulars. Mongolia, on the other hand, is not a supplier

27) COCOM, established in 1949, was used by the major Western industrial powers to impose restrictions on the transfer of militarily useful technology to the Soviet bloc. At the time of its elimination, COCOM was by far the most comprehensive export control mechanism dealing with "dual-use" technologies—items which have both commercial and military applications. Dual-use transfers are of particular concern in stemming the spread of capabilities for the production of the full spectrum of weapons system, from small arms to major conventional systems to weapons of mass destruction.

28) Jason Leow, "China's Weapons Sales Rules Could Be Double-Edged Sword," *The Straits Times*, August 30, 2002.

29) Chuang Peck Ming, "Bill Tightens Control Over Exports of Strategic Goods," *The Business Times Singapore*, November 26, 2002.

country and therefore may not have comprehensive end-use checks or extensive government outreach functions in place. Indonesia, furthermore, lists only one industry--PT. Pindad--as exporting controlled goods and technologies and therefore does not require a significant industry outreach capacity. Nevertheless, while the forms may vary, there must be a higher degree of harmonization between states of the region to insure that loopholes are not exploited. To that end, there remain three critical areas requiring further attention.³⁰⁾

Technology Controls and Control List Harmonization

The vast majority of Asian countries still do not have adequate technology controls in place. For example, as of late 2001, seven out of seventeen countries had no or only partial controls over the export or transit of sensitive technologies.³¹⁾ One country does not have controls on items from any of the multilateral lists, while another does not control goods on the NSG and Australia Group lists. A third country has no legal controls on dual-use equipment that could be used for chemical weapons (CW) and biological weapons (BW). Finally, while another maintains no formal controls on the items on the CWC schedules or on biological weapons, it does control CW- and BW-related dual-use equipment. Furthermore, the majority of surveyed countries lack national control lists that reflect those of the four multilateral export control regimes. However, a few countries, such as Singapore, are in the process of harmonizing their control lists (see

30) Center for Information on Strategic Technologies, *Questionnaire on Export Control Systems in Asian Countries and Regions* (Tokyo, Japan: March 2003). The authorities surveyed included Brunei, Cambodia, China, Hong Kong, Indonesia, Japan, Laos, Macao, Malaysia, Mongolia, Myanmar, the Philippines, South Korea, Taiwan, Thailand, Singapore, and Vietnam. The data that follow come from this survey.

31) Surveys conducted since 1999 indicate little development in controls over strategic technologies, especially with respect to controls over so-called "intangible transfers of technology."

Table 3).

While an important exercise, the harmonization of national control lists for regime non-members need not be an exacting process. An emerging trend in the practice of export controls is the move to so-called “activity-based” controls from the purely control list approach.³²⁾

1. The control-list approach focuses on the nature of the product or technology itself, and regulates export through product control lists. Typically, under this approach, an exporter first determines whether its product is covered by the product list and, if so, then consults the product list to determine what restrictions, if any, apply to the export of the product.
2. The activity-based approach, by contrast, focuses on the nature of the transaction and the identity of the exporter and its partners in the deal. It is not limited to an examination of the specific product being shipped. The purpose of an activity-based approach is to control certain dangerous activities, such as the proliferation of nuclear or chemical weapons or the advancement of terrorist organizations.

As the nature of the proliferation threat becomes geographically boundless, the role of activity-based controls has taken on increased significance as a mechanism for enforcing export control policy. Studies have indicated that proliferant countries often seek threshold or decontrolled technology for their WMD programs.³³⁾ Furthermore, the events of September 11 have accelerated this changing trend in, for example, U.S. export control legislation. The “bad guys” are no longer limited to a particular country.³⁴⁾ As a result, all transaction, even those that seem purely domestic, and transaction in “friendly countries,” now fall under the scope of export control laws. Countries, therefore,

32) Richard Sako and Louis Lambert, “The Changing Face of Export Controls: How the War on Terrorism is Affecting Corporate Export Compliance Obligations,” *Legal Media*, July 2002 [<http://www.legalmedia.net>].

33) Yuan, Jing-Dong, “The Future of Export Controls: Developing New Strategies for Nonproliferation,” *International Politics*, Vol. 39, No. 2 (June 2002).

Table 3. Scope of Control: 2001

	Goods		Technology
	Arms, Nuclear/BCW, missile related items	Dual-use items	
Brunei	Yes	Yes	No
Cambodia	Yes	Yes	No
China	Yes	Partial	Yes
Hong Kong China	Yes	Partial	Yes
Indonesia	Yes	Yes	Yes
Japan	Partial	Partial	No
Korea	Yes	Yes	Yes
Laos	Partial	Partial	Yes
Macau China	Yes	Yes	Yes
Malaysia	Partial	Yes	No
Mongolia	Partial	Partial	Yes
Myanmar	Yes	Partial	Yes
Philippines	Partial	No	No
Singapore	Partial	Partial	No
Chinese Taipei	Yes	Partial	Yes
Thailand	Yes	Partial	Yes
Viet Nam	Yes	Partial	Yes

Key:

Yes

Partial

No

must have the ability to control exports irrespective of list content. This flexibility has otherwise caused a catch-all clause, a tool not readily in abundance in the Asian region.

34) See Joseph Cirincione, "Global Trends," in J. Cirincione, *Deadly Arsenals: Tracking Weapons of Mass Destruction* (Washington DC: Carnegie Endowment for International Peace, 2002), pp. 3-25.

Catch-All Controls

National control systems have come to focus on the end-use and end-user of goods and technologies, allowing more freedom to transfer dual-use technologies to commercial end-users for commercial end-uses. Post-Gulf War disclosures of the operational means of Iraqi front companies furthered the spread of catch-all. Heightened concerns over terrorist acquisition of WMD components and technologies highlight the preventative role offered by catch-all legislation.

A “Catch-All” regulation is the means by which governments apply existing national export control procedures to goods and technologies not on national control lists when it is known or suspected that such goods or technologies will be used in weapons of mass destruction (WMD) programs. This type of regulation is also known as “End Use” regulation, because it requires that exporters ensure that their exports of dual-use products have legitimate end uses.³⁵⁾

Japan, for example, amended two cabinet orders to introduce a catch-all control in December 2001. The new regulation came into force in April 2002. Under the new control, the export of items which are not included in the export control list require export license if the items are for use in connection with WMD and their delivery means. To insure the effectiveness of the catch-all clause, Ministry of Economy, Trade and Industry provides exporters the “End User List” that lists end users of proliferation concern. South Korea also enacted a catch-all clause in early 2003.

With respect to China, officials believe they have the authority and

35) At its annual meeting in Paris on June 6, 2002, the Australia Group agreed to adopt a new set of formal guidelines on licensing exports of sensitive items. Two of the most important provisions in the new set of guidelines are the no-undercut and catch-all provisions. This is the first time that an export control regime has agreed to include a catch-all clause in its public guidelines.

already implement catch-all controls for several kinds of nonproliferation items. Moreover, Ministry of Foreign Trade and Economic Cooperation (MOFTEC) can restrict both nuclear and nuclear dual-use items that do not appear on the list.³⁶⁾ Allegedly, officials also interpret catch-all controls to permit restrictions on e-mail and fax transfers of technology. Officials indicate, however, that they need assistance in devising means to control these intangible forms of technology transfer effectively. In contrast, at least one source alleged that the government must put chemical items on the list before they can exercise controls, although the regulations then allow officials to restrict a host of associated production equipment and technologies. Although the central government appears to have the authority to use catch-all controls, the process for implementing these controls seems ambiguous.³⁷⁾

Apart from Japan and South Korea, the majority of reporting Asian states either lack completely or do not have multilateral export control regime standard catch-all control regulations. This characteristic is further reinforced by the relative absence of information regional governments provide their exporters and transportation industries on end users and entities of concerns. With the exceptions of a few countries, regional governments—to the extent they provide any export control-related information—share only the minimal amount of information, usually pertaining to compliance requirements. The functional essence of the catch-all regulation is a greater responsibility on behalf of industry to ensure that end use and end user are in no way illicit. Yet, industry must be adequately informed.

36) Similarly, China has indicated that it will apply special “scrutiny and caution” on missile-related exports to those countries developing nuclear-capable ballistic missiles, even if the items do not appear on the control list.

37) For a comprehensive study of the Chinese export control system, see Richard T. Cupitt, “China,” in M. Beck, R. Cupitt, S. Galhaut, and S. Jones, eds., *To Supply or To Deny: Nonproliferation Export Controls in Five Key Countries* (New York: Kluwer Law International, 2003).

Re-export and Transshipment Controls

Another way to maximize the ability to administer and enforce export controls is to focus international monitoring and enforcement efforts on major chokepoints in the flow of global commerce. A significant amount of global trade passes through a handful of major transshipment hubs—most of which are in the Asia region—that serve as key distribution points in the global economy. For example, the equivalent of more than 50 million containers a year has passed through the major ports of Southeast Asia in recent years.³⁸⁾

Such hubs potentially could be used by terrorists or countries of concern to divert sensitive items to unauthorized destinations or end-users. In addition, tighter national export controls and greater international cooperation have made direct access to items more difficult for end-users of proliferation concern. Proliferators are increasingly likely to use transit points in unsuspecting destinations to conceal the real nature of the transaction. They falsify cargo descriptions, do not enter end-user/user destinations, hide the final destination, use front companies, and try other ruses.³⁹⁾

Most of the countries surveyed do not have legislation covering re-exports or transshipment controls. This relative deficiency is perhaps the most serious export control challenge to the region, in light of the fact that most countries are—in proliferation terms—not suppliers but transshipment points, whose economies depend on the efficiencies and speed of trade facilitation. Compounding matters are the relative proximity of key technology suppliers, such as Japan and South Korea.

38) Karen Bhatia, Deputy Undersecretary for Industry and Security, Remarks at the Regional Forum on Transshipment Controls, December 12, 2002, Bangkok, Thailand [<http://www.bxa.doc.gov/press/2002/Bhatia@BangkokForum.html>].

39) Recently, John Bolton, Undersecretary of State for Arms Control and International Security, noted that “The whole administration is focusing more on transshipment countries,” especially those in Asia. William Neal, “Export Controls: U.S. Pushes Out the Borders,” *National Journal*, December 30, 2002.

For example, according to a Tokyo Metropolitan Police Department press release, authorities arrested the former managing director of the Ryokasha Company and Hitachi for conspiring to sell telecomparators to China.⁴⁰⁾ The sale of telecomparators is in violation of a Japanese law established by the Nuclear Suppliers Group in 1992. This device can be modified to develop an apparatus for the extraction of weapons grade plutonium. The company allegedly used South Korea as a transshipment point to avoid Japanese export controls to its final destination in Harbin, China. According to the police investigation three months after 18 telecomparators were shipped to Harbin in December 1996, the Ryokosha company sent technicians to offer assistance and repair the products.⁴¹⁾

Another case involved Singapore as a transshipment point. In May 2001, U.S. Customs Special Agents in Baltimore initiated an investigation based on a referral made by the Defense Security Service which alleged that a U.S. national was attempting to acquire sophisticated encryption technology and related data for illegal export to China (PRC). The technology is controlled for export under the U.S. Munitions List of the International Trafficking in Arms Regulations and by the National Security Agency. Based on the referral, an undercover investigation was initiated and the perpetrators were arrested for attempting to unlawfully export the encryption devices to the PRC via Singapore.⁴²⁾

40) A telecomparator is a precision manufacturing device that is accurate to 0.2 of a micrometer.

41) According to Ryokosha spokesman Teruhito Koizumi, it had known the machines sold to a South Korean agent were going to China, but the company was assured that the proper applications to export the telecomparators would be processed. The spokesman also said the company realized it was a mistake to send personnel to offer assistance to the end user. See, F. J. Khergamvala, "Japan Detects Export of Nuke Products To China," *The Hindu*, February 9, 1999.

42) Statement of Richard Mercier, Executive Director for Investigative Programs, Office of Investigations, U.S. Customs Service, Before the U.S.-China Commission, January 17, 2002 [<http://usinfo.state.gov/regional/ea/uschina/mercier.htm>].

Addressing the 2002 Southeast Asian regional forum on transshipment controls in Bangkok, director of the Office of Export Control Cooperation at the State Department's Bureau of Nonproliferation, John Schlosser, remarked: "State sponsors of terrorism and terrorist organizations increasingly are attempting to exploit the less-stringent controls that exist in the world's transshipment hubs--often by diverting legitimate trade or through front companies posing as honest brokers. Unless transshipment countries--like those you represent here today--catch up with these supplier states and similarly strengthen their export control systems, they will remain an attractive target for this kind of predatory trade."⁴³⁾

CONCLUSION: THE FUTURE OF EXPORT CONTROLS IN THE ASIAN REGION

When compared with supplier state export control systems such as the United States and Japan, most states in the region have only the most rudimentary of control systems. That being said, however, regional governments have been making progress on addressing systematic deficiencies on a voluntary and, more importantly, a cooperative basis. In order to sustain this progress, participating states must understand that export controls are not impediments to trade. On the contrary, they are the prerequisites for insuring the necessary international and regional stability and technology transfer on which economic development and growth depend.

The states of the region are becoming increasingly and inextricably economically intertwined, be it in the form of ASEAN or Asia-Pacific Economic Cooperation (APEC). Intra-Asian trade and transnationalized industrial production are escalating. With that in my mind, an instructive model for future regional export control

43) William New, "Export Controls: United States Pushing Out the Borders," *National Journal*, December 30, 2002.

developments is the European Union. As a consequence of increasingly harmonized trade policy, the EU eventually addressed the issue of a common framework for the export of dual-use and goods and technologies from the Community in the 1990s. Presently, the 15 member states operate under a common control list and set of export guidelines (e.g., such as an EU-level catch-all clause requirement), recognize a common license, regularly share licensing and enforcement information, and are subject to compliance reviews. In addition, until the year 2000, an EU member state could easily grant an export license for an item for which the authorities of another member state had refused authorization. Under a new Regulation, such undercutting can provoke considerable peer pressure. Member states now have to (1) inform each other on denials of export licenses; (2) consult with each other on their intention to undercut; and (3) explain their decision to do so.⁴⁴⁾

While such economic organizations as ASEAN and APEC are by no means the organizational equivalents of the EU, they can provide a framework for the creation of many of the export control norms, best practices and information sharing functions.⁴⁵⁾ For example, said organizations could host seminars on transshipment controls involving regional governments and freight forwarding, customs brokers, and the shipping industry--in addition to serving as information sharing platforms on end users of concern. For example, ASEAN has hosted a seminar on nonproliferation and initiated the 1995 Bangkok Treaty (or the Treaty on the Southeast Asia Nuclear

44) See, Burkhart Schmitt, "A Common European Export Policy for Defense and Dual-Use Items?" *Occasional Paper 25*, Institute for Security Studies, Western European Union (May 2001); And Panos Koutrakos, "The Reform of Common Rules on Exports of Dual-Use Goods under the Law of the European Union", *European Journal of Law Reform*, Vol. 2, No. 2 (Spring 2000).

45) Jurgen Haacke, "Collective Foreign and Security Policy: The Emergence of an ASEANized Regional Order in East Asia?" London School of Economics Department of International Relations, International Studies Association Annual Meeting, Minneapolis, MN, March 1998.

Weapons-Free Zone). Such services would reduce the institutional costs to national governments while increasing awareness of key export control issues.

A regional solution, therefore, is the most appropriate means to address the respective export control deficiencies of the region. In spite of that, such an outcome is wholly dependent on strong leadership and support. The United States has provided a great deal of bilateral export control assistance to many states in the region. For example, the U.S. Department of Commerce recently launched the Transshipment Country Export Control Initiative (TECI).⁴⁶⁾ The TECI is a multi-faceted, cooperative initiative that seeks to strengthen the trade compliance and export control practices of government and industry in major transshipment hubs, principally such as those in Asia. Perhaps more importantly, Japan has been providing such leadership and support for the past decade.

Above all, the abiding export control challenge for any government is identifying, then striking, the proper balance between trade and security. In this respect, it is critical that export controls are not viewed as impediments to trade. The nexus of trade and security cuts to the heart of the matter in Asia, where national economies are profoundly dependent on trade, as they are on regional and international security. The internal challenge for countries of the Asia region is to develop systems compatible with their political, economic, and security needs while addressing the overall threat posed by the proliferation of weapons of mass destruction.

46) The announcement of the TECI program was made at the Southeast Asian Conference on Trade Security in Bangkok, Thailand in December 2002. The TECI program works alongside another U.S. export control program, the Container Security Initiative (CSI). The initiative is designed to enhance security of the sea cargo container. One of the core elements of CSI involves placing U.S. Customs inspectors at major foreign seaports, such as Singapore and Hong Kong, to pre-screen cargo containers before they are shipped to America. U.S. Customs officials, working with their foreign counterparts, will be in a position to detect potential WMD in U.S.-bound containers at these foreign ports.