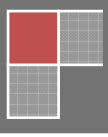
SSPC Issue Brief

UNSCR 1540: The Missing Links, and A Committed Partner

Sitakanta Mishra

January 27, 2015

The UNSCR 1540 is a visionary approach to address the threat of WMD proliferation beyond the state-centric approach. It amalgamates the entire range of multilateral obligations and controls relating to WMD-related technology and material. However, it has to bridge a few missing links at the methodological and attitudinal levels to prove optimum and universal. India, a committed partner, maintains a credible safety-security architecture with appropriate legal, physical and collaborative measures, and expects that the regime must ensure "greater national responsibility…accompanied by responsible behaviour by states" to make it thriving.



The UNSCR 1540 is a decade-old regime with a visionary approach that seeks to strengthen the global non-proliferation endeavour. First, it addresses the threat of WMD (Weapons of Mass Destruction) proliferation beyond the state-centric approach. Second, it establishes a universal system of measures to detect and deter acquisition of WMD by non-state actors as its applicability spans across all states regardless of their membership in multilateral agreements. Third, with catch-all provisions, it amalgamates the entire range of multilateral obligations and controls relating to WMD-related technology and material. However, given the complexity and magnitude of the challenges, the international community must bridge a few missing links at the methodological and attitudinal levels, as legislation alone would not suffice to achieve the desired effects of this resolution.

India, a victim of terrorism, a neighbour to clandestine nuclear program and terrorist breeding ground, is aware of the consequences of misuse of WMDs. Therefore, the 1540 resolution is in India's own interest, and New Delhi is committed to achieving the objectives of the resolution scrupulously. While maintaining credible safety-security architecture with appropriate legal, physical and collaborative measures, it expects that the WMD regime must ensure "greater national responsibility[…]accompanied by responsible behaviour by states".[1]

Missing Links

Firstly, for effective implementation of the resolution, the 1540 Committee, comprising of representatives from each member of the Security Council along with additional experts, is tasked to collect and review national reports and assist the member states for safety-security capacity-building. This *method of implementation* of the resolution and *criteria for evaluation*[2] of the implementation raises many questions: whether "universality of reporting" should be a "metric for success" or an evaluation criterion;[3] if the assessments

[1] "Inaugural Address by Amandeep Singh Gill, Joint Secretary, MEA at Seminar on UN Security Council Resolution 1540 (2004)", http://www.idsa.in/speech/AmandeepSinghGill_UNSecurityCouncilResolution540.html, pp. 7-8.

[2] The UNSC calls upon all States to present a report (the "first report") on steps they have taken to implement the Resolution and to submit such a report to the 1540 Committee. States are also encouraged to prepare national implementation action plans on a voluntary basis. The Committee is tasked to review national reports and compare the number of measures taken from successive reports to judge the level of implementation of the Resolution by respective States.

[3] Dana Perkins, "1540 through the fog of war", 1540 Compass Discussion Forum, http://cits.uga.edu/1540compass/article/op-ed-1540-through-the-fog-of-war, p. 4

are robust, and "implementation should be standardised";[4] how to measure progress when different states have varied amount of WMD material?

Since "not all countries are equal in terms of their relevance to WMD proliferation; therefore, not all of the provisions of the resolution are equally important for every country to fulfil."[5] Some states are more WMD-relevant than others, and that the provisions of the resolution carry varying degrees of importance depending on the state in question. Also, the secrecy maintained by states or 'unavailability of information' should not be interpreted as 'no-security' arrangement in place, as perceived by NTI Nuclear Security Index.

Secondly, universal criminalization of WMDs is the key to universal implementation of the resolution. While criminalization of chemical and biological weapons has been the strongest, the same is not the case as far as nuclear weapon is concerned. According to K. Subrahmaniam, many commissions – Hans Blix Commission, Gareth Evans Commission, Palme Commission, among others – have been constituted for arms control, non-proliferation, etc. But no commission has ever been tasked to enquire into the question of can a nuclear war be fought to win a meaningful military victory? Only such realization that a nuclear war cannot be fought to win a meaningful military victory will take the world towards de-legitimization of nuclear weapons. De-legitimization is a necessary step leading towards elimination;[6] but will the nuclear weapons states come forward to reduce the importance of nuclear weapons in their national security strategy? As long as nuclear weapons exist, nuclear technology, material and know-how will proliferate and chances of their misuse will remain high.

Should the 1540 Committee not propagate the process and rationale behind the no-first-use (NFU) agreement of Chemical Weapons (Geneva Protocol of 1925), and the eventual elimination of chemical weapons (1993 Convention)? Even after the promulgation of the Geneva Protocol, chemical weapons were used; but ultimately the conclusion was that chemical weapons could only kill people; they did not help win a war. The Germans used it and the Allies retaliated. Saddam Hussein used it against Iran and the Iranians retaliated. When it came to WW II, though gas masks were distributed widely in case chemical weapons were used, neither side used them. Largely, by that time, both sides were convinced that if one side used it, there would be certain retaliation, and it was not going to help to win the war.

---

[4] G. Balachandran, Report on "Identification of Effective Implementation Practices by Examining UNSCR 1540 (2004) After a Decade of its Existence", February 25-26, 2014, http://www.idsa.in/event/UNSCR1540AfteraDecadeofitsExistence, p. 4.

[5] Peter Crail, "Implementing UN Security Council Resolution 1540: A Risk-Based Approach", *Nonproliferation Review*, Vol. 13, No. 2, July 2006, p. 361.

[6] K Subrahmanyam, "Prospect for a Nuclear-Weapon-Free World", *Indian Foreign Affairs Journal*, vol. 5, no. 2, April-June 2010, pp. 172-180.

That was the basic reason why nations agreed to NFU of chemical weapons and finally in 1993 the Chemical Weapons Convention was adopted.[7] It took 68 years to move from the NFU to total elimination stage. Similarly, a detailed thought can be given to propagate more widely the *uselessness of nuclear weapons* and advocate for a universal NFU of nuclear weapons which would ultimately lead to their de-legitimization and elimination, like the chemical weapons.

Thirdly, "the focus on non-state actors should in no way diminish state accountability in combating terrorism, dismantling its support infrastructure or its linkage with WMD".[8] The missing link, therefore, is how to deal with the issue of 'terrorism as a state policy'. How to stop the covert trade of WMD technology that has been integral part of the foreign policy of some nations, "plotted and supervised by the ruling clique" itself?[9] Ensuring nuclear security is certainly the sole responsibility of states, which in turn necessitates "responsible behaviour by States." However, the persistent clandestine nuclear cooperation between states like China and Pakistan increases the chances of WMD materials falling into wrong hands, and dilutes the credibility of the non-proliferation regime entirely.

Fourthly, the know-how of WMD or the transfer of intangible aspects of technology (knowledge, skill, and intent) is the soft-underbelly of non-proliferation regime. It is expected that the volume of trade in dual use technology will grow phenomenally in the decades ahead. Mere clarion call to control their flow and safe-keep in good faith or voluntary action will achieve no major breakthrough. Robust international compliance programmes, punitive measures against grave misconducts should be built into the implementation framework of the 1540 Resolution.

Fifthly, legislation alone is not enough to give maximum effectiveness to the Resolution. To complement the legal framework, a robust technological approach must be applied. Greater international cooperation for sharing best practices and collaboration for innovating advanced detection technologies to monitor and secure WMD materials is the need of the hour. At the same time, efforts must be made to intensify proliferation-resistant technology innovation and share them with the world community. As the private sector is getting increasingly engaged with supply of sensitive technology, it must be better engaged for effective export controls governance. Often there is insufficient information to determine end-use concerns regarding dual-use technologies. 'Documentation of best practices' and stringent monitoring of dual-use technologies' manufacture and supply chain require delineation of strict compliance guidelines. Also,

[7] ibid.
[8] "Inaugural Address by Amandeep Singh Gill, n. 1.
[9] Adrian Levy and Catherine Scott-Clark, *Deception: Pakistan, the United States and the Global Nuclear Weapons Conspiracy* (New Delhi: Penguine Books India Pvt. Ltd., 2007), p. 2.

the monitoring devices used today are viewed "decades old" and are "ineffective" in detecting materials.[10]

Lastly, a comprehensive WMD information management programme involving media, public, academia and civil society should be devised to enhance public awareness as well as their responsibility. A "whole of society" approach through media outreach and collaborative programmes is essential[11] to enhance the public understanding of the gravity of the consequences of misuse of WMD-related material and need for greater vigilance. The UNSCR 1540 prescribes a universal system of prohibitions, accounting and security measures and export controls over WMD to detect and deter their acquisition by non-state actors. However, the contours, nature and magnitude of challenge in different parts of the world are varied. Therefore, a regional WMD security architecture must be thought of to understand specific threat scenarios; in this pursuit, the feasibility of regional summits or forums should be explored.

India: A Committed Partner

India fully shares the increasing global concern on possible breaches of WMD-related material's security. The worsening regional security environment, clandestine proliferation and thriving terror and smuggling networks in the neighbourhood necessitates India to prioritise security strategy against WMDs. India fully supports, and remains committed to achieve the objectives of UNSCR 1540, which is in line with the General Assembly resolution "Measures to prevent terrorists from gaining access to WMD" 2002. In pursuit of fulfilling its obligations, India has already filed its national report in November 2014[12] and it gives out periodic updates; latest being the one submitted on 31 May 2013.[13] India has also supported the extension of 1540 Committee mandate for ten years, until April 2021.

To meet the challenge of WMD proliferation threat, India follows a multi-prong strategy. At the domestic level, it has formulated stringent legal provisions, physical security arrangements, manpower capacity-building, etc. With international collaboration it has adopted best practices, and at the same time, it offers assistance to other countries in Asia, especially legislative capacity-building and in fulfilling state's obligations under

[10] Anshuman Roy, "Technological Best Practices" in the report "Identification of Effective Implementation Practices by Examining UNSCR 1540 (2004) After a Decade of its Existence", February 25-26, 2014. http://www.idsa.in/event/UNSCR1540AfteraDecadeofitsExistence, p. 23.

[11] Tanya Ogilvie-White, "On Effective Practices", ibid, p. 27.

[12] "India's National Report on the Implementation of Security Council Resolution 1540 (2004)", http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N04/661/17/PDF/N0466117.pdf?OpenElement

[13] "Note Verbale dated 31 May 2013 from the Permanent Mission of India to the United Nations Addressed to the Chair of the Committee", http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N14/205/54/PDF/N1420554.pdf?OpenElement

UNSCR 1540. Moreover, India strives for innovation of proliferation-resistant technology, and monitoring devices.

Institution, Legislation, and Administration: The Foreign Trade Development and Regulation (FTDR) Act No. 22 of 1992 (amended in 2010) provides the legal basis for India's technology trade control system, and strengthens national export control system, including intangible transfers. The FTDR "empowers the Directorate General of Foreign Trade (DGFT), situated within the Department of Commerce and Industry (DCI), to license the export and import of items on the Indian Tariff Classification (Harmonized System) or ITC (HS) list."[14]

This legal instrument was further strengthened with the passage of the Weapons of Mass Destruction (WMD) Act in 2005, which "authorizes the GOI to regulate the export, re-transfer, re-export, transit, and trans-shipment of any items related to the development, production, handling, operation, maintenance, storage, or dissemination of a WMD or missile delivery device. It also established a catch-all control that restricts exports of non-listed items destined for a WMD end-use, and it provided a rudimentary legal basis to regulate technology transfers."[15]

India passed the Chemical Weapons Convention Act in 2000 and subsequently amended it in 2010. The law was enacted "to give effect to the convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction." India signed the convention on January 14, 1993.[16] India is also a party to the 1972 Biological and Toxin Weapons Convention (BTWC), and participates actively in the inter-sessional programme under the Convention.

India's Global Centre for Nuclear Energy Partnership (GCNEP), established in 2014, focuses on the development of enhanced nuclear safeguards to effectively and efficiently monitor nuclear materials and facilities; advanced proliferation resistant nuclear power reactors; advanced nuclear energy systems, isotopes and radiation technologies, nuclear forensic; and establishment of accreditation facilities for radiation monitoring. The Centre aims to explore international best practices, organize training courses, workshops, public awareness and outreach programmes in coordination with the Department of Atomic Energy (DAE) and International Atomic Energy Agency (IAEA). Moreover, in a bid to tackle smuggling and illegal transportation of nuclear materials, the Directorate of Forensic Science Laboratories (DFSL) in Bangalore has drawn up a comprehensive

[14] "India's Export Controls: Current Status and Possible Changes on the Horizon," *SECURUS Strategic Trade Solutions*, 2011. Available at: http://securustrade.com/Indias_Export_Controls_Article_July_2011_FINAL.pdf
[15] Ibid.
[16] "Lok Sabha Passes Chemical Weapons, AIIMS Bills," *Ndtv.com*, August 30, 2012. Available at http://www.ndtv.com/article/india/lok-sabha-passes-chemical-weapons-aiims-bills-260977

perspective plan to take forensic sciences to a global level with the establishment of a centre for nuclear forensic science. This is expected to take off by 2018-19.[17]

Supply Chain and Export Control: All Indian industries in general and the strategic industries in particular have adopted the strict 'codes of conduct' for robust internal compliance. To ensure genuine end-use of the exported items, "India requires End User Certificate (EUC) from all companies in the supply chain. Furnishing information regarding previous exports to support a licence application as well as End User Undertaking, details of the technical specification of an item, and purchase order/contract are mandatory. The end user certificate must indicate name of the item of export, name of the importer, specific end use of the product, and details of purchase order."[18] Generally, licence applications are assessed upon the credentials of the end-user and credibility of the stated end-use.[19] Currently, India does not offer open or general licences in critical or strategic sectors.

Technology / Provisions: Specifically to monitor intangible technology transfers, methods like company audits, visa screening, intelligence collection, etc. are adopted. India maintains internal compliance through procedures like pre-employment screening (police verification); confidentiality undertaking at the time of employment (application of the official secrets act); security checks at entry and exist points; multi-layered access control systems in place; non-disclosure agreements wherever applicable; restriction on the disclosure of information pertaining to controlled items; limited access for visitors, etc.[20]

India uses a robust system called Central Monitoring System, which is run by the Centre for Development of Telemetrics (C-DOT) for monitoring of phone calls, social media, etc.[21] Radiation Monitor Portals have been installed in major seaports – Mumbai Port, Kandla, Goa, New Mangalore, Cochin, Tuticorin, Ennore, Chennai, Visakhapatnam, Paradip, and Kolkata. At present, only the Jawaharlal Nehru Port, Mumbai (JNP) is Container Security Initiative (CSI) compliant and equipped with "automated container

[17] "Dirty Bomb: Forensic Lab to Take Lead in Fighting Nuclear Terrorism", http://www.dnaindia.com/bangalore/report-dirty-bomb-forensic-lab-to-take-lead-in-fighting-nuclear-terrorism-1516166, March 06, 2011.

[18] S.K. Samal, "Indian Experience" in the report "Identification of Effective Implementation Practices by Examining UNSCR 1540 (2004) After a Decade of its Existence", February 25-26, 2014, http://www.idsa.in/event/UNSCR1540AfteraDecadeofitsExistence, p. 16.

[19] Ibid.

[20] AB Awati, "Identification of Effective Practices: Next Steps", in the report "Identification of Effective Implementation Practices by Examining UNSCR 1540 (2004) After a Decade of its Existence", February 25-26, 2014, http://www.idsa.in/event/UNSCR1540AfteraDecadeofitsExistence, pp. 34-35.

[21] R. Ramachandran, "Intangible Technology Transfer" in the report "Identification of Effective Implementation Practices by Examining UNSCR 1540 (2004) After a Decade of its Existence", February 25-26, 2014. http://www.idsa.in/event/UNSCR1540AfteraDecadeofitsExistence, p. 32.

screening and information exchange" provisions to intercept the movement of radioactive materials.[22]

Mobile Radiation Detection Systems (MRDS), as part of the preparedness to handle radiological emergencies, have been put in place in major Indian cities. In 2011, the Union Home Ministry sanctioned setting up nearly 1,000 MRDS in police stations at 50 Indian cities for detecting radiation. The cities that have been identified in the first phase of monitoring include Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Ahmedabad, Pune, Lucknow, Jaipur, Thiruvananthapuram, Patna, Ranchi, Bhopal, Agra, Kanpur, Indore, Bhubaneswar, and Chandigarh.[23]

Indian scientists have indigenously developed two types of radiation detection systems using plastic scintillators – a portal monitor for pedestrians and a camouflaged Limb/Pole monitor.[24] These have been calibrated and installed at a few facilities to detect orphan sources and unauthorized movement or illicit trafficking of radioactive materials. At the major transit points, border crossings and airports, radiation monitoring devices have been installed to monitor any unauthorized movement of radioactive materials.[25] Devices have been positioned in 14 major airports, including Delhi, Mumbai, Chennai, Kolkata and Amritsar. The remaining airports will be covered phase-wise. Similarly, in the first phase, devices have been installed at 13 integrated border check-posts, including the check posts at Wagah-Attari and on either side of the India-Nepal border. The police and border security forces have been given necessary training to identify and take action if any unwanted event is noticed. In 2004, India's Border Security Force formed a battalion with special skills in countering nuclear, biological and chemical threats.

A Few Counsels

Since security threats are dynamic in nature, and the global non-proliferation regime is still evolving, constant review of the threats with consequent national measures and international collaborations are needed. It is also to be kept in mind that the terrorists would not follow the traditional methods to unleash their objectives anymore.

Universal implementation of the resolution is desirable, but the "prevention of WMD proliferation depends largely on how seriously states take their responsibilities to prevent

[22] Gurpreet S Khurana, "India and the Container Security Initiative", *IDSA COMMENT*, July 17, 2007.

[23] Vishwa Mohan, "50 Cities to Get Mobile Kit to Trace Radiation," *The Times of India*, October 07, 2011.

[24] Harikumar M, Vaishali M Thakur, Amit Kumar Verma, Krishnamachari G, D. N Sharma, "Detection of Unauthorized Movement of Radioactive Sources in the Public Domain for Regaining Control on Orphan Sources – Systems and Feasibility," IAEA. Available at: http://www.unece.org/fileadmin/DAM/trans/radiation/docs/India.pdf

[25] Y. Mallikarjun, "Seaports, Airports to Get Radiation Detection Equipment," *The Hindu*, May 04, 2012.

such proliferation, both inside and outside the established regimes."[26] Therefore, making the resolution *obligatory* would demand state parties to be more responsive. Meanwhile, the UN Security Council should constitute a commission to prepare a roadmap for de-legitimisation of nuclear weapons, and initiate efforts for a universal NFU of nuclear weapons treaty.

As far as India is concerned, a national WMD Information Management System must be devised in collaboration with the media, academia, security agencies and scientists. At the outset, theoretical and practical aspects of WMD threat and security process should be introduced in school and university courses.

As increasing number of commercial container ships are entering Indian ports, extensive monitoring of trade and transit should be given more attention. The JNP has set itself a long-term goal of achieving 10 million TEUs (twenty foot equivalent container units) by 2014-15.[27] India's extensive 7,500 km coastline is dotted with a dozen of major ports and some 200 minor and intermediate ports. All major Indian seaports should be equipped with technology similar to CSI. To effectively control the access to dual-use WMD-relevant items and engage the industry, India may draw lessons from Singapore, Malaysia, South Korea and Japan that have developed excellent models with vast experience.[28]

In the model of Nuclear Security Summits (NSS), India in coordination with 1540 Committee may consider organising Regional WMD Security Summits, taking along its neighbours like China, Pakistan and the ASEAN countries.

Lastly, while controlling the access to dual-use technology/material to restrict WMD proliferation and their wrongful use, the sovereign right of states to avail technologies for genuine purposes should not be squeezed; neither should it impede the globalization phenomenon or the technology-driven economic development of developing countries.

[26] Crail, n. 5, p. 385.

[27] Jawaharlal Nehru Port Trust, "History", http://www.jnport.com/

[28] Anupam Srivastava, in the report "Identification of Effective Implementation Practices by Examining UNSCR 1540 (2004) After a Decade of its Existence", February 25-26, 2014, http://www.idsa.in/event/UNSCR1540AfteraDecadeofitsExistence, p. 25-26.

Dr. Sitakanta Mishra is a Research Fellow at the Centre for Air Power Studies, New Delhi, and the Associate Editor of Indian Foreign Affairs Journal (New Delhi), published by The Association of Indian Diplomats. Dr. Mishra has also worked with the Indian Pugwash for several years. He was a Visiting Research Scholar at Sandia National Laboratories in Albuquerque, New Mexico, during September-December 2013, and April-Aug 2014.

Dr. Mishra has authored three books: Parmanu Politics: Indian Political Parties and Nuclear Weapons (2015); Cruise Missiles: Evolution, Proliferation and Future (2011); and The Challenge of Nuclear Terror (2008). He has many other national and international publications related to South Asian affairs, nuclear energy, nuclear safety-security, missiles, Indian foreign policy, and also involved in Indo-Pak track-two dialogue.

The views expressed in this article are solely that of the author.

The Society for the Study of Peace and Conflict (SSPC) is an independent, non-profit, nonpartisan research organization based in New Delhi, dedicated to conduct rigorous and comprehensive research, and work towards disseminating information through commentaries and analyses on a broad spectrum of issues relating to peace, conflict and human development. SSPC has been registered under the Societies Registration Act (XXI) of 1860. The SSPC came into being as a platform to exchange ideas, to undertake quality research, and to ensure a fruitful dialogue.

Published by:
Society for the Study of Peace and Conflict.
Post Box: 10560,
JNU Old Campus, New Delhi-110067.
Website: www.sspconline.org
https://www.facebook.com/sspconline
https://twitter.com/sspconline

We welcome your feedback. Email your comments at "sspconline@gmail.com"

Designed and typeset by Excel Solutions