



Royal United Services Institute
for Defence and Security Studies

Occasional Paper

Upgrading to a New, Rigorous System

Recent Developments in China's Export Controls

Xiaoming Liu



Upgrading to a New, Rigorous System

Recent Developments in China's Export Controls

Xiaoming Liu

RUSI Occasional Paper, March 2016



Royal United Services Institute
for Defence and Security Studies

Over 180 years of independent defence and security thinking

The Royal United Services Institute is the UK's leading independent think-tank on international defence and security. Its mission is to be an analytical, research-led global forum for informing, influencing and enhancing public debate on a safer and more stable world.

Since its foundation in 1831, RUSI has relied on its members to support its activities, sustaining its political independence for over 180 years.

London | Brussels | Nairobi | Doha | Tokyo | Washington, DC

The views expressed in this publication are those of the author(s), and do not reflect the views of RUSI or any other institution.

Published in 2016 by the Royal United Services Institute for Defence and Security Studies.



This work is licensed under a Creative Commons Attribution – Non-Commercial – No-Derivatives 4.0 International Licence. For more information, see <<http://creativecommons.org/licenses/by-nc-nd/4.0/>>.

RUSI Occasional Paper, March 2016. ISSN 2397-0286 (Online).

Royal United Services Institute
for Defence and Security Studies
Whitehall
London SW1A 2ET
United Kingdom
+44 (0)20 7747 2600
www.rusi.org

RUSI is a registered charity (No. 210639)

Abstract

THE PROLIFERATION OF weapons of mass destruction (WMD) and their delivery systems continues to be a serious threat to international security and stability. The deepening process of economic and supply-chain globalisation, e-commerce and rapid flows of trade and people have allowed proliferation activities to become more sophisticated and less visible. One country cannot deal with proliferation by itself. All countries should co-ordinate their efforts to counter this challenge.

China, as a country with a growing industrial production base, is a critical link in the international non-proliferation regime. Thus, its non-proliferation export-control practices play an important role in international efforts to counter proliferation.

This paper examines China's contemporary export-control practices, challenges and the recent efforts to improve the export-control system. It also identifies trends in the development of China's export controls and outlines the importance of the country's integration with global non-proliferation endeavours.

Recent Developments in China's Export Controls

THE RISKS ASSOCIATED with the proliferation of weapons of mass destruction (WMD) and their delivery systems are widely recognised as a threat to international security and stability. The international-security environment has dramatically changed since the end of the Cold War, and traditional and non-traditional threats have become intertwined, especially since the 9/11 attacks. The deepening process of economic and supply-chain globalisation, e-commerce, and rapid flows of trade and people are causing 'new threats which are more diverse, less visible and less predictable'.¹

The international community has taken comprehensive actions to counter proliferation. The UN Security Council adopted Resolution 1540 in April 2004, recognising the importance of export controls in preventing the proliferation of WMD and urging all countries to put in place a national export-control system.

The Chinese government believes that effective export control serves as an important means to pursue non-proliferation. China, as an emerging power of political influence and growing industrial-production capacity, is a critical part of global non-proliferation endeavours. The country has adopted comprehensive policies and measures in this regard.

Since the mid-1990s, China has been building up its non-proliferation export-control efforts. It has now established a comprehensive export-control system covering nuclear, biological, chemical, missile and related sensitive items and technologies, as well as all military products. Beijing has adopted relevant universal export-control measures, including a licensing system, end-user and end-use certificates, list controls and a 'catch-all' principle. After years of work, China has completed a transition in its non-proliferation export control from an administrative process to one based on law with relevant measures basically in line with common international practices.

This paper seeks to provide a comprehensive picture of Chinese export-control policy, practices, and the continual efforts to improve the system's effectiveness and efficiency. The paper first briefly introduces China's export-control policy, legal framework and daily management system. It then explores China's policy on enforcement, including case investigation, outreach to industry and industry compliance. The paper highlights recent developments in China's export-control system and the drivers behind these moves, and considers the potential significance of this momentum for wider efforts to deepen international partnerships with China in the export-control and non-proliferation field. The paper focuses only on WMD and related dual-use items, and therefore does not address conventional-arms export licensing.

1. European Council, 'A Secure Europe in a Better World: European Security Strategy', December 2003, p. 3.

Overview of the Contemporary Chinese System

China's Non-Proliferation Policy

China's non-proliferation policy has gradually evolved from resistance and suspicion at the beginning of the 1950s to being fully embraced in the 1980s. China is now firmly against the proliferation of WMD and their means of delivery, and firmly supports international non-proliferation efforts. China actively participates in non-proliferation processes and has signed all international treaties in this field.² The Chinese government believes that effective export control serves as an important means to pursue the goal of non-proliferation.

China attaches importance to international exchange and co-operation in the area of non-proliferation and export control. With a view to learning from other countries, Beijing maintains constant dialogue and communication with the EU, the US and other countries, organisations and multilateral export-control regimes.

Legal Basis

In China, there are three tiers of legal instruments governing export controls: national laws; regulations; and ministerial decrees.³ Two laws – the Foreign Trade Law,⁴ and the Customs Law⁵ – provide the legal basis for implementing national export controls.⁶ To enact China's non-proliferation policy and the country's international non-proliferation obligations, the government has used the authorisation granted by these two laws to promulgate a series of regulations and ministerial decrees, including official notices to administrate export controls (see Annex 1).

-
2. 'International treaties' in this paper refers to the Nuclear Non-Proliferation Treaty (NPT), the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC), to which China is already a signatory.
 3. The first tier is national laws, formulated by the National People's Congress. The second tier is regulations, formulated by the Chinese State Council, which is the top administrative organ of the Chinese government. It is headed by the premier and also consists of the vice premiers, State Council members and ministers of all government ministries. It has the power to formulate and issue regulations within the purview of a national law. The third tier is ministerial decrees, such as ministerial official notice or implementation measures, formulated by individual ministries or a few ministries jointly, to implement State Council regulations. The laws are signed for publication by the Chinese president. Regulations are signed by the premier and decrees by ministers.
 4. The Foreign Trade Law was enacted in 1994. Prior to then, Chinese foreign trade was regulated by administrative measures, based on regulations including Temporary Regulations for the Control of Foreign Trade and Implementation Measures on Import and Export Licence System. The Foreign Trade Law (1994) was revised in 2004 in light of China's increasing exports and admission to the World Trade Organization.
 5. The Customs Law was enacted in 1987 and revised in 2000.
 6. China does not have a national law on non-proliferation and export control. Although the Foreign Trade Law provided the legal basis for the current export-control system, it was primarily designed to promote and regulate foreign trade, rather than maintain security and ensure non-proliferation. However, the Chinese government is aware of this deficiency and is drafting a new non-proliferation law. This issue is discussed in greater depth later in the paper.

These regulations and control lists form a complete system for the export control of nuclear, biological and chemical weapons; missiles and other sensitive items and technologies; and all military products. The system integrates the valuable experience of multinational export-control mechanisms and widely adopts prevailing export-control methods and principles, including an export-registration system, licensing system, end-user and end-use certification and list-control method as seen in other countries but reflecting China's own national circumstances.

Besides these mechanisms, the competent export-control departments may implement temporary export-control measures on items and technologies which are not on the existing control lists. For example, China's Ministry of Commerce (MofCom), State Administration of Science, Technology and Industry for National Defence (SASTIND) and the General Administration of Customs (GAC) jointly issued Official Notice Number 50 (2006) on Temporary Export Control Measures on Graphite-Related Items,⁷ which took effect on 1 September 2006.⁸ The measure states that all graphite-related products need a licence before being exported from China.

The export-control-related regulations are undergoing continual revision and amendments in accordance with China's international obligations and practical needs. One example is the revision of the Regulations on Export Control of Nuclear Dual-Use Items and Related Technologies enacted in January 2007.⁹ Several important amendments have been added to existing regulations, including intangible technology transfer (ITT),¹⁰ customs enquiry,¹¹ company internal compliance requirements, the 'catch-all' principle,¹² the establishment of the

-
7. The Chinese official legal document 'Gong Gao' can be translated as 'Official Notice', 'Announcement', 'Circular' or 'Decree'. Here in the legal context related to export control, these documents are equivalent to an official ministerial-level legally binding document.
 8. The notice was published on the Ministry of Commerce's (MofCom) website. See Ministry of Commerce of the People's Republic of China Bureau of Industry, Security, Import and Export Control, 'Shangwubu: Guofang kegongwei, haiguan zongshu gonggao 2006 nian di 50 hao jue ding dui shimolei xiangguan zhipin shishi linshi chukou guanzhi cuoshi [Announcement No. 50 [2006] from the Ministry of Commerce, Commission of Science Technology and Industry for National Defense and General Administration of Customs: Implementing Temporary Export Control Measures on Carbon Graphite and Related Materials]', 31 July 2007, <<http://aqygzj.mofcom.gov.cn/article/zcgz/200607/20060702759453.shtml>>, accessed 17 February 2016.
 9. China joined the Nuclear Suppliers Group (NSG) in 2004. In order to better implement the NSG's guidelines and control lists, China revised the Regulations on Nuclear Export Control in 2006 and the Regulations on Export Control of Nuclear Dual-Use Items and Related Technologies in 2007.
 10. Article 2 of the regulation says that the term 'export' means the commercial exports of equipment, materials, software and related technologies, as well as foreign donation, exhibition, science and technology co-operation, aid, services and all other means of transfer.
 11. The customs-enquiry authorisation was first introduced in the revised Regulations on Nuclear Export Control in 2006.
 12. The 'catch-all' clause first appeared in the Regulations on Export Control of Missiles and Missile-Related Items and Technologies in 2002, Article 16: 'Where the exporter knows or should know that the missile-related items and technologies to be exported will be used by the receiving party directly in its programme for developing missiles and other delivering systems listed in the Control List that can be used to deliver weapons of mass destruction, the export shall be subject to the provisions of these Regulations even if the items or technologies are not listed in the Control List.'

Export Control Consulting Committee, and the authorisation for MofCom and the GAC to seize suspicious goods.

The authorisation of customs enquiries means that during the cargo inspection for clearance, any on-site customs officer may raise questions as to whether the item or technology an exporter intends to ship is controlled and may therefore require the exporter to apply to MofCom for a certification of the controlled or uncontrolled nature of the goods in question. Although the authorisation was introduced in nuclear-related regulations, customs officers can now refer and question suspicious goods of any nature. In the event that an official questions the veracity of the goods, the exporter has to submit a formal Business Enquiry¹³ document to MofCom with detailed information on the goods and the declared end-user. If the goods are found to be controlled, the exporter must apply for an export licence according to the provisions of the relevant regulations. The customs-enquiry mechanism is powerful and has prevented many suspicious exports from being exported.

The Export Control Consulting Committee, more often called the Export Supporting Committee, was established in 2004 and plays an important role in export-licensing processes. Experts in the committee perform technical consultation, items identification, policy assessment and scientific research. It has two subcommittees: one comprises dozens of policy experts and researchers from universities and think tanks and is designed to review existing policies; the other comprises scientists and technicians from nuclear, chemical, biological and missile fields and is designed to provide advice on technical matters during item classification, licensing and case investigation. The latter subcommittee is the more active of the two; it is often asked to evaluate items on control lists or threshold products, or help to decide whether a product will be controlled in the case of a Business Enquiry.

Division of Competencies

China's non-proliferation export-control regime involves numerous ministries, including MofCom, the Ministry of Industry and Information Technology (MIIT), SASTIND, the China Atomic Energy Agency (CAEA), the Ministry of Foreign Affairs (MFA), Chinese customs and others. A mechanism for a clear division of responsibility and co-ordination has been established between these departments. (For a full description of the departments involved, their functions and consultation mechanisms see Annex 2).

13. When an exporter encounters a Customs Enquiry or cannot be sure whether an export item falls into the scope of export control after consulting the official catalogue, the exporter shall file an enquiry to the local MofCom office. The local office will conduct an initial screening of the case and forward it with suggestions to MofCom for approval. MofCom may organise experts for review if necessary. After review, MofCom will issue a formal reply, stating explicitly whether an export licence should be granted.

Control Lists

Pursuant to the Measures for the Administration on Import and Export Licence for Dual-Use Items and Technologies (2005), enacted on 30 December 2006, MofCom and the GAC jointly compiled and published the Export Licensing Catalogue of Sensitive Items and Technologies. This is, in effect, China's catalogue of controlled dual-use items and technology. The catalogue integrated the control lists attached to individual regulations, covering all nuclear, biological, chemical, missile and dual-use goods and technologies. It is updated annually, with amended versions taking effect on the first day of each new calendar year.

The scope of the catalogue is basically in line with global multilateral export-control regimes. In the nuclear field, the control list completely matches those of the Zangger Committee and the Nuclear Suppliers Group (NSG). In the biological and chemical field, the lists are almost the same as those of the Australia Group. China's missile-related control list also conforms, by and large, with the annex to the Missile Technology Control Regime (MTCR).¹⁴ The List of Dual-Use Items and Technologies Banned from Export to the Democratic People's Republic of Korea is not part of the catalogue. It was announced separately and is discussed in greater detail below.

Missile Technology Control Regime

While other nations include the multilateral export-control measures outlined in the MTCR as part of their efforts to address the trade in dual-use and strategic goods, China is not currently a member of this arrangement. Nonetheless, even though its 2004 application to join the MTCR has not been accepted, China adheres to its guidelines on a voluntary basis. China hopes that this regime will be more inclusive in the future, particularly as discussions over the future of export-control regimes which exclude consideration of Chinese participation would constitute a missed opportunity for the global non-proliferation community.

Licensing

All of the items on the control lists require a licence in order to export them from China. There are two types of licences in China. The first is a Sensitive Items and Technologies Export Licence, which is an individual licence for a single transaction. The second is a General Permit for Export of Dual-Use Items and Technologies, which grants an exporter a certificate for multiple exports to one destination, or multiple exports to multiple destinations. China has established and maintains an e-licensing platform, which serves as a digital portal for officials

14. During the briefing on the issuance of the Regulations on Export Control of Missiles and Missile-Related Items and Technologies in August 2002, the then director general of the Arms Control Department of the Ministry of Foreign Affairs explained the difference between the Chinese list and the MTCR list. He noted that the Chinese list includes some items which are not on the MTCR list. Very few of MTCR items are not on the Chinese list, either because China does not produce these items or because the items are not fully understood.

and industries to submit and approve export licences. Every export licence must be applied to via the e-licensing platform.¹⁵

Central–Provincial Licensing System

China practices a two-level (central–provincial) application examination and approval system. All applications for an export licence from a local exporter are submitted through the e-licensing platform. As a first step, provincially based MofCom officers will conduct a pre-examination of the licence application. After this initial verification, qualified submissions will be transferred to MofCom’s central office in Beijing electronically. Once there the case will be examined further in consultation with other relevant departments including the MFA, the MIIT, the CAEA, SASTIND and the Ministry of Public Security, as well as other bodies such as the Ministry of Health if needed. If the application is approved, the case will be confirmed through the e-platform and the exporter will be informed. The relevant provincial MofCom office will then issue a formal export licence to the exporter.

There are thirty-two local offices which have authorisation to issue export licences, covering all Chinese mainland provinces and municipalities directly under the central government. Each has its own website and all export-control-related requirements and procedures are published there.

China’s Export-Control Enforcement Process

China has adopted a multidimensional approach to implementing and enforcing its export-control policies and regulations: from publication of information, guidelines and outreach training, to case investigation and punishment.

Information Publication and Guidelines

Each agency publishes all relevant policies, regulations, requirements and procedures on their individual websites. For all dual-use-related export controls, MofCom’s sub-domain for the Bureau of Industry, Security, Import and Export Control is the portal covering all of the regulations, requirements, licensing processes and required application materials as well as approval processes, control lists and news updates. MofCom also publishes a Licensing Guideline for Export of Dual-Use Items and Technology, containing all frequently asked questions and answers an exporter may require. Moreover, MofCom compiles all export-control-related regulations into one document on its website free for all exporters to download.

15. Ministry of Commerce of the People’s Republic of China Bureau of Industry, Security, Import and Export Control, ‘Liangyong wuxiang he jishu jinchukou guanzhi zhengwu pingtai [E-government Platform for the Management of Import/Export Controls for Dual-Use Material and Technology]’, <http://exctrl.ec.com.cn/tecp/corp_index.jsp>, accessed 17 February 2016.

Inter-Agency Co-ordination

In May 2004, the Chinese government established an inter-agency co-ordination mechanism for export control, which conducts investigations into certain serious suspected cases and deals with violators according to law. In recent years, efforts have been made to consistently strengthen this mechanism. More relevant ministries, such as those governing sea transportation, the banking system and the intelligence community, have been folded into the system and there is now a clearer division of labour. The following example illustrates how various agencies work together:¹⁶

In early September 2002, the Ministry of Foreign Affairs sent a letter to the China National Chemical Weapons Convention Implementation Office (NCWCIO) stating that ... a company in Liaoning intended to export two three-thousand-litre glass-lined distillation systems ... The letter requested that the NCWCIO conduct an investigation into the matter ...

The NCWCIO ... request[ed] that the end-user customer issue a document containing assurances that the imported items would only be used to produce civilian products, would not be used to produce chemical weapons, and would not be transferred to a third country ...

A letter of assurance [was provided] from the Embassy of the importing country to the NCWCIO. The document only mentioned that the imported equipment would be used for producing medicine, and did not state clearly that it 'would not be used for the production of chemical weapons and would not be transferred to a third country.' Therefore, the letter did not meet the NCWCIO's requirements ...

[In the meantime] NCWCIO learnt that the items had already been sent on the 19 September. Upon further investigation, the ship containing the controlled goods was found to be on its way to Hong Kong, and upon arrival it would proceed directly to the Middle East. The Ministry of Transportation issued an emergency order that the ship conduct an additional stop in Shenzhen's Chiwan port. Because of the interdepartmental co-operation ... four cases of goods were offloaded from the ship...

At the end of October, the Liaoning provincial government ... decided to remove the head of the company from its position, and fined the company 350,000 RMB.

The case shows that whenever a suspicious case emerges, relevant authorities have the capability to take immediate action. A case can be investigated by a single ministry, but on most occasions will be investigated jointly by several agencies. If information on a suspicious case originated from a foreign source, the MFA will receive the information and immediately inform the competent authorities directly related to the case, such as MofCom, customs or the Ministry of Transportation, for appropriate action.

16. The case is published on the website of the China Association of Controlled Chemicals. See China Controlled Chemicals Association, 'Jiankong huaxuepin jinchukou guanli yu fangkuosan yiguo jun [Management of the Import/Export of Controlled Chemical Products and Countering the Proliferation of Iranian by Yi Guojun]', 12 November 2013, <<http://www.zjhx.org/view.asp?id=215>>, accessed 17 February 2016. English translation supplied by RUSI.

Violation Detection and Case Investigation

There are several sources of information which may raise questions over the potentially suspicious nature of a transaction. Licensing and customs officers can find suspicious cases or unusual goods movements during the course of their daily work. Authorities sometimes receive industry reports or intelligence support from competent agencies or from international partners. Between 2004 and 2014, nearly 400 cases were investigated by the government. In 2014 alone, close to seventy cases were investigated.¹⁷

Penalty and Risk Management

Penalty measures are clearly outlined in each export-control regulation. Punishment may consist of warnings, confiscation of illicit income, economic fines, the cancellation of a company's privileges to carry out sensitive exports or imprisonment. Both MofCom and customs have the power to apply administrative punishments in response to confirmed violations. Where a crime is suspected, criminal liability will be investigated.

Details of some enforcement actions have been published by Chinese authorities. In one incident, Shanghai Zhitong Chemical smuggled potassium bifluoride. As a result, MofCom cancelled its registration record on dual-use items from 5 April 2007 meaning the company was no longer able to export controlled goods. In a separate case, Shandong Zibo Beite Chemical was found to have exported glass-lined vessels without a licence. The company was fined 450,000 RMB by MofCom on 14 November 2007 as a result.

Competent authorities have put the companies with records of violations, either in terms of administrative or criminal liability, on a 'watch list' to prevent the recurrence of similar activities. This list is maintained for internal use and is not made publicly available. As a matter of course, MofCom and the GAC screen applications and shipments against this list during the process of licensing, customs monitoring and cargo clearance. Chinese customs also maintains a larger list of company names for risk analysis. This list is for monitoring companies which conduct especially sensitive exports or frequently export to sensitive destinations.

Implementation of UN Security Council Resolutions

China has consistently implemented all relevant UN Security Council resolutions. As soon as a resolution is passed, the Chinese government will publicise the resolution on relevant ministerial websites, such as the MFA's or MofCom's.¹⁸ All exporters are required to look through these sanctioned parties during their international-trade transactions.

17. These numbers were released by government officials during the export-control workshop held in January 2015 in Chongqing, China. The workshop was jointly organised by the China Arms Control and Disarmament Association and King's College London.

18. The MofCom website has published a number of relevant resolutions including UN Security Council Resolutions 1737, 1747, 1803, 1835 and 1929 on Iran; and UN Security Council Resolutions 1718 and 1874 on North Korea. These have been published to remind exporters of their

If concrete actions need to be taken in order to implement UN Security Council resolutions, competent authorities will issue official notices or measures, based on Chinese laws, to spell out stipulations. For example, on 23 September 2013, four Chinese ministries – MofCom, the MIIT, the GAC and the CAEA – based on the Foreign Trade Law, jointly issued Official Notice Number 59 (2013), listing dual-use items and technologies banned from export to North Korea.

The general statement of the ban list identifies four fields which are subject to controls: nuclear; missile-related; biological; and chemical-related items. It also mentions some supplementary items, such as graphite and special valves. This 236-page list of items informs all Chinese companies and individuals that goods on the list cannot be exported to North Korea. The official explanation was that the publication of the compiled list was not a punishment in response to North Korea's third nuclear test, but a measure to push it back on track to denuclearisation. However, it has been widely suspected that it was a clear warning to Pyongyang.

In addition to the publication of the ban list, government agencies also take other measures to further promote the implementation of UN resolutions. This issue is always important at training workshops, especially for those targeting sensitive industries in particular provinces. One example is a non-proliferation export-control training workshop which was held on 11 June 2015 in the city of Dandong,¹⁹ and organised by the NCWCIO of Liaoning province. At the workshop, trainers reiterated the importance of looking into China's export control and ban lists concerning sensitive countries, and urged exporters to pay particular attention to any related business enquiry from any foreign entity. This kind of export-control workshop is frequently happening across China, especially in provinces with a heavy industrial base or with proliferation-sensitive industries. (For more information on government–industry training workshops see Annex 3.)

Industry Compliance and Internal Compliance Programmes

Internal compliance programmes (ICPs) have been an important element of China's export-control system. To improve the implementation of relevant Chinese regulations, MofCom promulgated ICP guidelines in 2007 (MofCom Announcement Number 69). These introduced the

obligations to abide by them. For example, UN Security Council Resolution 1835 (2008) is available at Ministry of Commerce of the People's Republic of China Bureau of Industry, Security, Import and Export Control, 'Lianheguo anlihui di 1835 (2008) hao jueyi, guanyu yilang he wenti [United Nations Security Council Resolution 1835 (2008) on the Iranian Nuclear Problem]', 10 November 2010, <<http://aqygzj.mofcom.gov.cn/article/zcgz/201504/20150400952914.shtml>>, accessed 17 February 2016; for Resolution 1874 (2009) see Ministry of Commerce of the People's Republic of China Bureau of Industry, Security, Import and Export Control, 'Lianheguo anlihui di 1874 hao jueyi (2009 nian 6 yue 12 ri, guanyu chaoxian he wenti [United Nations Security Council Resolution 1834 (12 June 2009) on the North Korean Nuclear Problem]', 18 June 2009, <<http://aqygzj.mofcom.gov.cn/article/zcgz/201504/20150400952906.shtml>>, accessed 17 February 2016.

19. Dandong is located on the Chinese border with North Korea. For the news report see Liaoning Provincial Economy and Information Commission, 'Jiankong huaxuepin fang kuosan peixun huiyi zai Dandong zhaokai [Training Course on Countering the Proliferation of Controlled Chemical Products Convenes in Dandong]', 24 June 2015, <<http://www.lneic.gov.cn/lnjxw/2015/06/24/77751.html>>, accessed 17 February 2016.

ICP guiding concept, principles and core elements. Basic elements of these guidelines include: a publicly available company policy on non-proliferation and export control; a management team; internal operational procedures; and records-keeping requirements.²⁰ Continual training was highly recommended.

MofCom encourages all relevant enterprises that conduct research and development, manufacturing or foreign trading in dual-use products to establish an ICP. As stipulated in the Regulation on General Permits, an ICP is a requirement for any company wishing to apply for a General Permit for export. Whether a company has an active ICP will also be an important consideration when reviewing the company's licence applications. A company with an ICP can be expected to benefit from a shorter licence-application processing time and customs-clearance process compared with one without an ICP.

After years of outreach by the government, Chinese industry has begun to appreciate that non-proliferation and export-control compliance is not only a legal obligation, but a measure for self-protection. Compliance can make trade generally safer, enhance a company's reputation and mitigate the prospect of incurring fines or other forms of punishment. Thus, ICPs are now widely understood among Chinese companies to be a concrete measure of risk management. Major corporations, such as China North Industries Corporation, China Machinery Engineering Corporation, China Great Wall Industry Corporation, Huawei Technologies and Poly Technologies, have established robust ICPs.

Yet, as in other countries, while many larger firms have successfully implemented ICPs, the programmes in many small- and medium-sized companies remain deficient. These companies often face personnel or financial resource constraints which impede their ability to devote efforts to devising and enacting an effective ICP. Furthermore, the goods they export may be limited in nature, quantity or destination, raising internal resistance to adopting wider-ranging compliance mechanisms. The Chinese government is aware of these difficulties and has focused particular attention on dealing with awareness and the compliance practices of these companies. Whenever an outreach event is held, all relevant companies in the surrounding area, regardless of their size, are informed and invited to participate.

Training and Outreach

Training related to export control, such as that given to local MofCom and customs officers as well as to industry, is regarded as critically important and the best way to implement national export-

20. The document is available at MofCom's website. See MofCom, 'Zhonghua Renmin Gongheguo Shangwubu: Gonggao 2007 nian di 29 hao [Ministry of Commerce of the People's Republic China: Announcement No. 69]', 2007, <<http://aqygjz.mofcom.gov.cn/article/zcgz/200709/20070905071676>>, accessed 17 February 2016. For example, the records-keeping requirement says that an exporter shall maintain complete and correct accounts of export-related documents, including export records, communications record with government offices, client information and exchange documents, licensing documents and execution documents. All important exchanges by telephone, fax, e-mail or other means of communication should be documented as memos.

control regulations. Thus, to date the Chinese government has devoted substantial resources to providing export-control training, seminars and other government–industry interactions.

There is no single training organisation that conducts these programmes. Due to China's size and the variety of agencies with authority in this area, the training is mainly conducted through each individual agency's management system. For example, there are five primary providers of this form of educational outreach: MofCom focuses on dual-use items, the NCWCIO on controlled chemicals, the CAEA on nuclear exports, SASTIND on arms exports and the GAC on customs officers.

Naturally, while each training session will be tailored to take into account the nature of the sector or industry being approached, training content is largely consistent across fields. In addition to the five government agencies providing educational outreach, there are two secondary providers actively involved in export-control training: NGOs; and industry itself. These seven parties together constitute a comprehensive non-proliferation export-control training network running throughout China. No statistics on the number of annual export-control training sessions are currently available, though details of a few recent events have been included in this paper in Annex 3.

After years of educating and training, export-control knowledge has greatly improved in China. Continual training will keep the momentum. Two priorities are showing the new trend. The first is having more special training courses on policies, regulations and enforcement skills in cities prone to cases of illegal exports. The second is a greater focus on small- and medium-sized enterprises in the manufacturing sector as well as trading companies and various intermediary agents involved in customs clearance and logistics.

Challenges

Despite the strides made in recent years, China's export-control system continues to face major challenges ranging from internal management to sensitive goods which are being sought by illicit foreign buyers.

China's manufacturing and export industry is vast, and its international connectivity unparalleled. Recent figures show that in the first ten months of 2015, Chinese exports reached \$1.8 trillion. Mechanical and electrical products accounted for over \$1 trillion of this amount. In 2014, over 370,000 Chinese companies were engaged in export activity. Of those companies, 70 per cent were private (that is, not state-owned) entities.²¹ Although only a very small portion of these

21. This figure is based on data from two sources. See Global Government Affairs Network, 'Zhongguo duiwai maoyi xingshi baogao (2015 nian chunji) [Report on China's Foreign Trade Situation (2015 Spring Edition)]', 10 May 2015, <http://www.govinfo.so/news_info.php?id=48518>, accessed 17 February 2016; Zhejiang Online, '2014 nian zhongguo duiwai mao 200 qiangbangdan chulu Ningbo 3 qiye shangban [List of China's Top 200 Foreign Trading Companies in 2014 is Released: 3 Ningbo Companies Included]', 30 April 2015, <<http://zjnews.zjol.com.cn/system/2015/04/30/020630359.shtml>>, accessed 17 February 2016.

companies conducted proliferation-sensitive trade, the size of that contingent is larger than in other countries and continues to grow. This creates persistent challenges for the Chinese government in preventing illegal exports, whether as a result of deliberate violations or through deficient internal compliance and due diligence.

The task is becoming more difficult for other reasons as well. A number of factors have made the flow of goods and technology between nations increasingly difficult to monitor and control, including: increasing complexity in the global supply chain; and developments in information technology and e-commerce. Consumer pressures for timely access to goods have magnified these challenges.

China is targeted by many front companies from other countries or foreign buyers seeking sensitive goods and technology. Their activities are often covert; transit and transshipment control is still difficult to achieve. In order to cope with these challenges, China's capabilities in intelligence-gathering, monitoring and detection, and investigation and enforcement need continual improvements.

China also faces some internal challenges. For example, the country does not yet have a unified national law on non-proliferation and export control. The present legal system comprises specialised regulations governing a particular field of export control, and ministerial official notices and implementation orders. The enforcement power of these regulations can be compromised when they conflict with other trade or administrative national laws. Fortunately, actions have been taken by the government and new laws on export control are planned. Details of these are discussed in later sections of this paper.

New Developments on China's Export-Control Regime

Since President Xi Jinping came to power in 2012, China has experienced further economic and social reform. The meeting of the third plenary session of the 18th Central Committee of the Communist Party of China (CPC), held in November 2013, was significant and tackled key areas of Chinese society, including governance, the financial system and national security. One of the decisions of the meeting was to establish a new National Security Commission.

The National Security Commission convened its first meeting in April 2014, during which President Xi first proposed his Overall National Security Outlook. China's ambassador for disarmament affairs, Wu Haitao, outlined the idea at the general debate of the First Committee of the 69th Session of the UN General Assembly in October 2014: 'China will not only pay attention to its own security, but also to collective security ... These are China's response to various security challenges under new circumstances, and also the fundamental principle of China's participation in international security affairs.'²²

22. Wu Haitao, 'Statement by H.E. Ambassador Wu Haitao of China at the General Debate of the First Committee of the 69th Session of the United Nations General Assembly', Permanent Mission of the People's Republic Of China to the United Nations Office at Geneva and other International

Another important meeting, the fourth plenary session of the 18th Central Committee of the CPC, held in October 2014, may also have a substantial impact on Chinese governance in the future. Rule of law – including a blueprint for building a socialist country based on this principle – was placed at the top of the agenda and ‘set the tone for the CPC to promote rule of law in China in an all-rounded manner, under new circumstances’, according to Xinhua.²³

These new concepts inevitably impact China’s foreign policy on non-proliferation and practice on export control. On the non-proliferation side, security will have more weight in discussions on trade promotion. A stronger legal basis for non-proliferation and export control will be created, with new laws to be drafted to fill in the gaps in the current legal framework related to non-proliferation. Relevant ministries are therefore expected to make efforts to strengthen work on these issues.

In recent years, work has been done both bilaterally and multilaterally on non-proliferation issues. Bilaterally, China has strengthened discussions with the US – non-proliferation and export-control issues now have more weight in the strategic and economic dialogues between the two countries. An unprecedented bilateral non-proliferation mechanism, the US–China Nonproliferation Joint Working Group, was established and had its first round of meetings in December 2014, followed by consultation on enforcement measures in April 2015. Multilaterally, China has strengthened its co-ordination with other parties on major regional proliferation issues and continued its engagement with multilateral export-control regimes. China is demonstrating its long-term commitment to the non-proliferation agenda. It has also showed its intention to participate in global governance and to accumulate soft power more generally.

The Evolution of the Export-Control Bureaucracy

In April 2014, MofCom established a new department called the Bureau of Industry, Security, Import and Export Control. Before its creation, the export-control function was performed by Division I, which oversaw import control,²⁴ and Division II, which oversaw export control, in MofCom’s Department of Mechanical, Electronic and Hi-Tech Industry. These two divisions were enlarged to six units with detailed functions and additional staff: the Division of Policy Planning; the Division of Industrial Competitiveness; the Division of Security Review; the Division of Licensing; the Division of Investigation and Enforcement; and the Office for General Affairs.

With the enlargement, the staff assigned to tasks related to export control increased from a dozen to more than thirty. Much of the work performed by Division II, such as licensing or case investigation, is now allocated to separate divisions. For example, the Division of Licensing will

Organizations in Switzerland, 9 October 2014, <<http://www.china-un.ch/eng/dbtyw/t1199382.htm>>, accessed 11 February 2016.

23. *Xinhua*, ‘CPC Convenes First Plenum on “Rule of Law” in Reform, Anti-Graft Drive’, 20 October 2014.

24. The main function of Division I was to respond to requirements of foreign countries on export-related matters involving China, including issuing end-use and end-user certificates.

focus on export-licence review and approval, and the Division of Investigation and Enforcement has access to additional resources to focus its work on enforcement.

There are several goals of this new bureau. The foremost aim is to fulfill China's international obligations and safeguard its national security. To achieve this objective the bureau is tasked with: refining national import- and export-control laws and the system of regulations and policies; improving the import and export licensing system and the management and technical evaluation of the control lists; strengthening investigation and enforcement; and exploring an import-security-review mechanism related to national security and trade control.

Other goals include urging foreign countries to relax controls on China in relation to hi-tech products and services, seeking hi-tech and strategic trade co-operation with other countries, improving consultation mechanisms on bilateral and multilateral export control and hi-tech trade, analysing the competitiveness capacity of key industries, encouraging innovation in the development of new technologies, developing a system of common standards and making improvements to the intellectual-property regime.

Also in 2014, the MFA made changes to the 2nd Division of the Arms Control Department, whose function previously focused on the implementation of the Chemical Weapons Convention and the Biological Weapons Convention; it is now to be known as the Non-Proliferation Division, focusing on non-proliferation and affairs related to export control, especially case investigation. Besides this adjustment, the MFA created a new position for a non-proliferation co-ordinator, based in the Arms Control Department. The co-ordinator will help to strengthen the inter-agency co-operation among Chinese ministries, and co-ordinate and strengthen China's non-proliferation exchanges and co-operation with international partners. In a similar vein, the MFA also set up non-proliferation attachés in key countries with the aim of promoting non-proliferation co-operation.

In yet another development, a prompt-response mechanism at the local level, known as the Provincial Emergency Responsive Mechanism, was established on a trial basis in 2014. In six provinces – where sensitive industries are concentrated or proliferation-prone activities with illicit procurement tend to happen more frequently – the direct links among central government agencies, provincial departments and city offices have been consolidated.

The purpose of this initiative is to immediately respond to any urgent situation concerning proliferation and conduct case investigations. At the central level, several key agencies are involved, including the MFA, MofCom, the MIIT, the CAEA, SASTIND, the GAC and the People's Bank of China. At the local level, all relevant offices stand ready to co-operate with other authorities whenever needed. This recent activity in the export-control field suggests that China is intent on enhancing its ability to detect, control and respond to proliferation-sensitive trade and engage authorities at all levels.

New Export Controls on Unmanned Aerial Vehicles and High-Performance Computers

On 25 June 2015, four Chinese ministries – MofCom, the GAC, SASTIND and the General Armament Department of the People's Liberation Army – jointly announced Public Notice Number 20, 2015, on Temporary Control of Military and Civilian Dual-Use UAV Export. According to the new notice, from 1 July 2015, unmanned aerial vehicles (UAVs) made in China with a flying range equal to or greater than 300 kilometers, or with a load-carrying capacity of more than 20 litres, will be subject to export controls.

Although it was called a 'temporary control' – like the temporary control on graphite-related products in 2006 – it may become permanent. The controlled items conformed to the requirements of the Category II control list specified by the MTCR; it also reflected Items 19, 19.A.2 and 19.A.3 relating to complete UAVs with certain capacities.²⁵

Furthermore, on 31 July 2015, MofCom and the GAC jointly issued an Official Notice on Strengthening the Export Control on Certain Dual-Use Items (No. 31/2015),²⁶ with the parameters for the controlled items and licensing process attached. Additional types of UAVs have been placed under export control, as well as high-performance computers (HPCs). According to the annex to the notice, controls will be applied to UAVs which: have a cruising capacity of more than 30 minutes out of eyesight of the operator and are capable of flying in wind speeds of more than 46.3 kilometers per hour; or are capable of staying aloft for more than an hour. All the equipment and spare parts of these UAVs will be controlled, including flight engines which allow UAVs to reach altitudes above 15,420 meters (50,000 feet).

HPCs that are capable of performing more than 8 trillion floating point operations per second, as well as their specially designed electronic components and external interconnecting devices with 2 gigabits per second of networking capacity, are also placed under export control.

Since 15 August 2015, all items listed require a licence before export. According to a MofCom spokesperson in a statement made on 7 August 2015, the new rule aims to maintain national security and strengthen export control on sensitive items. The spokesperson also mentioned that the action was in line with related international export-control mechanisms. According to the statement, 'Bringing the sensitive items above into the export control contributes to maintaining China's national security and better fulfilling related international obligations; it also contributes to creating a safe trade environment for enterprises and promoting the healthy development of the industries.'²⁷

25. For further information, refer to the MTCR control list. MTCR, 'Missile Technology Control Regime (M.T.C.R.): Equipment, Software and Technology Annex', MTCR/TEM/2015/Annex, October 2015.

26. MofCom, 'Shangwubu haiguan zongshu gonggao 2015 nian di 31 hao guanyu jiaqiang bufen liangyong wuxiang chukou guanzhi de gonggao [General Customs Administration of the Ministry of Commerce Announcement No. 31 on Strengthening Export Controls on Certain Dual-Use Items]', 31 July 2015, <<http://www.mofcom.gov.cn/article/b/e/201507/20150701067575.shtml>>, accessed 17 February 2016.

27. MofCom, 'Regular Press Conference of the Ministry of Commerce on August 4, 2015', August 2015, <<http://english.mofcom.gov.cn/article/newsrelease/press/201508/20150801074148.shtml>>.

Annex 2 of the Official Notice spells out the export licensing process for controlled UAVs and HPCs. It reminds all exporters of these sensitive products to register with MofCom for approval to export. Such a reminder is necessary because the new controls will cover many products which were not previously controlled. Many companies producing these controlled products were not previously registered as an exporter of sensitive items and may therefore lack experience in export licensing.

This MofCom and GAC control list enlarges the scope of controlled items so that it more closely reflects the MTCR list. This is particularly important for China since it is reported that 70 per cent of global commercial UAVs are produced in the country;²⁸ although more advanced UAVs still tend to be produced in just a few Western countries.

With such a large stake in the trade of commercial UAVs, it makes sense to regulate UAV exports in order to prevent them from falling into the wrong hands, such as terrorist groups, or limit the possibility of other states using these commercial products for military purposes. Another reason for implementing these controls can be to prevent China from losing its competitive advantage by limiting the proliferation of these key technologies.

Updates on the Control List and the Dual-Use Catalogue

Revision of the Control List

On 13 May 2015, MofCom and the CAEA jointly announced Official Notice Number 14, 2015, which revises the Export Control List of Nuclear Dual-Use Items and Technologies. The new list went into effect from 1 July 2015. Twenty-eight new items have been added to the new list, following the updated NSG control list of June 2015.

Updates on the Dual-Use Catalogue

On 30 June 2015, MofCom and the GAC jointly announced Notice Number 21, 2015, which updated the Dual-Use Items and Technologies Import and Export Management Catalogue. The revised catalogue went into effect on 1 July 2015. The new version incorporates the nuclear dual-use control list updated on 13 May 2015 and creates a new item, Number 196 under missile-related items, listing UAVs controlled by Official Notice Number 20 of 25 June 2015.

As stated above, MofCom and the GAC generally update the Dual-Use Catalogue at the end of the year and the new catalogue will be effective on the first day of the new calendar year. The deviation from this standard practice in June 2015 was likely due to the comparatively major update required for the control lists. It may also be a way for agencies to increase their efficiency and ensure that industry avoids any mistakes during the time window between individual list

accessed 11 February 2016.

28. See Changjiang Daily, 'Wurenji he chaoji jisuanji lieru chukou guanzhi minglu [Drones and Supercomputers Included in Export Control List]', 5 August 2015, <<http://www.chinanews.com/it/2015/08-05/7448966.shtml>>, accessed 17 February 2016.

updates and the comprehensive catalogue updates, as many companies are used to checking the Dual-Use Catalogue and may overlook the individual control-list updates.

New Efforts on Strengthening the Legal Basis for Export Control

As mentioned previously, China is promoting the rule of law in a number of areas. Although China's export-control licensing and management systems run well under current regulations, the introduction of a governing law to sit above these can further strengthen the legal framework relating to the country's export-control processes and better promote non-proliferation policy and export-control practices.

Currently, China's Foreign Trade Law mainly provides the legal foundation for the country's export controls. Based on this law, the Chinese government has promulgated a series of regulations on activities related to export control. But the Foreign Trade Law only provides basic guidelines on import and export control, and it is primarily oriented to promote and regulate the economic aspects of foreign trade. Non-proliferation export-control laws should be chiefly based on striking a balance between security and economic interests. It is now time for China to formulate its laws related to non-proliferation and export control.

The Non-Proliferation Law

The MFA is drafting a non-proliferation law which aims to address new challenges, such as non-state actors, and upgrade the current system. Unlike regulations, this governing law will focus on higher-level non-proliferation goals and the establishment of a wide-ranging national system, rather than concentrating on operational-level matters such as licensing, agency co-ordination and enforcement.

The main goal of the law is to define a citizen's rights and obligations in relation to China's non-proliferation policy. Chinese officials believe that greater awareness of non-proliferation among all of the country's citizens has become essential for the fulfillment of national non-proliferation objectives. It is particularly urgent since Chinese small- and medium-sized companies are producing increasing numbers of hi-tech dual-use goods of increasing sophistication.

Furthermore, this law will simplify the process of translating international law and UN Security Council resolutions into domestic legislation. The concept of 'all process control' will be introduced into the new non-proliferation law. This concept refers to the monitoring and control of a controlled item or technology, from R&D, to manufacture, transport, export and shipment. This will expand Chinese export control to cover the whole lifecycle of the sensitive product.

In addition, since China's present export-control arrangements are operating within Chinese borders to avoid 'extraterritorial sovereignty', the issue of how to address violations which take place outside of Chinese territory is likely to be considered in the process of formulating the new governing law.

The Export-Control Law

An export-control law is being drafted by MofCom which will aim to strengthen China's legal framework for export control, including enforcement capacity and mechanisms, and inter-agency co-ordination processes. It will also increase the minimum penalties for violations.

A very important measure will be the increased authorisation for export-control enforcement forces within MofCom and the customs service to detain suspected personnel and goods, forcibly check suspicious goods and confiscate relevant evidence. Currently, these agencies have to call in the police and other departments to take enforcement actions. A clearer division of labour among ministries on issues of enforcement will be clarified to improve the efficiency of actions taken under the new law. It will also contain measures to refine the present process, such as standardising management processes and increasing government–industry interaction.

It is widely assumed that this export-control law will also address dual-use items controls related to conventional weapons, creating a list similar to the Wassenaar Arrangement's dual-use list, which China still lacks. It is likely that more items with security implications will be added to the control list in the future.

The present Dual-Use Catalogue will likely continue to be used even after the introduction of the new law. Whether China will adopt a Western-style listing and coding control list in the long term is still not clear.

The two laws mentioned above are currently being drafted and will shortly move to the next stage: agency review. They have not yet been sent to the National People's Congress for approval, but it is expected that the laws will be enacted before 2020.

Conclusion

China's security concept and non-proliferation regime have been gradually evolving. China argues that peace and development has become the main theme of the times and that human society has increasingly become a community of integrated interests and shared futures. Meanwhile, the world is still not tranquil, with lingering wars, turbulence and rising non-traditional security threats, such as terrorism, extremism, epidemics, and the proliferation of WMD and advanced lethal weapons.

Meeting these challenges is a vital task for all countries. The Chinese government has devoted significant resources and efforts to improving the enforcement and management of export controls. The recent updates on control lists and new controls on UAV technology demonstrate China's willingness to adhere to the practices of international non-proliferation regimes. Similarly, continual efforts to increase the number of export-control practitioners, strengthen China's enforcement capacity and the plans to expand legislation in the near future demonstrate the country's ambition to create a robust export-control system to counter proliferation.

China's growing position as a source of advanced dual-use products and its connection to international markets will make the country an even-more significant actor in the non-proliferation arena. Enhancing its ability to control sensitive exports is therefore essential and carries notable potential benefits for non-proliferation and international security.

Export-control policies and practices within China will undoubtedly continue to be the subject of scrutiny and criticism, not least because of their international importance. China has a relatively short history in issues related to export control – around two decades – and so there is still much improvement to be made.

Experts, both inside and outside China, should look ahead with a view to facilitating these improvements. China would welcome other states sharing their experience in this area with Beijing; it would similarly welcome all forms of support and co-operation from the global security community. Ultimately, it aspires to be an equal partner in countering WMD proliferation and all other forms of illicit dangerous trade. Its recent strides show the country's intention to be regarded as such a partner. A China that is more fully integrated into global economic, security and political systems is in the interests of all states – this is the only way to face the world's current challenges.

Since China is already a major source of sensitive products, it has become a critical link in international non-proliferation efforts. China continues its efforts to improve its export-control practices, and such enormous efforts show that it is willing to be part of the international non-proliferation regime. The country has adopted highly responsible policies and measures in non-proliferation export control. After years of endeavor, export-control measures are in line with common international practices.

The Chinese government has attached great importance to law enforcement and has adopted a series of effective measures to ensure the implementation of laws and regulations on export control. Beijing has emphasised the need to raise public awareness on these issues and has reached out to industry. Dozens of export-control workshops happen every year throughout the country. Compliance concepts and associated internal programmes have been embedded in many Chinese companies.

China's movements in recent years to enlarge its export-control bureaucracy and increase practitioners working in the area, and to update its export-control lists so that they fully match with multilateral export-control regimes shows China's willingness to practice export control effectively as well as its readiness to join international regimes as a responsible partner.

China expects the international community to respond positively to its commitment and partner with it. If tangible results can be seen, such as overcoming the obstacles preventing China from joining the MTCR, China will be greatly motivated to integrate with multilateral export-control regimes more quickly and finally join the Australia Group and Wassenaar Arrangement. Non-proliferation export control is a long-term policy. The Chinese government will continue to improve its management practices, enhance its enforcement capabilities and publicise relevant

legislative developments; moreover, it will focus on education and training for enterprises operating in the sector. Taken together, these measures are part of China's wider plan of making contributions to international non-proliferation efforts.

Annex 1: Chinese Regulations on Export Control

Regulations

1987: Regulations on the Control of Nuclear Materials.

1995: Regulations of the People's Republic of China (PRC) on the Administration of Controlled Chemicals, and the Controlled Chemicals List.

1997: Regulations on Nuclear Export Control of the PRC – revised in 2006.

1997: Regulations of the PRC on Administration of Arms Export and Military Products Export Control List (2002).

1998: Regulations on Export Control of Nuclear Dual-Use Items and Related Technologies of the PRC, and its Control List – revised in 2007.

2002: Regulations on Export Control of Missiles and Missile-Related Items and Technologies of the PRC.

2002: Regulations on Export Control of Dual-Use Biological Agents and Related Equipment and Technologies of the PRC – revised in 2006.

2002: Regulations on Export Control of Certain Chemicals and Related Equipment and Technologies of the PRC and its Control List.

Ministerial Decrees (based on regulations, specific orders or notices to implement regulations from competent ministries)

1997: Detailed Implementation Measures on the Regulations on Administration of Controlled Chemicals, by the then Ministry of Chemical Industry, currently part of the Ministry of Industry and Information Technology (MIIT).

2002: Measures on the Administration of Export Registration for Sensitive Items and Technologies, by the Ministry of Commerce (MofCom).

2003: Measures on the Administration of Transshipment and Territory Transit of Nuclear Products (Trial Implementation), by the State Administration for Science, Technology and Industry for National Defence (SASTIND), MofCom, the General Administration of Customs (GAC).

2005: Measures for the Administration on Import and Export Licence for Dual-Use Items and Technologies, by MofCom and the GAC.

2006: Measures for Classified Administration of the Export of Civil Aviation Spare Parts, by MofCom and the GAC.

2009: Measures on General Permit for Export of Dual-Use Items and Technologies, by MofCom.

Annex 2: Chinese Export-Control Agencies and Their Functions

Ministry of Commerce

The Ministry of Commerce (MofCom) is in charge of the export of nuclear dual-use items, dual-use biological agents, certain chemicals, and missile-related dual-use items and technologies for civilian use.

Ministry of Industry and Information Technology

Under the Ministry of Industry and Information Technology (MIIT), three departments are responsible for different areas of control:

- China's National Chemical Weapons Convention Implementation Office (NCWCIO), based in the Safety Production Bureau of the MIIT, is in charge of the export approval of controlled chemicals
- The State Administration of Science, Technology and Industry for National Defence (SASTIND) is in charge of arms exports
- The China Atomic Energy Agency (CAEA) is in charge of nuclear items and technology export.

Export applications are subject to examination by the office in charge, in co-ordination with other relevant government agencies. For example, the export of nuclear dual-use items and missile-related dual-use items and technologies is subject to examination by MofCom in co-ordination with SASTIND. The export of dual-use biological agents and technologies related to animals and plants is subject to examination by MofCom, in co-ordination with the Ministry of Agriculture if needed. The export of dual-use biological agents and technologies related to humans is subject to examination by MofCom, in co-ordination with the Ministry of Health. The export of equipment and technologies related to dual-use biological agents and of equipment and technologies related to certain chemicals is subject to examination by MofCom, in co-ordination with the MIIT. The export of controlled chemicals is subject to examination by MIIT, in co-ordination with MofCom.

An exporter applies to the agency in charge of its category of export. For example, for any controlled chemical export, an exporter needs to apply to the MIIT. Nonetheless, all export licences will be issued by the MofCom Quota and Licence Administrative Bureau for unified management. An exporter will use the approval document from the MIIT to obtain a paper export licence from MofCom or local MofCom offices.

The export of sensitive items and related equipment and technologies that are related to foreign policy is subject to examination by the competent departments mentioned above, in coordination with the Ministry of Foreign Affairs. Where the export items entail significant impact on national security and matters of public interest, the competent departments submit, jointly with other relevant departments, the case is taken to the State Council and the Central Military Commission for approval.

The General Administration of Customs is responsible for the supervision and control of the export of the above-mentioned items and technologies, and it also participates in investigating and handling cases of illegal exports.

Annex 3: China's Industry-Outreach Activities

Ministry of Commerce System on Dual-Use Items

Due to China's industrial manufacturing base, the Ministry of Commerce's (MofCom) dual-use control covers a large number of dual-use products, enterprises and trading companies. MofCom uses its nationwide network to conduct dozens of events every year. Its work occurs at three levels: national; provincial; and metropolitan.

National Level

In the first ten years of China's development of export controls the MofCom conducted nationwide export-control training either by itself or jointly with local MofCom departments, especially after new regulations were enacted. This was implemented as local MofCom officials were not very familiar with export-control regulations or practices. For example, on 11–12 August 2004, MofCom, together with Liaoning, Jilin and Heilongjiang provinces – the three provinces in northeastern China with heavy-industry bases – conducted an export-control training workshop. Trainers came from Ministry of Foreign Affairs (MFA), MofCom, the National Chemical Weapons Convention Implementation Office (NCWCIO), the State Administration of Science, Technology and Industry for National Defence (SASTIND) and the General Administration of Customs (GAC).¹

Another good example is the event held on 15–17 November 2006 when MofCom conducted a nationwide graphite-related industry training meeting. This was conducted soon after control measures were announced in July and entered into force on 1 September 2006.² More than 200 participants joined the meeting.

MofCom now relies on its local offices to conduct export-control training. But MofCom keeps its export-control focus through its nationwide Annual Industry Security and Export Control Meeting. During the meeting, the non-proliferation situation and challenges, both internal

-
1. Department of Science and Technology, Ministry of Commerce, 'Guanyu zhaokai "dongbei san sheng minggan wuxiang he keji chukou guanzhi peixun ban" de tongzhi [Announcement on the Convening of Training Courses on Import-Export Controls for Sensitive Items and Technology in the Three North-Eastern Provinces], 27 July 2004, <<http://www.mofcom.gov.cn/aarticle/h/redht/200407/20040700254971.html>>, accessed 16 February 2016.
 2. Department of Science and Technology, Ministry of Commerce, 'Guanyu zhaokai "shimolei xiangguan zhipin jingying danwei chukou guanzhi peixun hui" de tongzhi [Announcement on the Convening of Training Courses for Work Units Engaging in Business Related to the Import and Export of Graphite-Like-Carbon and Related Products]', 24 October 2006, <<http://www.mofcom.gov.cn/article/h/redht/200610/20061003503585.shtml>>, accessed 16 February 2016.

and international, are discussed, annual work analysed and the focus of work next year agreed upon. Participants come from all provincial MofCom offices.

Provincial Level

Provincial MofCom offices are the main body responsible for training workshops. For example, the Commercial Department of Hebei province, surrounding Beijing and Tianjin, conducts an export-control workshop every year.³ Participants in this kind of provincial-level training workshop include city-level commercial office supervisors and officers-in-charge, industry representatives, as well as large and small manufacturers and trading companies. Trainers running the workshops come from central government offices, typically including MofCom, MFA and GAC officials. A single event generally involves 80–120 participants.

Metropolitan Level

After provincial training, the commerce department of a city can also organise additional training. For example, the Commerce Department of Qingdao – a coastal city with a large sea port which is close to South Korea and Japan – conducted an export-control workshop on 27 August 2014. Trainers came from the Commerce Department itself and participants included officers-in-charge from districts of the city and industry representatives. More than 110 companies sent representatives to this event.⁴

The activities above show that MofCom has developed a comprehensive training network for the dual-use export-control system. The law-enforcement officials for export control, especially those at the metropolitan level, have greatly raised their policy awareness and capability to exercise export control.

NCWCIO System for Controlled Chemicals

The NCWCIO is based in the MIIT Safety Production Department. The NCWCIO organises dozens of national training meetings every year. Non-proliferation and export control is always an important part of the training workshops and seminars, and features among other topics such as Chemical Weapons Convention (CWC) on-site inspection and declaration. For example, on 17–20 December 2015, the NCWCIO organised the National CWC Implementation Training and Non-Proliferation Seminar in Beijing. Representatives from all provincial and municipal CWC Implementation Offices and chemical industries attended the meeting. In addition to presentations relating to chemicals covered by the treaty, an MFA official briefed participants on

3. Workshops in recent years convened on 11 November 2015, 25 September 2014 and 1 November 2013. The news report is available at MofCom, <<http://hebei.mofcom.gov.cn/>>, accessed 16 February 2016.

4. Qingdao Bureau of Commerce, 'Qingdaoshi liangyong wuxiang he keji jinchukou guanzhi peixun ban yuanman chenggong [Training Courses in Qingdao on Import-Export Controls for Dual-Use Items and Technology Have Concluded Successfully]', 28 August 2014, <<http://www.qdbofcom.gov.cn:8080/zwfb1swyw/166741.htm>>, accessed 16 February 2016.

the non-proliferation situation and other developments. Scott Jones, director of the Center for International Trade and Security at the University of Georgia, was invited to give a presentation on strategic trade control.

Another example is the CWC Implementation and Sensitive Chemicals Import and Export Meeting, held on 23–24 February 2003 by the Dalian⁵ CWC Implementation Office. During this meeting, participants were briefed on the non-proliferation situation and cases on controlled chemicals and equipment.⁶

Similar to MofCom practices, the NCWCIO organises special training workshop in cities which contain a large number of manufacturers or trading companies or which are at a high risk of export violations. For example, on 11 June 2015, the CWC Implementation Office of Liaoning province organised a Non-Proliferation Controlled Chemicals Workshop in the city of Dandong.⁷ The meeting invited the MFA and NCWCIO officials to talk about China's non-proliferation policy, CWC implementation and export controls. They emphasised the critical importance of fulfilling CWC implementation and meeting non-proliferation objectives. Officials from the Liaoning Provincial Economic and Information Commission briefed participants on Liaoning's non-proliferation challenges and requested all companies to establish internal compliance programmes. Participating companies are reminded to check the national control lists whenever a business enquiry is received from a foreign buyer. More than ninety participants from chemical-production companies attended the meeting.

The China Atomic Energy Agency System for Nuclear Items

As the authority for nuclear export approval, the China Atomic Energy Agency (CAEA) also organises export-control training workshops. For example, in 2007, the CAEA conducted a national nuclear export-control workshop.⁸ More than thirty industry representatives were in attendance.

5. Dalian is a major sea port in northeastern China and close to South Korea.

6. Dalian Municipal Economic Commission, 'Guanyu zhaokai shi jin huawu lvyue xuanbu gongzuo nianbao ji huaxue pin jinchukou guanli peixun gongzuo huiyide tongzhi [Announcement on the Convening of Training Seminars]', 15 December 2003, <<http://www.dl.gov.cn/gov/detail/detail.vm?diid=100E0400062&go=official>>, accessed 16 February 2016.

7. Liaoning Economic and Information Commission, 'Jiankong huaxuepin fang kuosan peixun huiyi zai Dandong zhaokai [Training courses on Countering Proliferation of Controlled Chemical Products Convened in Dandong]', 24 June 2015, <<http://www.lneic.gov.cn/ljxw/2015/06/24/77751.html>>, accessed 16 February 2016.

8. China Atomic Energy Authority, 'Guojia yuanzineng jigou he chukou guanli peixun ban zai jing juban [China Atomic Energy Authority Training Courses on Nuclear Export Controls Convened in Beijing]', 23 November 2011, <<http://www.caea.gov.cn/n16/n1100/n1298/38352.html>>, accessed 16 February 2016.

SASTIND and Arms Exports

Every year, SASTIND conducts non-proliferation workshops for Chinese arms corporations and trading companies. On 8–9 December 2011, more than 160 participants attended the SASTIND export-control workshop in Beijing.⁹ The MFA, MofCom, the GAC and experts on arms and regional issues were invited to deliver presentations.

The GAC System for Customs Officers

Two institutions are directly subordinated under the GAC. The first is the Shanghai Customs College; the second is the Chinese Academy of Customs Administration (CACA) in the city of Qinhuangdao. The Shanghai Customs College enrolls students every year and has curricula related to non-proliferation and export control. The CACA is the training centre for customs officials at work. In addition to training on non-proliferation and export-control regulations, the CACA is also a centre for commodity identification training (CIT). A recent event was a week-long CIT workshop in the CACA held on 5–11 September 2015.¹⁰ The meeting invited Chinese officials and foreign experts from US Oak Ridge National Laboratory, Los Alamos National Laboratory and Lawrence Livermore National Laboratory to deliver presentations. Forty-three customs officers from across the national customs stations attended the workshop.

NGO Participation and Industry Outreach

The China Arms Control and Disarmament Association (CACDA) is a non-governmental and non-profit organisation.¹¹ In the past fifteen years, it has held dozens of export-control workshops for Chinese industry. Between 2003 and 2010, CACDA partnered with its US counterpart, the Center for International Trade and Security at the University of Georgia and the Center for Nonproliferation Studies at the Monterey Institute of International Studies. It also conducted dozens of export-control workshops in China covering all sectors relating to sensitive items. In the past five years, the CACDA partnered with King's College London and conducted four export-control workshops in China. Each workshop focused on a particular industry sector in different cities which have a heavy-industry base.

Another active NGO in industry outreach is the China Association for Controlled Chemicals. It is an industry association and boasts close to 300 members. It organises export-control workshops

-
9. China Arms Control and Disarmament Association, 'Junkong fang kuosan peixun ban zai jing zhaokai [Disarmament and Counter-Proliferation Training Courses Convened in Beijing]', 29 December 2011, <<http://www.cacda.org.cn/a/xiehuihuodong/20111223/1299.html>>, accessed 16 February 2016.
 10. China Academy of Customs Administration, '2015 nian haiguan chukou guanzi shangpin shibie ji jianzhi jiaoshi peixun ban shunli jieye [2015 Customs Training Course for Part-Time Instructors on the Recognition of Controlled Export Goods Concludes Smoothly]', 14 September 2015, <http://qinhuangdao_edu.customs.gov.cn/publish/portal136/tab69132/info772711.htm>, accessed 16 February 2016.
 11. See China Arms Control and Disarmament Association, <www.cacda.org.cn>, accessed 11 February 2016.

regularly and publishes an internal monthly Bulletin on Controlled Chemicals promoting non-proliferation policy, export-control practices and industry compliance.

The Chinese Academy of International Trade and Economic Co-operation has also played an important role in research, training and information dissemination related to export control.

Internal Industry Training

Constant training is critically important for the effectiveness of a company's compliance. Many major Chinese corporations conduct export-control training for their compliance officers in their subsidiaries and for new employees. Regular training workshops are happening every year in companies like the China North Industries Corporation, China Machinery Engineering Corporation and China National Aero-Technology Import and Export Corporation.

After years of endeavour, the awareness of issues relating to non-proliferation and export control among the public and industry has increased. Chinese industry's export-control capacity has been greatly enhanced. This is particularly true for major Chinese corporations. A large number of these have established an internal-compliance system. Due to the competitiveness of international business, the profit from controlled-items trade has dropped to a very small percentage for many major companies, especially conglomerates; it can be as low as 2–5 per cent. For these major corporations, there has been considerable diversification in their international business. International trade in controlled items has become a small part of their business portfolio and most of their revenue comes from other sources such as oil, infrastructure and factory investment. These major corporations no longer want to put their whole company at risk and in many cases they prefer to fully comply with all export-control measures, including with the requirements pertaining to international trade, instead of gaining small amounts of profit from sensitive trade with risks.

About the Author

Xiaoming Liu is the former Director of the Secretariat of the China Arms Control and Disarmament Association (CACDA) based in Beijing. The CACDA is not responsible for any errors in this paper or for any consequences arising from the use of information contained in this paper. The views and opinions expressed are solely those of the author and do not necessarily reflect those of the CACDA.

