

# China's Continued Weapons of Mass Destruction-related Exports: What Can Be Done?

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*Preventing the proliferation of weapons of mass destruction (WMDs) – including nuclear, chemical and biological weapons – and their means of delivery is crucial for promoting international peace and security.<sup>1</sup> China is a member of the international non-proliferation regime, has signed on to the Zangger Committee and Nuclear Suppliers Group, and has unilaterally committed to other multilateral export control regimes. Yet China's enterprises, especially private companies have continued to export some WMD-related goods, items and technologies, and this has served to undermine the efficiency of these regimes. This policy brief examines China's obligations under the international non-proliferation and multilateral export control regimes, its continued WMD-related exports and its motivations for doing so. It argues that in order to address this challenge:*

- » *The Chinese government should seek to train and inform Chinese enterprises about export control obligations, and encourage them to build stronger internal compliance programmes*
- » *The US government should continue to link its export of high-tech products to China to the latter's compliance with its non-proliferation obligations, and should be wary of provoking China through weapons exports to Taiwan*
- » *The international community should continue to underscore the need for compliance with its non-proliferation obligations as an integral part of China's responsible great power status*

## ABOUT THE AUTHOR

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<sup>1</sup> See 1540 Committee of the United Nations, *United Nations Security Council Resolution 1540* (2004) <http://www.un.org/en/sc/1540/> (accessed 15 March 2013).

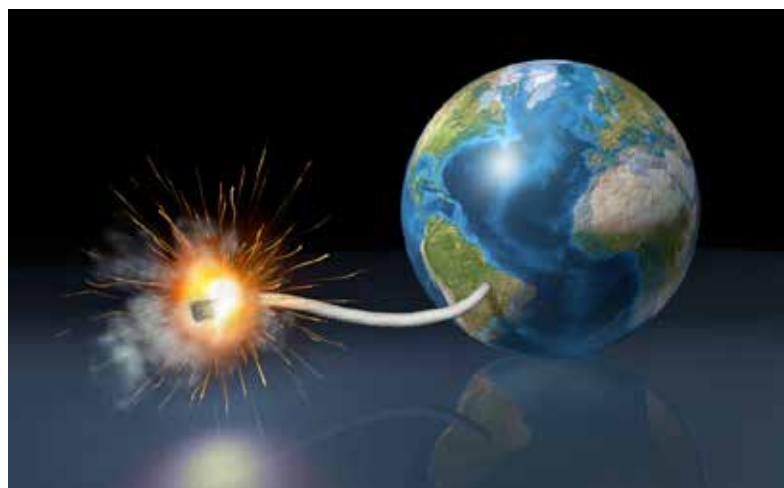


TABLE 1: CHINA AND THE INTERNATIONAL NON-PROLIFERATION AND MULTILATERAL EXPORT CONTROL REGIMES

International non-proliferation and multilateral export control regimes	China's accession or pledges
The Nuclear Non-proliferation Treaty (1970)	1992
The International Atomic Energy Agency (1957)	1984
Biological and Toxin Weapons Convention (1984)	1984
Chemical Weapons Convention (1993)	Signed in 1993, ratified in 1993
The Zangger Committee (1971)	1997
The Nuclear Suppliers Group (1975)	2004
the Missile Technology Control Regime (1987)	Pledges in the 1990s
The Wassenaar Arrangement (1995)	Under negotiation
The Australia Group (1985)	Under negotiation

Sources: Jing-dong Yuan, 'The evolution of China's non-proliferation policy since the 1990s: progress, problems, and prospects', *Journal of Contemporary China* 11(31), (2002), pp. 209-233; Ministry of Foreign Affairs of People's Republic of China (PRC), 'Zhongguo yu duobian fang kuosan jizhi de guanxi [China's relations with the multilateral export control regimes]', [http://www.fmprc.gov.cn/mfa\\_chn/ziliao\\_611306/tytj\\_611312/zcwj\\_611316/t410696.shtml](http://www.fmprc.gov.cn/mfa_chn/ziliao_611306/tytj_611312/zcwj_611316/t410696.shtml) (accessed 6 April 2013).

## CHINA'S NON-PROLIFERATION OBLIGATIONS

China has gradually integrated into the international non-proliferation and multilateral export control regimes since the 1980s (see Table 1). These regimes include the Nuclear Non-proliferation Treaty (NPT), the International Atomic Energy Agency (IAEA), the Biological and Toxin Weapons Convention (BTWC), the Chemical Weapons Convention (CWC), the Zangger Committee (nuclear), the Nuclear Suppliers Group (NSG, nuclear and nuclear related dual-use items), the Missile Technology Control Regime (MTCR, missile and missile-related dual-use items), the Wassenaar Arrangement (WA, military goods and dual-use items), and the Australia Group (AG, chemical and biological weapons-related items).

With its integration into the international non-proliferation and multilateral export control regimes, China's corresponding non-proliferation obligations are as follows:

**Nuclear-related exports:** China should abide by the NSG's two Guidelines, that is, Guidelines for Nuclear Transfers (INFCIRC/254, Part 1) and Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology (INFCIRC/254, Part 2).<sup>2</sup> According to these Guidelines, China should not transfer nuclear and nuclear-related items to non-signatory states of the NPT, and should only transfer nuclear and nuclear-related items to those non-nuclear weapon states that have the full-scope safeguards agreement with the IAEA.

**Chemical- and biological-related exports:** Based on the BTWC and CWC, China should apply licensing requirements to the export of dual-use chemical manufacturing facilities

and equipment and related technology, plant pathogens, animal pathogens, biological agents, and dual-use biological equipment.<sup>3</sup>

**Missile and missile-related exports:** Based on its pledges to abide by the MTCR Guidelines and the Equipment, Software and Technology Annex, China should not transfer missiles and related technologies capable of carrying a 500-kilogram payload at least 300 kilometres or delivering any type of WMDs.<sup>4</sup>

## CHINA'S CONTINUED WMD-RELATED EXPORTS

Although China has become a member of the international non-proliferation regimes, there is credible evidence that China has continued to export WMD-related goods at both the enterprise level and the governmental level.

At the enterprise level, evidence of China's continued WMD-related exports is found both in the US's continued sanctions against some Chinese entities<sup>5</sup> and in a number of disclosures made by external sources (see Table 2).

In addition to those Chinese enterprises exporting WMD-related goods without the Chinese government's knowledge, there is some evidence of WMD-related exports that have been supported or directly conducted by the Chinese government with other countries, including:

3 NTI, "Australia Group (AG)," <http://www.nti.org/treaties-and-regimes/australia-group-ag/> (accessed 6 April 2013).

4 Missile Technology Control Regime, "MTCR guidelines and the equipment, software and technology annex," <http://www.mtcrc.info/english/guidelines.html> (accessed 6 April 2013).

5 After 2004, the US has continued to impose sanctions on a number of Chinese companies and individuals for their WMD-related exports. See Shirley A. Kan, *China and Proliferation of Weapons of Mass Destruction and Missiles: Policy Issues*, 11 March 2013, <http://www.fas.org/sgp/crs/nuke/RL31555.pdf>, pp.67-73 (accessed 7 April 2013).

2 Nuclear Suppliers Group, "INFCIRC/254/Rev.11/Part 1," <http://www.nuclearsuppliersgroup.org/Leng/PDF/infcirc254r11p1.pdf>, and "INFCIRC/254/Rev.8/Part 2," <http://www.nuclearsuppliersgroup.org/Leng/PDF/infcirc254r8p2.pdf> (accessed 6 April 2013).

TABLE 2: SELECTED EXTERNAL DISCLOSURES OF CHINA'S WMD-RELATED EXPORTS

Date	External sources	Disclosures of China's WMD-related Exports
May 2006	Two anonymous diplomats, cited in Kan (2013)	China had supplied Iran with uranium hexafluoride gas (UF <sub>6</sub> ) that was used to accelerate Iran's uranium enrichment program
February 2010	The Associated Press in Taipei	Roc-Master Manufacture & Supply Company, a Shanghai based Chinese company, helped Iran in early 2009 successfully buy a large quantity of the pressure gauges, a dual-use item
February 2013	Institute for Science and International Security, USA	Some Chinese companies' help Iran acquire nuclear related items
15 April 2012	<i>The Telegraph</i> , <i>Asahi Shimbun</i> and <i>Jane's Defense Weekly</i>	A 16-wheel transporter – erectorlauncher (TEL), being used to deliver an apparent Intercontinental Ballistic Missile (ICBM) displayed in North Korea's military parade in Pyongyang, was produced and exported in 2011 by the Hubei Sanjiang Space Wanshan Special Vehicle Company

Sources: Kan, *China and Proliferation of Weapons of Mass Destruction and Missiles*; David Albright, "Ring magnets for IR-1 centrifuges," ISIS Report, 13 February 2013, p.1, [http://isis-online.org/uploads/isis-reports/documents/iran\\_ring\\_magnet\\_13Feb2013.pdf](http://isis-online.org/uploads/isis-reports/documents/iran_ring_magnet_13Feb2013.pdf) (accessed 5 April 2013).

**Pakistan.** In February 2010, the Chinese government agreed to help Pakistan build two more nuclear reactors, Chashma-3 and Chashma-4, in addition to the two already operating there; in June 2010 its state-owned company China National Nuclear Corporation (CNNC) signed a contract with Pakistan to carry out the project. Moreover, China sold some missiles and avionics to Pakistan to help the latter to equip its 250 JF-17 Thunder jet fighter.<sup>6</sup>

**Bangladesh.** On May 14, 2008, a Chinese-made C-802A anti-ship cruise missile was launched successfully during a Bangladeshi missile test. Moreover, China's FM 90 missiles were displayed in Bangladesh's national military parade in late 2011.<sup>7</sup>

**Indonesia.** In 2009, three Chinese Qianwei-3 portable surface-to-air missiles (SAM) units were sold to Indonesia, in addition to the C-802 Chinese cruise missile, which is a missile with a range of 300 kilometres equipped with an inertial guidance GPS system. In 2012 China not only agreed to speed up its missile technology transfer to Indonesia but also established a joint factory for missiles production based in Indonesia.<sup>8</sup>

**Iran.** China was reported to have opened a factory in Iran for assembling and producing the Nasr-1 anti-ship missile, which

is based on the Chinese C-704 anti-ship missile, unveiled at the 2008 Zhuhai Air Show and was developed specifically for Iran by China's Hongdu Aviation Group.<sup>9</sup>

### MOTIVATIONS FOR CHINA'S CONTINUED WMD-RELATED EXPORTS

China has multiple motivations for continuing to export WMD-related goods and technologies despite its obligations under non-proliferation regimes. Understanding these motivations is crucial to ending such exports. They include:

**To balance against geostrategic competitors.** China's WMD-related exports are designed to balance against the weapons trade amongst some of its competitors, notably between the US- and India, and the US and Taiwan. In 2008, the US and India signed a bilateral civilian nuclear cooperation deal, in spite of the fact that India is neither a member of the NPT nor a member of the NSG. This agreement ended the three decade-long sanctions against India which were a response to its first peaceful nuclear explosion in 1974. As a result of the 2008 deal, not only can India now access the international nuclear market to import nuclear and nuclear-related goods and technologies, but, perhaps more importantly, its nuclear power status is now finally recognized by the international community. Under such circumstances, China uses its nuclear cooperation with Pakistan as a counter-measure. Similarly, the country uses missile exports as a tool to balance against the US's arms sales to Taiwan, since China regards these American sales as proliferating behaviour.<sup>10</sup>

**To procure sustained oil supplies from Iran.** Iran, with the world's fourth largest oil reserves and second largest gas reserves, has become one of China's most important fuel

6 Xu Tianran and Chris Dalby, "Pakistan inks deals for Chinese missiles," *Global Times*, 18 November 2010, <http://www.globaltimes.cn/china/diplomacy/2010-11/593020.html> (accessed 1 April 2013).

7 "Mengjiala haijun 14 ri chenggong shishe disandai C-802 fanjian daodan [A third generation C-802 anti-ship cruise missile was tested successfully by Bangladeshi Navy on 14th ]," *Xinhua*, 15 May 2008, [http://news.xinhuanet.com/mil/2008-05/15/content\\_8175474.htm](http://news.xinhuanet.com/mil/2008-05/15/content_8175474.htm); Ke Xi, "Zhongguo FM90 fangkong daodan jiaofu Mengjiala nv zongli qinlin jianyu [China's FM90 surface-to-air Missiles were delivered to Bangladesh The Female Prime Minister reviewed them by herself]," *Huanqiu Shibao* [*Global Times*], 7 December 2011, <http://military.china.com/top01/11053250/20111207/16910039.html> (accessed 1 April 2013).

8 Jon Grevatt, "Indonesia looks to Swiss, Chinese deals to bolster air defenses," *Janes Defense Weekly*, 17 September 2009, [www.janes.com](http://www.janes.com) (accessed 21 March 2013).

9 United Press International (UPI), "China opens missile plant in Iran," 23 April 2010, [http://www.upi.com/Business\\_News/Security-Industry/2010/04/23/China-opens-missile-plant-in-Iran/UPI-82791272037022/](http://www.upi.com/Business_News/Security-Industry/2010/04/23/China-opens-missile-plant-in-Iran/UPI-82791272037022/) (accessed 1 April 2013).

10 Evan S. Medeiros, *Reluctant Restraint: The Evolution of China's Nonproliferation Policies and Practices, 1980-2004* (Stanford, California: Stanford University Press, 2007), pp.97-174.

suppliers. Iran is China's third largest oil supplier, after Saudi Arabia and Angola, accounting for nearly 11% of China's total oil imports. Thus in order to ensure its oil supplies from Iran, China has continued to cooperate with Iran in the latter's missile program.

#### **To gain commercial profits in the missile export market.**

China has invested billions on the development of missiles and missile-related technology. In this context, if it exercises strict restraints on its missile-related technology exports, China arguably deprives itself of the opportunity to earn considerable profits in lucrative external markets such as Indonesia, which might otherwise be occupied by other missile-technology exporters.

### **POLICY RECOMMENDATIONS**

Without action from both the Chinese government and the international community, China is likely to continue exporting WMD-related products despite its integration into the international non-proliferation and multilateral export control regimes.

To address continued WMD-related exports by Chinese enterprises, which break China's own non-proliferation and export control policies, the Chinese government should adopt the following measures:

- Provide training and seminars on the international non-proliferation and multilateral export control regimes and China's export control policies to help familiarize enterprises with both international and domestic obligations.
- Increase transparency through a variety of means, such as informative websites and official gazettes that are devoted to introducing China's export control legislation, contact information and license processing information.
- Encourage enterprises to establish their own internal compliance programs (ICP).
- Apply severe punitive measures against those enterprises and individuals that violate China's non-proliferation and export control legislation.

The international community in general, and the US government in particular, should welcome and facilitate the Chinese government's efforts to improve the efficiency of its export control enforcement.

In order to address those WMD-related exports supported by the Chinese government, the following measures should be taken:

- The international community should continue to underscore the need for compliance with its non-proliferation obligations as an integral part of China's responsible great power status.
- The US should continue to link its export of high-tech products to China to the latter's compliance with its non-proliferation obligations.
- The US should avoid providing weapons to Taiwan so as not to provoke China to use WMD-related exports as a countermeasure.
- The international community in general and the US in particular should support China's efforts to increase the share of nuclear energy in its energy mix so as to reduce its reliance on overseas oil, especially that from Iran.



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