

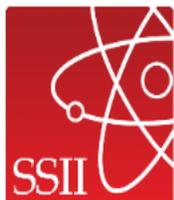
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India's Export Control Regime: From Possible Proliferator to Responsible Nuclear State?



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Amina Afzal

Introduction

On December 7, 2017, India became the 42nd member of the Wassenaar Arrangement, a multilateral export control regime that promotes greater transparency and responsibility in transfers of conventional arms and dual-use goods and technologies.¹ In another significant development India became a member of the Missile Technology Control Regime (MTCR) in June 2016.² India is now seeking membership of the more informal Australia Group that works to harmonise controls to ensure that export of critical chemicals doesn't lead to the development of chemical or biological weapons.³ Its admission into these influential groups would allow India greater leverage to bargain for entry into the Nuclear Suppliers' Group.

In January 2017 a new phase of export control cooperation began between the United States and India when the US Department of Commerce's Bureau of Industry and Security (BIS) amended its Export Administration Regulations (EAR) on January 19, 2017. The modifications led to a change in India's "Validated End User" (VEU) status.⁴ These changes were a consequence of the June 7, 2016 US recognition of India as a "Major Defence Partner."⁵ India now receives license-free access to a wide range of dual-use technologies. In return India undertook steps to align its existing system of export controls with the practices of the global export control regimes.

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Notwithstanding these developments, the Nuclear Suppliers Group (NSG) has thus far failed to reach consensus on the issue of India's accession to the group. Some member states have expressed concern that the admission of a non-NPT signatory to the NSG would undermine both the existing system of export controls and the global non-proliferation regime. Refuting these arguments, India claims that its revised export control norms are "more stringent"⁶ than those practiced by some members of Nuclear Suppliers' Group (NSG). To prove its commitment to the global export control norms, Indian Foreign Secretary Ranjan Mathai announced India's decision to update its Special Chemicals, Organisms, Materials, Equipment, and Technologies SCOMET list to correspond with the lists of both the Missile Technology Control Regime (MTCR) and the Nuclear Suppliers Group (NSG).⁷ India's Directorate General of Foreign Trade (DGFT) issued a notification on March 14, 2013 amending the SCOMET List.

India's possible membership of the NSG remains a controversial issue on account of the fact that the very creation of the group was a result of the 1974 Indian nuclear tests. The aim of the seven founding member states was to restrict nuclear commerce after the Indian nuclear tests, which made use of materials that India had acquired in breach of its bilateral agreements with both the US and Canada on the peaceful use of nuclear technology. Arguably, India has come a long way since its official position contending that controls in the absence of a genuine movement towards nuclear disarmament would be unacceptable to India.⁸ The country's export control policy has also witnessed a paradigm shift during the last two decades. In the wake of the 2005 US-India Nuclear deal there is broad consensus among both Indian policy makers and the

world at large that India has pursued a proactive approach towards its export control system thereby bringing it at par with international trade control standards.

According to Indian discourse on the issue, India has always maintained an impeccable record vis-à-vis export controls. It is important to note however that the US-India Nuclear Deal became possible only after India agreed to overhaul its existing system of export controls. Therefore, the country's non-proliferation records need to be examined critically if India is being considered for a special status within the Nuclear Suppliers Group.

This paper will investigate India's proliferation record by exploring its implementation of strategic export controls over the years. It will outline the development of Indian export controls and analyse its current system of export controls in the larger context of the economic liberalisation that the country has undergone during the last two decades. It will also discuss the evolution of India's nuclear control list and provide a description of the process to control the export of dual-use items in India. It will then try to identify the strengths and weaknesses of the export control system, the challenges it faces and its relative progress over the years. In the final analysis, the paper will try and determine the extent to which India's export controls have been successful in curbing the illicit trafficking of nuclear materials.⁹

US-India Nuclear Deal

The US-India nuclear deal ended a three-and-a-half-decade long US ban on nuclear trade with India. Despite the disapproval received from its critics, the deal remains firmly entrenched in US policy. Its importance is embodied in Secretary of State Hillary Clinton's remarks

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during the India Business Council's Synergies Summit in June 2009: -

“President Clinton opened a new chapter of engagement with India...This second stage in our history continued through the last US and Indian administrations and culminated in completion of the Indo-US civilian nuclear agreement this past October under the Bush Administration. This landmark accord, which the Obama Administration is fully committed to implementing, provides a framework for economic and technical cooperation between our two countries and allows us to move beyond our concerns about the status of India's nuclear programme, an issue that dominated our relationship for much of the last decade. The nuclear deal, which was completed through the efforts of former President Bush, removed the final barrier to broader cooperation between us”¹⁰

In the context of US-India relations, the broad strategic dialogue initiated during the Clinton Presidency, continued between the two countries under the Bush Administration. In 2002, the two countries launched a High Technology Group to facilitate high tech trade between India and the US.¹¹ This culminated in the launch of the Next Step in Strategic Partnership (NSSP) in January 2004. Both countries announced the completion of the NSSP in July 2005. Meanwhile India also passed its WMD Act in 2005 thus aligning its export control regime with the United States and based on International standards.¹²

The consequent US decision to liberalise its export licensing policy resulted in the removal of several Indian entities including the Indian Space Research Organisation from the list of organisations banned from receiving US exports. Furthermore, the licensing

requirement for “low level dual-use items” as well as unilaterally controlled nuclear items was also waived. India also earned the eligibility to apply for the US Department of Commerce administered Trusted Customer Programme.¹³ Although the NSSP was considered a great achievement in terms of its impact on US-India relations, India still remained in nuclear isolation and there was significant room for relaxation in terms of US nuclear export controls vis-à-vis Indian entities. In 2005, the Bush Administration finally shifted its focus towards Nuclear Cooperation with India, and the leadership in both countries announced their decision to sign a civilian nuclear cooperation agreement. The United States’ pledge to make necessary changes to its domestic law to facilitate this deal was conditional, based on India’s commitment to fulfil certain requirements.¹⁴

Consequently, the US added export controls to the US-India Agenda as an important benchmark toward which India was required to demonstrate progress in order for the US-India Nuclear Deal to reach fruition. The requirement was aimed at confirming India’s ability to prove itself as a state mindful of the dangers of WMD proliferation, and also to gauge its commitment to utilising its resources to manage the WMD threat to both domestic and international security.

India and the NSG

As part of the US-India nuclear deal, the Nuclear Suppliers Group also waived its standard conditions to do business with India.¹⁵ India therefore began engaging with the international community on the issue of export controls. From an Indian perspective, an overhaul of its export control system translated into an important “confidence building measure (CBM) for increasing its

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international trade and national security.”¹⁶

India expressed an interest in taking forward this engagement with the international community to the next phase in November 2010 when it sought membership of the four export control regimes - NSG, MTCR, Australia Group and the Wassenaar Arrangement. India initiated a series of changes to its export control regime evident from activities including updating its SCOMET lists and conducting regular Industrial outreach programmes.¹⁷ Based on India's efforts to integrate the regimes export control requirements into its domestic system, the Obama Administration also expressed its support for India's membership of the NSG in a “phased manner”¹⁸ in consultation with the groups' members.¹⁹

India's role as a potential supplier to the organisation made its possible membership more plausible. According to India, it had the infrastructure to manufacture research reactors with a unit capacity of 220 MWe.²⁰ India said these units could be useful for nations with small grids planning “nuclear forays”²¹ and have low investment levels. Accordingly, the Nuclear Power Corporation of India Ltd. (NPCIL) initiated talks with potential buyers in Kazakhstan, Vietnam, Thailand and also some countries in Africa.²² Also the NPCIL has the capacity to produce small and medium reactors tailored to suit the needs of individual buyers based on country specific requirements. India maintains that these reactors are proliferation resistant.²³

In the defence and atomic energy sector, the Indian government has maintained control over the imports and exports of fissile minerals as well as over their exploration and research. Some form of direct or indirect control also exists on the research and production of all

defence related technology and research.²⁴ As a consequence, companies such as NPCIL²⁵ and other similar entities have been subject to strict government regulations ensuring that no material or technology is diverted for illicit purposes. This situation began changing in 2001 when the defence sector was opened to private sector participation.²⁶ Prior to this the role of the private sector was minimal and remained restricted to the supply of raw material for production in Ordnance Factories and Defence Public Sector Undertakings (DPSUs).

The Indian Economy and Strategic Trade Controls

Before the advent of the liberalisation process, which began in India during the early 1990s, the Indian government maintained strict control over missile research and development by restricting such activities to national laboratories and production by defence public sector units (PSUs).²⁷ Dr Seema Gahlaut thus describes:

“This is the single most important reason for India’s success in non-proliferation of weapons of mass destruction (WMDs) beyond its borders. Conversely, the problem exports from India have been in the area of dual-use chemicals, perhaps because the chemical industry has traditionally been dominated by the private sector, rather than by the government owned public sector enterprises.”²⁸

Significant changes to India’s domestic environment over the last two decades have resulted in weakening its commitment to horizontal non-proliferation. The economic reforms commencing in July 1991 led to major structural changes in the Indian economic system.²⁹ The previously state dominated economy

consequently witnessed a shift toward increased private sector involvement especially in dual use items. Furthermore, as the envisaged role for the private-sector in several dual-use technologies increased, it automatically implied weaker government control over exports of such technologies.³⁰ As a consequence of these developments, the expectations of the Indian public also began changing. The public demanded improved management of its funds. Almost all public institutions, including the Defence Research and Development Organisation (DRDO) came under intense scrutiny to ensure efficient management of public resources, and to ascertain that their returns justified the investment of scarce resources. The profitability and efficiency of the atomic energy and missile programmes were also subjected to similar scrutiny.³¹

As a result, the Indian government increasingly finds itself in situations whereby it may have to adopt export control policies “that are designed to assist in generating revenues for its defence industries.”³² Such policies may also result in weaker government control over the exports of such products. The growth of the Indian industry has positively impacted the Indian private sector by giving it access to greater information and databases and has enabled it to undertake research in several sectors including IT, Chemical and Biological, pharmaceuticals and Bio technology.³³ With the opening up of the defence sector to private enterprise, the opening of the Indian economy is a foregone conclusion.

Export Control Framework

Recognising the problems associated with dual use export items as a consequence of the economic changes in India, the country initiated a process to further consolidate its system of strategic trade controls. The

first step in this direction was the enactment of the Foreign Trade Act of 1992 which brought both import and export controls under the Indian Tariff Classification published by the Ministry of Commerce.³⁴ The Department of Commerce within the Ministry of Commerce became the principal organisation responsible for controlling and regulating exports. India also introduced several other legislations as well as amending existing laws and regulations in order to make its export control regime more rigorous and to improve its ability to deal with contemporary problems associated with globalisation.

The resultant export control regime that emerged in India is a law-based system covering different legislations, regulations, appendices, rules and different governmental notifications and circulars.³⁵ However, India lacks a unified export control law as different laws govern nuclear, biological and chemical exports.³⁶ The lack of a unified system can be explained in terms of the economic transition that India has witnessed over the years. The production of defence items was exclusively carried out by government entities for consumption by the Indian government. This ensured that the industry remained subject to strict government regulations and by default decreased the dangers associated with illicit trafficking of dual use items and technologies. With the government's decision to open the defence sector to private businesses also came the recognition that India's existing export control system would require restructuring to ensure its ability to deal with the problems associated with the opening up of the economy.

Until 1992, the IECA or Imports and Exports Control Act of 1947 regulated Indian exports and imports. The Foreign Trade Development and Regulation Act or FTDR of 1992 superseded the IECA and it is

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responsible for regulating the export control laws of the country. The government of India reviews its export import policy based on the FTDR. In order to further institutionalise its system of export controls the government of India established the “Small Group on Strategic Trade Controls” in 1993 which was responsible for finalising the SMET list.³⁷ The Systematic dual use control lists in India were first notified in 1995 and were classified as SMET or “Special Material, Equipment and Technology”, published under the Foreign Trade Act. This list was subsequently revised in 1999, 2005, 2007, 2013 and most recently in 2017. The list is now known as “SCOMET” or the Special Chemicals, Organisms, Material, Equipment and Technology List.³⁸

The Atomic Energy Act³⁹ as well as the Customs Act of 1962⁴⁰ are also important legislations forming the basis of India's export control regime. However, the Weapons of Mass destruction Act of 2005 remains the single most important legislation pertaining to Indian export controls. The WMD Act of 2005 incorporated international standards into India's national legislation. It covers technology transfers, “catch-all” controls, trans-shipment and transit controls. Furthermore, it criminalises the possession of weapons of mass destruction by unauthorised entities or individuals. It prohibits the export out of India of any goods or technology from India if the exporter is aware they will be used for a WMD programme. Lastly the act is responsible for regulating the flow of sensitive technology from India or by expatriate Indians. It also governs foreigners while they are in India. Furthermore, the act imposes a general prohibition on brokering by Indian citizens or foreigners while they are in India.

The 2010 FTDR Amendment Act revised India's Foreign Trade Development and Regulation Act of

1992. The Act enables the government to formulate and amend India's foreign trade policy as well as empowering "the Directorate General of Foreign Trade (DGFT) to license the export and import of items on the Indian Tariff Classification Harmonised System (HS) list."⁴¹

Enforcement Mechanism

India's enforcement of Export Controls can be explained in terms of its domestic and international efforts, both aimed at strengthening its export control regime. Whereas the former refer to efforts taken to lessen the government-industry gap, the latter are concerned with India's pursuit of fulfilling its international commitments including its membership of the 1540 Committee and the Nuclear Security Summit process.

In terms of domestic implementation, an Inter-Ministerial Working Group coordinated by the Directorate General of Foreign Trade administers the SCOMET regulations. The regulations outline the procedure, process and factors relating to the licensing of controlled items. The licensing process is rigorous, involving various departments and critically examines export applications. Based on changing global trends affecting proliferation of WMD related items, the Indian export control mechanism strives to make use of a dynamic risk assessment system. To this end, India remains committed to exercising "restraint and responsibility in the transfer of sensitive systems and technologies."

In an effort to harmonise its export control system India has integrated its customs and other enforcement agencies in its export control system. Coordination between the different governmental organisations is

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aimed at the prevention, detection and penalisation of unauthorised exports. An inter-agency Core Group is responsible for co-ordinating these activities and it meets periodically to review these issues. As part of regular review of implementation of export controls, India updates its control lists based on changing global requirements. India also remains committed to training enforcement officials, commodity identification support and installation of detection equipment at ports and border checkpoints and other necessary measures. The DGFT is currently in the process of introducing an online application system to facilitate the application process for obtaining licenses and as a consequence also to facilitate the implementation of export controls.

Industry outreach is perhaps the single most important area in order to enhance understanding about export controls among producers and exporters of controlled items. India cooperates with several partners including the four export control regimes in an effort to share experiences and best practices in export controls.

India's Export Control regulations underwent significant changes introduced by the Directorate General of Foreign Trade (DGFT) in April 2017. The amendments revised the Special Chemical, Organisms, Materials, Equipment and Technologies category (SCOMET) list relating to dual-use goods and technologies. It also includes some procedural changes including reductions in the processing time for SCOMET applications.⁴²

These changes came about as a result of the country's obligations as a member of the Missile Technology Control Regime and in an effort to follow the Nuclear Suppliers Group Guidelines. It was also an effort to align India with the guidelines and control lists of both the Wassenaar Arrangement and the Australia Group. In

2017 thus, a new Category 8 was introduced under the SCOMET for “Special Materials and Related Equipment, Material Processing, Electronics, Computers, Telecommunications, Information Security, Sensors, and Lasers, Navigation and Avionics, Marine, Aerospace and Propulsion”.⁴³

Similarly, the SCOMET Category 6, which was earlier ‘reserved’, has been updated with a ‘Munitions List’. The Munitions List completely replaces the earlier Military Stores List. Amendments have also been made to Categories 1C / 1D relating to the export of chemicals and Category 2 relating to micro-organisms.⁴⁴

Moreover, the regulation of export of non- SCOMET items having a potential risk of use in or diversion weapons of mass destruction, missile and military end use has been provided for. A ‘Commodity Identification Note’ has also been introduced in the SCOMET List to help companies identify and classify the licensing and jurisdiction procedures of their goods.⁴⁵

The new changes also include a ‘General Technology Note’ to provide clarity on which technology is covered under the SCOMET list. It provides that technology which is “required” for development; production or use of the specified items covered under Category 8 will also be treated as controlled. Such technology will remain controlled even if it is made applicable to uncontrolled items, barring certain exclusions. Similarly, another feature called the General Software Note provides clarity on exclusion of software, which is available in public domain.⁴⁶

India's Proliferation Record: Past and Present

In the recent past, with the notable exception of a June 2016 story about India's embarrassing *North Korean Connection*,⁴⁷ India's claimed commitment to horizontal nonproliferation has endured. The concerns about India's vertical nuclear nonproliferation however have remained a significant problem. From the point of view of critics, the Indian "proliferation problem" relates to the domestic proliferation problem in India. Although India may not have provided significant⁴⁸ nuclear weapons assistance to another country, some lesser-known aspects of India's non-proliferation records need to be highlighted if India is being considered for a special status within the Nuclear Suppliers Group. These issues remain critical from the point of view of WMD related proliferation especially in the context of India's private sector emerging as a major supplier of dual use items and related technology.

A 2006 ISIS article titled "India's Gas Centrifuge Programme: Stopping Illicit Procurement and the Leakage of Technical Centrifuge Know-How," identified three main weaknesses in India's "impeccable" non-proliferation record. It referred to illicit procurement of dual-use items by Indian entities for its nuclear programme, centrifuge know-how leakage and finally a poorly implemented export control system. The report blames Indian entities for procuring sensitive items without identifying that the end user would be a military facility without safeguards. The ISIS report also revealed how the bidding process for the country's gas centrifuge programme was responsible for leaking sensitive information.⁴⁹ The article goes on to highlight the possibility of onward proliferation because of the inherent weaknesses associated with the Indian export control regime. As a consequence, Indian industries

remain an attractive target for Proliferating states.

In a related development, a confidential European “early warning” intelligence assessment conducted by *The Guardian* in January 2006 identified Pakistan, Iran, Syria, and North Korea as states engaged in illicit procurement to bolster their nuclear, chemical, and biological weapons programmes and associated delivery systems.⁵⁰ The report warned European companies about Indian entities associated with the Indian Department of Atomic Energy (DAE) engaged in the procurement of materials for nuclear weapon development from European firms. The report warns European government officials and high-technology manufacturers to be suspicious of approaches by Indian nuclear entities and their intermediaries who had tried to conceal the fact that they were doing business on behalf of the DAE. Indian missile companies including high profile state organisations may also have been engaged in proliferation activities. The report did not rule out the possibility of Indian proliferation to third countries. However, it did not name any country, which could have been the potential beneficiary of such transactions.⁵¹

The ISIS report goes on to highlight the role of Indian Rare Earths (IRE) Ltd a subsidiary of the Department of Atomic Energy in leaking detailed gas centrifuge information in the process of procuring for its gas centrifuge enrichment plant.⁵² The company used both the web and print media to invite interested firms to purchase bidding documents. The tender advertisements did not indicate to the bidder that the items would be used in a gas centrifuge facility. The documents were available for a meagre fee of \$10 and contained detailed drawings and manufacturing instructions for direct use centrifuge components and other sensitive centrifuge-related items.⁵³ Seemingly the tender documents could

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be acquired with relative ease. The tender documents did not restrict foreign firms or individuals from participating in the process.⁵⁴

A related concern that emerged as a consequence of this process of bidding was the possibility that a manufacturer who won the bid may have eventually sold the same item to other buyers. According to the ISIS report, it could not verify the existence of any controls in place to stop such additional sales.⁵⁵ The ISIS has published several reports since the report in 2006 highlighting the weaknesses in India's export control system and their implications for both horizontal and vertical proliferation. In this context two recent cases shed light on the inadequacies of the Indian export control system despite continued efforts to address issues related to the illicit trafficking of dual use items.

On December 11, 2012, Canada imposed an asset freeze and a dealings prohibition on almost 98 entities because of proliferation concerns. Jahan Tech Rooyan Pars Co. was one of these companies. A February 13, 2013 report released by the Institute for Science and International Security documents the 2011 attempt by Jahan Tech Rooyan Pars Co to acquire ring magnets for the Iranian nuclear programme via China. Incidentally, the report mentions a small Indian company Ferrito Plastronics, apparently "offering its services in China." The ISIS report could not discern the possible role of Ferrito Plastronics through the enquiry.⁵⁶

As it remains unclear whether the Indian company was responding to the enquiry or being contacted by the Iranian firm, the ISIS report suggests that it is likely that several suppliers in different countries were contacted, using the internet or perhaps approached even directly. Smaller companies like Ferrito Plastronics would

probably have needed to procure the magnets from larger manufacturers.

Although the ISIS report lacks evidence to prove Ferrito Plastronics involvement with the Iranian company it does highlight the small Chennai-based firm in the context of how illicit procurement has been conducted by Iranian entities by using dubious companies and creative channels to bypass trade controls and procure nuclear equipment from different sources.

In his final analysis, David Albright identifies the possible weaknesses in both the Indian and Chinese system of export controls and asks them to warn domestic companies that there is zero tolerance for them entering into such transactions.

In an interview to the *Times of India*, Bala Subramanian, the owner of this small Chennai based business defended his company, stressing that although his company does supply magnets - the kind used to make decorative magnets for fridges or making medical equipment, coils and loud speakers. A bewildered Subramanian wondered why it was wrong for a foreign company making an enquiry and why he shouldn't have been conducting business. He also pointed out that his company was not in a position to match Chinese prices and was therefore trading within India.⁵⁷

Although his defence seemed genuine, small companies like Ferrito Plastronics could be used to procure the magnets from larger manufacturers. In this context, Subramanian pointed out that he does not manufacture magnets but sources them from a Winner Electricals, a New Delhi based company.

In another incident which did not receive much international attention, operations were launched in

Germany and Turkey in March 2013 to catch a network of smugglers allegedly involved in transferring nuclear equipment obtained from India and Germany to a nuclear facility in Iran's Arak city. The smuggling network coordinated almost 900 operations whereby nuclear equipment from India and Germany was smuggled using fake companies registered in Istanbul, Turkey.⁵⁸

Indian membership of the NSG and other export control regimes implies an increase in Indian imports of nuclear dual use items. This in turn will put a severe strain on India's evolving export control system, even as it struggles to ensure that Indian enterprises refrain from re-transferring imported items or alternatively reverse engineer items to sell in the international market.

Conclusion

Notwithstanding Indian efforts to strengthen its export controls to counter proliferation, they have served a limited purpose only. The weaknesses in export control system are not exclusive to India. Even developed countries like Germany are not entirely immune to the loopholes associated with the system of export controls and have succumbed to them.

Between 2011-2012, the Indian government refused export licenses to 13 companies that were identified as intermediaries in the international black market for WMD materials. South African and West Asian entities are known to employ Indian firms to assist the covert movement of potential unconventional weapons materials. According to reports, the Directors General of both the Foreign Trade and the Atomic Energy Departments turned down at least 13 export requests for goods contained on the Special Chemicals, Organisms,

Materials, Equipment and Technologies list.

These denials were viewed as “aiding New Delhi's campaign to gain admittance” to international export control regimes including the NSG. However, they also reveal the daunting task at hand for the Indian export control regime. In the past also nuclear smuggling networks were able to find creative ways to work around export controls in order to procure items for illicit purposes. Indian Export Controls are the main instruments used by the government to prevent Indian businesses from exporting illegal or dual-use items outside the country. On account of its evolving nature, however, the export control system is still grappling with numerous teething problems including limited knowledge, lack of co-ordination, infancy of outreach programmes, and little or no knowledge of legal issues and re-exports.

In recent years, the government-industry interaction has undergone dramatic changes especially as the government strives to share more information as well as making itself more accessible. This is evident by the increase in the number of outreach activities including seminars in order to educate businesses about the importance of trade controls. The Ministry of External Affairs is working together with the Indian Chambers of Commerce and Industry to further facilitate the sharing of information and best practices within the industry.

As such, this interaction needs to be a regular feature rather than being occasional. This would go a long way in improving the industry's self-regulation mechanisms. It would also help promote genuine dialogue on emerging issues related to the security of dual use technologies. A common factor in the case studies has been the importance involving small and medium

enterprises in the process of institutionalising export controls. There is a need to convince SMEs as well as brokerage and warehouse firms to adopt rigorous internal compliance programmes.

Finally, the government needs to establish better means of monitoring the export activities of foreign subsidiaries of Indian firms and of foreign companies that operate on Indian Territory.

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27. Seema Gahlaut, "Non Proliferation Export Controls in India" in M.D. Beck, R.T. Cupitt, S Gahlaut, S.A. Jones eds., *To Supply or to Deny: Comparing Non Proliferation Export Controls in Five Key Countries* (London: Kluwer, 2003).
28. Ibid.
29. Gahlaut, "Non Proliferation".
30. Aubin and Idiart, *Export Control*.
31. Ibid.
32. Ibid.
33. Ibid.
34. Ibid., 187.
35. Ibid.
36. Ibid.
37. Ibid.
38. The harmonisation of SCOMET controls with the Nuclear Suppliers Group and Missile Technology Control Regime

- guidelines and annexes was notified in 2008.
39. The Act regulates the use and trade of atomic minerals and technologies as well as specifying items that are under the specific control of government of India.
40. The Act deals with the control of trade in defence and dual use good.
41. The ITC (HS) is an 8-digit commodity classification system based on Harmonized System Codes (HS- codes) that is used by India to identify all trade-related transactions. The ITC (HS) is divided into two schedules: Schedule 1 (imports) and Schedule 2 (exports). India's national dual-use export control list, the Special Chemicals, Organisms, Materials, Equipment, and Technologies (SCOMET) list can be found in Appendix 3 of Schedule 2 of the ITC (HS).
42. Director General of Foreign Trade, *FAQs on Amendments in SCOMET Related Policy*, April 24, 2017, <http://dgft.gov.in/exim/2000/scomet/2017/FAQs2017.pdf>.
43. Ibid.
44. Ibid.
45. Ibid.
46. Ibid.
47. According to the June 2017 Al Jazeera story, since 2005 when it was first established, some thirty North Korean Scientists underwent training at India's CSSTEAP (Centre for Space Science and Technology Education in Asia and the Pacific in Dhera Dun, two of them as recently as 2017.
48. The case of NEC Engineering Private Ltd which emerged in 2003 not only damaged India's claims of having a strong export control system but also highlighted India's proliferation record in terms of illicit exports to entities outside India.
49. D. Albright and S. Basu, "Neither a determined Proliferator Nor a Responsible Nuclear State: India's Record Needs Scrutiny," Institute for Science and International Security (ISIS) Report, April 5, 2006, <https://isis-online.org/uploads/isis-reports/documents/indiacritique.pdf>.

50. A country included in the July 2005 assessment but not listed by the *Guardian* is India. The report contains two “early warning” sections on India, which serve as a warning about India’s technology procurements for its national laser programme, ballistic missile programmes, and nuclear programme. This intelligence report is in sharp contrast to statements by Indian officials following the release of our March 10 report, in which they denied conducting any illicit procurement.
51. Albright and Basu, “Neither a determined”.
52. Ibid.
53. Ibid.
54. Ibid.
55. Ibid.
56. David Albright, “Ring Magnets for IR 1 Centrifuges,” Institute for Science and International Security (ISIS) Report, February 13, 2013, <http://isis-online.org/isis-reports/detail/ring-magnets-for-ir-1-centrifuges/>.
57. Jaya Menon and Deeptiman Tiwary, “Global Watchdog Sees Chennai’s Tiny Shop as Supplier to Iran’s Nuclear Program,” *The Times of India*, February 17, 2013, <https://timesofindia.indiatimes.com/india/Global-watchdog-sees-Chennais-tiny-shop-as-supplier-to-Irans-nuclear-programme/articleshow/18536431.cms>.
58. “Nuclear Materials Smugglers Arrested,” *United Press International*, March 11, 2013, <https://www.upi.com/Nuclear-materials-smugglers-arrested/80861362997303/>; Cheryl K. Chumley, “Turkey and Germany Arrest Iranians in Nuclear Smuggling Scheme,” *Washington Times*, March 11, 2013, <https://www.washingtontimes.com/news/2013/mar/11/turkey-germany-arrest-iranians-nuclear-smuggling-s/>.