Policy Forum 11-30: A ‘Black Hole’ in the Global Nonproliferation Regime: the Case of Taiwan

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A ‘Black Hole’ in the Global Nonproliferation Regime: the Case of Taiwan

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This is a paper from the Nautilus Institute workshop “Cooperation to Control Non-State Nuclear Proliferation: Extra-Territorial Jurisdiction and UN Resolutions 1540 and 1373” held on April 4th and 5th, 2011 in Washington DC with the Stanley Foundation and the Carnegie Endowment for International Peace. This workshop explored the theoretical options and practical pathways to extend states' control over non-state actor nuclear proliferation through the use of extra-territorial jurisdiction and international legal cooperation.

Other papers and presentations from the workshop are available here.

Nautilus invites your contributions to this forum, including any responses to this report.

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I. Introduction

Togzhan Kassenova, an Associate at the Carnegie Endowment for International Peace Nuclear Policy Program, analyzes Taiwan's unique position within the international security system and the global nonproliferation regime. Despite being an “outsider” in relation to relevant international frameworks, Taiwan is a major transit and transshipment hub well-positioned in the supply and consumption chain of high-tech goods and boasts a highly-developed civilian nuclear program. As a result, Kassenova asserts that "Taiwain is the only place that presents such high stakes for the global nonproliferation system."

The views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the Nautilus Institute. Readers should note that Nautilus seeks a diversity of views and opinions on significant topics in order to identify common ground.

II. Article by Togzhan Kassenova

- “A ‘Black Hole’ in the Global Nonproliferation Regime: the Case of Taiwan”
By Togzhan Kassenova [1]

Introduction

Taiwan occupies a unique niche in the world community that necessitates enhanced participation in the global nonproliferation regime. It is one of the world’s key suppliers and consumers of high-tech, dual-use goods and technology. It has a reasonably-advanced nuclear energy program that further increases the flow of sensitive materials and technology. The island is located at the intersection of the world’s major sea-lanes, making it a major transit and transshipment hub. Most critically, there have been attempts (some of which succeeded) to smuggle WMD-sensitive goods out of Taiwan, as well as across its territory.

Despite the critical security concerns arising as a result of these factors, Taiwan is effectively a legal and political ‘black hole’ in the realm of international nonproliferation cooperation. This is due to its ‘non-state’ status, which prevents it from participating in multilateral nonproliferation treaties and export control regimes, and limits its access to information and intelligence sharing from national and international security agencies. In spite of these challenges, Taiwan demonstrates a relatively

strong commitment to upholding the principles and objectives of the global nonproliferation regime. However, given the importance of the issue, the international community cannot afford to remain complacent in addressing a key question: how to ensure a sustainable commitment to nonproliferation by an "outsider" to the international system?

Taiwan's Critical Role in the Global Nonproliferation Regime

Taiwan has a critical role to play in the nonproliferation regime for three reasons. First, it has succeeded in becoming one of the world's largest producers of high-tech goods and technology. For example, it has a leading position in the global semiconductors market, with the Taiwan Semiconductor Manufacturing Company (TMSC), the world's largest semiconductor foundry, engaged in pure-play production. [2] In addition to being widely used for peaceful purposes (e.g. computers, telephones and radios), semiconductors have applications in WMD and military programs. If not regulated properly, some dual-use goods and technology could be diverted for non-peaceful use by malicious actors.

A second important factor to consider is Taiwan's high technological capacity in the field of nuclear energy. Nuclear energy programs universally present a potential proliferation risk. First, sensitive stages of nuclear fuel production—uranium enrichment and spent fuel reprocessing—involve technologies that can be used for nuclear weapons programs. Taiwan does not possess this sensitive technology at present, but the introduction of these crucial stages of the fuel cycle in the future cannot be dismissed entirely. Second, nuclear energy programs use materials and technology of a dual-use nature that further exacerbate proliferation risks, thus adding responsibility for the relevant governments to take measures to prevent their unauthorized use.

Finally, Taiwan's geographic location at the intersection of the world's major sea-lanes means that it deals with a high volume of transit and transshipment cargo. Actors wishing to transport items procured for WMD programs could potentially use Taiwan as a transit/transshipment point. As a result, Taiwan's vigilance in terms of regulating cargo coming into, out of, and through its territory is critical in order to prevent smuggling of proliferation-sensitive goods.

Taiwan's proliferation record to date includes several high-profile cases of WMD-sensitive goods making their way to third parties either from Taiwan or via Taiwan. In 2007 Taiwanese authorities discovered that the *Royal Team Corporation*, a Taiwanese trading company, carried out 14 transactions in 2006-2007 to supply precision machinery workstation computers to North Korea. The equipment was destined for North Korea's missile and nuclear weapon programs. [3] In another case, a Taiwanese company *Yicheng Co*. sent high-precision equipment capable of producing weapons-related material to North Korea. [4] There have been a number of cases that involved Taiwanese companies but were discovered by foreign governments. For example, back in 2006 the Japanese government discovered that *Meisho Yoko*, a Tokyo-based company led by Kim Young Gun, exported freeze-drying equipment that could be used in biowarfare applications to North Korea. *Meisho Yoko* exported the equipment via a trading company in Taiwan. [5] In another case, the Japanese company *Tokyo Vacuum* exported controlled items (vacuum pumps) to North Korea via a Taiwanese company *Transmeritis*. [6] The US government has prosecuted a number of companies for attempting to illegally export controlled items to Taiwan. In 2009 a Taiwanese company, *Well Being Enterprise Co. Ltd*., was accused of conspiring to export materials controlled for nuclear proliferation reasons (nickel powder, hafnium, zirconium, and bismuth) from the United States to Taiwan over the period of several years (2003-2006). [7] The same year another Taiwanese company, *Foxsemicon*, was accused of unlicensed exports of pressure transducers controlled for nuclear proliferation purposes to China. [8] In 2010 US authorities arrested a Taiwanese citizen in Guam for illegally exporting missile components to Iran. [9] This incomplete list of proliferation-

relevant cases involving Taiwanese companies and individuals serves as a reminder that the commitment of the Taiwanese government to strengthen proliferation controls and to comply with nonproliferation norms is absolutely critical for international security.

"Falling Between the Cracks"

The security considerations outlined above demonstrate that Taiwan is an important stakeholder when it comes to strengthening the global nonproliferation regime. However, due to its unique political status as a non-member of the United Nations (UN), Taiwan remains outside of key international security frameworks and is in an ambiguous position when it comes to its nonproliferation obligations.

Technically speaking, many international nonproliferation laws do not apply to Taiwan. For example, UN Security Council Resolution (UNSCR) 1540 places a legal requirement on all UN member states to implement 'appropriate' domestic controls to prevent WMD proliferation to non-state actors. However, as a non-member state, Taiwan is not bound by UNSCR 1540's stipulations.

Since losing its UN status in 1971, Taiwan has been excluded from membership in international nonproliferation treaties [10] and has lost a right to be considered for membership in multilateral export control regimes (MECRs). The four MECRs—the Australia Group, the Nuclear Suppliers Group, the Missile Technology Control Regime, and the Wassenaar Arrangement—each adopt a list of items which should be controlled for nonproliferation purposes. In addition to maintaining these control lists, MECRs provide an important forum for member countries to exchange information on emerging proliferation-sensitive products, suspicious actors, export license denials, and other proliferation-relevant factors.

Just as Taiwan is not explicitly bound by international law, it is unable to call on international law or its enforcement agencies, such as Interpol, in the pursuit of known proliferators and their agents. The Taiwanese government can enact extradition agreements only with countries with which it has diplomatic relations. Currently, Taiwan has extradition agreements with a handful of small island nations. As a result, Taiwan is not able to extradite criminals from other nations, nor can other nations easily repatriate criminals who may treat Taiwan as a 'safe haven.' This legal impediment to Taiwanese cooperation with international processes also spills over into the intelligence field. For example, Taiwan does not have access to Interpol's I-24/7 global police communications system, which provides real-time information on criminals and criminal activities. [11]

These various challenges facing Taiwan—not being subject to international law, lack of membership in international nonproliferation treaties or MECRS, and lack of recourse to international legal mechanisms and information sharing—are all potential handicaps limiting the island's ability to pursue robust and effective nonproliferation policies.

Taiwan's Nonproliferation Policies

In the absence of international legal nonproliferation mechanisms involving Taiwan, its own political commitment to nonproliferation norms and values is of paramount importance. Taiwanese officials point to domestic proliferation controls as indicative of how serious Taiwan is about upholding nonproliferation norms and preventing the spread of WMD-sensitive goods and technology. Taiwan's president, Ma Ying-jeou, in his inaugural speech referred to Taiwan as "a world citizen" that accepts the responsibility to promote nonproliferation, among other key tasks. [12]

Two key drivers influence Taiwan's nonproliferation policies: external pressure and incentives and

Taiwan's strategic ambition to be as involved in the international community as its limited political status permits. Externally, pressure from the United States played a major role in Taiwan's decision to abandon the nuclear weapons program that it attempted to jump-start in the 1950s and 1980s. The US is also working actively with Taiwan to strengthen its strategic trade control system. Taiwan participates in several US-led nonproliferation initiatives, such as the Container Security Initiative (CSI) and the Megaports Initiative. Taiwan's two major ports, Kaohsiung and Keelung, both participate in the CSI, in which ports worldwide conduct screening of high-risk cargo before it departs for the US. Kaohsiung is also a member of the Megaports Initiative, designed to strengthen the capabilities of key international ports to deter, detect, and interdict illicit radioactive and nuclear cargo. [13]

In the area of nuclear safeguards, in the absence of a standard IAEA agreement, Taiwan, the US and the IAEA signed a trilateral safeguards agreement (INFCIRC/158) in 1964. The agreement transferred responsibility for Taiwanese nuclear safeguards from the US, which had implemented them since 1955, to the IAEA. In 1998, Taiwan took on additional safeguard responsibilities, in line with the requirements contained in the IAEA Model Additional Protocol. [14]

Over the last decade, Taiwan has achieved laudable progress in strengthening domestic proliferation controls, especially in the area of strategic trade management. [15] Taiwan has developed a strong domestic legal basis for controlling trade in WMD-sensitive goods and technology. The *Foreign Trade Act* provides the legal foundation for strategic trade management; it includes provisions for penalizing those who intentionally or unwittingly engage in unauthorized transfers of goods and technology that can lead to WMD proliferation. An array of additional laws and regulations build upon the *Foreign Trade Act* and provide detailed guidance on specific categories of strategic goods and technologies. [16]

Taiwan's national export control list provides the best indication of how Taipei aims to position itself in relation to the MECRs, and how it reacts to international concerns about proliferant states. Despite not being a member in the MECRs, Taiwan has chosen to adhere to all four regimes by incorporating their respective control lists into its national list, which consists of three categories. The first category includes dual-use goods and technologies that appear on the MECR control lists, as well as certain controlled munitions (corresponding to the Common Military List of the European Union). It also includes a list of items that are controlled if exported to Iran or North Korea (the 'Sensitive Commodity List'). The second category of Taiwan's national control list establishes a "catch-all" provision by requiring traders to seek a license for items that are not designated on the control list, but that could be used in the production of WMD or missiles. This important provision provides the Taiwanese government with the authority to regulate a broader range of items under the "catch-all" principle. Finally, the third category includes import commodities for which exporting countries require the Taiwanese government to issue import assurance documents certifying their end use. The existence of such a comprehensive export control list suggests that Taiwan is prepared to follow the MECR guidelines closely and to take measures necessary to prevent proliferant states from acquiring sensitive goods and technologies.

When it comes to enforcement of controls over sensitive trade, Taiwan employs risk assessment techniques. Taiwanese licensing officials utilize intelligence data when making licensing decisions, and also work closely with Customs. If licensing officials deem that intelligence data points credibly to a potential violation of export control regulations, they inform Customs and request close attention be paid to the suspect traders. National licensing authorities also implement post-shipment checks on export transactions based on intelligence. Customs authorities also employ risk management techniques such as targeting high-risk groups and implementing random cargo checks. [17]

Although the arrangements outlined above demonstrate that Taipei has built a robust domestic system to prevent proliferation over the years, some important elements of advanced proliferation controls remain underdeveloped. Most important among these are controls over intangible technology transfers, and controls over the transit and transshipment of cargo, both of which remain weak in Taiwan's case. There is no dedicated legislation or institutional arrangements devoted to comprehensive controls over intangible technology transfers (transfers of sensitive technology by electronic means or technical discussions relating to controlled technology with foreign citizens). Given Taiwan's leading position in the technology field, the lack of comprehensive controls in this area requires remedy. Controls over transit and transshipment of strategic cargo are limited to goods originating in or destined for "certain restricted areas" (Iran, Iraq, North Korea, mainland China, Cuba, Sudan, and Syria). [18] This is a nonproliferation handicap for a major transit and transshipment hub like Taiwan.

Taiwan's actual enforcement capacity to detect, investigate, and prosecute violations is another area which has room for improvement. Available information does not point to a strong record in terms of detections and penalties. For example, in one of the most serious cases investigated by the Taiwanese authorities, those responsible for fourteen transactions involving illegal shipment of WMD-sensitive items to North Korea received only minimum suspended sentences. [19]

Conclusion

Taiwan represents a unique case in the international security system. The island is not the only territory or geographical space in the world that is either ungoverned or remains outside the reach of international security frameworks. However, Taiwan is the only place that presents such high stakes for the global nonproliferation system. Its leading position in the supply and consumption of high-tech goods and technology, its role as a major transit and transshipment hub, and its highly-developed civilian nuclear program make it extremely relevant to global efforts to prevent WMD proliferation.

Despite being an "outsider" in relation to relevant international frameworks, Taiwan has made policy choices indicating that it strives to comply with international nonproliferation norms. Although it has made significant progress in this field, gaps remain in the area of more advanced types of proliferation controls and enforcement.

It is critical that Taiwan continues to strengthen its WMD proliferation controls. Two things need to happen to support that outcome. First, Taipei's own unilateral commitment to the global nonproliferation regime must be maintained. Second, the international community must find creative solutions to provide Taiwan with greater exposure to nonproliferation-relevant debates and information, as well as to strengthen Taiwan's obligations to the global nonproliferation regime.

III. References

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[14] “International Cooperation – Multilateral Cooperation,” Atomic Energy Council, http://www.aec.gov.tw/www/english/international/index03.php
[15] Strategic trade management, which refers to controls over transfers of dual-use goods and technologies that can have both peaceful and military (including WMD) applications, provides a regulatory and institutional framework enabling governments to simultaneously pursue nonproliferation and economic objectives.
[16] They include the Act for Establishment and Administration of Science Parks, Statute for the Establishment and Administration of Export Processing Zone, the Operational Regulations Governing Nuclear Safeguards, the Administrative Regulations for Radioactive Material and Equipment Capable of Producing Ionizing Radiation and Associate Practice, the Ionizing Radiation Protection Act, the National Defense Technology Institute Regulations, and Bylaw of Armaments Bureau.
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IV. Nautilus invites your responses

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