The state practice of India and the development of international law : selected areas

Patel, B.N.

CHAPTER VIII

LAWS OF DISARMAMENT OF THE WEAPONS OF MASS DESTRUCTION: A CASE STUDY OF CHEMICAL WEAPONS CONVENTION

8.1. Introduction

India has been a staunch proponent of disarmament[727] and has vehemently advocated its stated position in international political and legal forum. For example, in the area of nuclear weapons, it has actively worked for the full and complete prohibition of nuclear weapons as long back as its independence. It did not sign the treaties banning tests, including the Comprehensive Test Ban Treaty (CTBT) and the earlier treaty banning nuclear proliferation, even though it supported that concept as part of a larger scheme of comprehensive prohibition of nuclear weapons. Its emphasis has always been on eventual elimination of nuclear weapons and general and complete disarmament. In the area of biological weapons, India became a party to the Biological Weapons Convention.[728] However, as there has not been any verification protocol,[729] it is difficult to determine whether

[727] For some of the latest international and national scholarship on the issue, see, Mario, E Carranza, "Avoiding a nuclear catastrophe: Arms Control after the 2002 India-Pakistan Crisis", 40 *International Politics* 3, 313-339 (2003); Brahma Chellaney, "India's Nuclear Planning, Force Structure, Doctrine and Arms Control Posture", 53 *Australian Journal of International Affairs* 1, 57-69 (1999); Sumit Ganguly, "India's Pathways to Pokhran II: the Prospects and Sources of New Delhi's Nuclear Weapons Programme", In Sumit Ganguly, *Going Nuclear: Nuclear Proliferation and International Security in the 21st Century*, 147-175 (Cambridge: MIT Press, 2010); Shiv R. S Bedi, "The Development of India's Nuclear Weapons Policy in the Framework of the Development of International Humanitarian Law by the International Court of Justice", Shiv R. S. Bedi, *International Criminal and Human Rights*, 155-200 (New Delhi, Manak: 2010); Amitabh Singh and Ginu Zacharia Oomen, "Towards a World Free of Nuclear Weapons: Reporting an International Conference", 64 *India Quarterly* 2, 1-26 (2008); Waheguru Pal Singh Sidhu, "India's Nuclear Use Doctrine", *Planning the Unthinkable: How New Powers will use Nuclear, Biological and Chemical Weapons,* 125-157 (Ithaca: Cornell University Press, 2000).

[728] India signed the BWC on 15 January 1973 and ratified the same on 15 July 1974. India has a well-developed biotechnology infrastructure that includes numerous pharmaceutical production facilities bio-containment laboratories (including BSL-3 and BSL-4) for working with lethal pathogens. It also has highly qualified scientists with expertise in infectious diseases. Some of India's facilities are being used to support research and development for BW defense purposes. India has ratified the BWC and pledges to abide by its obligations. There is no clear evidence, circumstantial or otherwise, that directly points toward an offensive BW program. New Delhi does possess the scientific capability and infrastructure to launch an offensive BW program, but has chosen not to do so. In terms of delivery, India also possesses the capability to produce aerosols and has numerous potential delivery systems ranging from crop dusters to sophisticated ballistic missiles. In 2001, after Indian Postal Services received 17 "suspicious" letters believed to contain Bacillus anthracis spores, a Bio-Safety Level 2 (BSL-2) Laboratory was established to provide guidance in preparing the Indian government for a biological attack. B. anthracis is one of many pathogens studied at the institute, which also examines pathogens causing tuberculosis, typhoid, hepatitis B, rabies, yellow fever, Lassa fever, Ebola, and plague. The Defense Research and Development Establishment (DRDE) at Gwalior is the primary establishment for studies in toxicology and biochemical pharmacology and development of antibodies against several bacterial and viral agents. Work is in progress to prepare responses to threats like Anthrax, Brucellosis, Cholera and Plague, viral threats like smallpox and viral hemorrhage fever and biotoxic threats like botulism. Most of the information is classified. Researchers have developed chemical/biological protective gear, including masks, suits, detectors and suitable drugs. India has a 'no first use' policy. India has ratified the BWC and pledges to abide by its obligations. There is no clear evidence, circumstantial or otherwise, that directly points toward an offensive BW program. New Delhi does possess the scientific capability and infrastructure to launch an offensive BW program, but has not chosen to do so. In terms of delivery, India also possesses the capability to produce aerosols and has numerous potential delivery systems ranging from crop dusters to sophisticated ballistic missiles. However, no information exists in the public domain suggesting interest by the Indian government in delivery of biological agents by these or any other

India possesses these weapons and what are its plans for destruction, if possessed the biological weapons. On one hand, India possessing of nuclear weapons have not joined any nuclear weapons treaty, on the other hand, lack of verification protocol for Biological Weapons Convention offers a bleak picture[730] as far as India's letter and spirit compliance of international conventions on weapons of mass destruction are concerned.[731] This chapter examines the following issues: What are the obligations on India under the Chemical Weapons Convention and how it has attempted to fulfil these obligations? Which challenges India has faced during the negotiations of the Convention and while implementing the Convention at domestic level? How India can be considered to have contributed to the promotion of non-proliferation regime envisaged under the Convention? What has been India's position and approach with regard to the provisions of international cooperation and assistance to promote peaceful uses of chemistry? What role India has played in the creation of the OPCW and how it has contributed to the legal, administrative, and other organizational issues of the Organisation?

8.2. Overview of the Chemical Weapons Convention

Before embarking on the analysis, a brief but analytical overview of the CWC and the Organization for the Prohibition of Chemical Weapons which oversees the implementation of the Convention is essential. CWC is a disarmament agreement which outlaws the production, stockpiling and use of chemical weapons[732]. As of 15 July 2013 189 states were party to the CWC. India is one of the 65 original members of the Organization.[733] OPCW is mandated to prohibit development, production, stockpiling, and use of chemical weapons and to accomplish their destruction. The Organization mandates each member state to harmonise its laws in line with the obligations under the CWC. The implementation of the Convention affects world trade in chemicals[734] as well as has impact on the security of member states. The CWC requires States Parties (military and industry sectors alike) to submit sensitive and confidential business and military information, thus conceding a small thread of sovereignty. Activities of natural and legal persons belonging to States Parties are also regulated by the legislations implementing the Convention. To achieve these objectives, the Organization is endowed with an independent international and municipal legal personality, human and financial resources, etc.

---

means. To reiterate the latter point, in October 2002, Indian President Dr Kalam asserted that "we [India] will not make biological weapons. It is cruel to human beings..."

729 Daniel Feakes, Evaluating the CWC verification system, 4 *Disarmament Forum*, 11-21 (2002); Sebestyhn Gork and Richard Sullivan, Biological toxins: a bioweapon threat in the 21st century, 33 *Security dialogue* 2 141-56 (Oslo: International Peace Research Institute, 2002).

730 Onno Kervers, Strengthening compliance with the Biological Weapons Convention: the protocol negotiations, 7 *JCSL* 2, 275-292 (2002).

731 Jez Littlewood, "The Verification Debate in the Biological and Toxin Weapons Convention", in 3 *Disarmament Forum*, 15-25 (Geneva: UNIDIR: 2011); Piers Millet, "The Biological Weapons Convention: Securing Biology in the 21st Century", In 15 *Journal of Conflict and Security Laws* 1, 25-43 (2010); Jack M Beard, "The Shortcomings in the Indeterminacy in Arms Control Regimes: the Case of the Biological Weapons Convention", 101 *American JIL* 2, 271-321 (2007).

732 Its full name is the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. The Convention is administered by the Organisation for the Prohibition of Chemical Weapons (OPCW), which is an independent organization and often mistaken as being a department within the United Nations.

733 India signed the Convention on 14 January 1993 and submitted the instrument of ratification on 3 September 1996.

734 Doaa Abdel Motaal, "Reaching REACH: the Challenge for Chemicals Entering International Trade," 12 *Journal of Int Economic Law* 3, 643-662 (2009); Carter Ashton, John Deutch and Philip Zelikow, "Catastrophic Terrorism: Tackling the New Danger", 77 *Foreign Affairs* 6, 8-94 (1998).

Six States Parties including India have declared a total of (originally) approximately 70,000 tonnes of CW chemical agents. Twelve States Parties including India have declared 64 chemical weapons production facilities – Bosnia and Herzegovina, China, Yugoslavia (now Serbia and Montenegro), France, the Islamic Republic of Iran, Japan, Libya, the Russian Federation, UK, USA, and one other State Party – CWPF past capabilities.[735]

Whether India has complied with essential obligations under the CWC? Whether the compliance fully meets the letter and spirit of the Convention provisions? Which problems India encountered and whether in resolving the challenges, India compromised with its obligations? How the Indian compliance can be compared vis-à-vis other States Parties possessing CW and CWPFs? Finally, does Indian position and practice suggest evolution of any new norm or consolidation of an existing norm? These are the critical questions which need to be answered in order to defend a central argument of this chapter that Indian position and practice with regard to the laws of disarmament for weapons of mass destruction merely reflects a power and interest paradigm of a dominant state's position in the development of international law.

8.2.1. Regime on the destruction of chemical weapons and destruction and or conversion of chemical weapons production facilities

What are the obligations for India as far as destruction of chemical weapons and destruction and or conversion of chemical weapons production facilities are concerned? Destruction of chemical weapons and destruction and or conversion of chemical weapons production facilities are the fundamental obligations. Under Article III, India was obliged to submit, not later than 30 days after the Convention has entered into force for it (i.e. 29 May 1997), an initial declaration stating whether it owns or possesses any chemical weapons in any place under its jurisdiction or control. It was also required to specify the location, the aggregate quantity and a detailed inventory, and declare whether it has transferred or received, directly or indirectly, any chemical weapons since 1 January 1946. For reasons unknown,[736] India denied possession of chemical weapons.[737] This position attracted a lot of media and political queries after the immediate entry into force of the CWC. In this regard, it is quite interesting to note that the Joint Declaration of India and Pakistan of 1992 categorically mentions non-possession of chemical weapons by either party.[738] Based on this joint declaration, it may be inferred that production of chemical weapons may have taken place after 19 August 1992.

Along with its initial declaration, India was required to provide a general plan for the destruction of those chemical weapons, together with an overview of the national destruction programme and information on

[735] In addition, nine States Parties declared OCW - Belgium, Canada, France, Germany, Italy, Japan, Slovenia, UK and USA. Three States Parties China, Italy and Panama – have declared abandoned chemical weapons (ACW). www.opcw.org.

[736] In 1989, in reply to a note verbale of the UN Secretary-General on the subject of chemical weapons, India declared that it did not possess chemical weapons, Reply to a NV of the UN Secretary-General, referred to in Report of the Secretary-General in respect for the right to life: elimination of chemical weapons, prepared in accordance with the UN Sub-Commission on Human Rights Resolution 1988/27, UN document, E/CN.4/Sub.2/1989/4, 17 August 1989, para. 98.

[737] According to a 1991 DIA assessment, India has the technical capability and industrial base needed to produce precursors and chemical agents, and it is expected to acquire chemical weapons over the next two decades. Development is expected to be "paced by the parallel Pakistani program." E. J. Hogendoorn, "A Chemical Weapons Atlas", September/October 1997 pp. 35-39 (vol. 53, no. 05) © 1997 Bulletin of the Atomic Scientists

[738] "…reaffirming their respective unilateral declarations of non-possession of chemical weapons…", India – Pakistan Joint Declaration on the Complete Prohibition of Chemical Weapons of 19 August 1992.

its efforts to fulfil the Convention's destruction requirements.[739] India submitted the required information and covered all the requisite norms with adequate emphasis. Thus, India fully met its first procedural obligation to provide initial declaration in a timely manner to the OPCW.

8.2.2. Initial declaration on CW programmes

One of the primary obligations under the CWC is to destroy the CW, ACWs, OCWs, CWPFs. India has declared possession of CW[740] and CWPFs, accordingly, it is required to destroy the stockpiles and facilities in accordance with extensive and complex provisions that stipulate principles, methods, deadlines and order of destruction.[741] By fulfilling these obligations in letter and spirit, India has been able to strengthen the first ever truly multilateral non-discriminatory disarmament regime.[742] The norms for destruction of CW are also to be followed keeping in good faith the environmental consequences of such behaviour. For example, CW destruction shall not be carried out by dumping in any body of water, land burial or open-pit burning. India has conducted destruction of CW at specifically designated and appropriately designed and equipped facilities. India designed the facilities and carried out the destruction processes in the manner laid down in the provisions of the Convention. As the information pertaining to Indian CW destruction programme are highly confidential, the exact facts and figures are not available in the public domain.

8.2.3. Annual Plans, Reports and Detailed Facility Information

India was obliged to submit detailed annual plans for destruction, facility information, and annual reports. In addition, it was also required to submit detailed facility information to enable the OPCW Technical Secretariat to develop preliminary inspection procedures. It should be noted that such facility information is not part of the detailed annual plans, but is to be submitted just once, for each facility, as long as no changes occur. Detailed annual plans are required for each facility, specifying the types of chemical weapons that will be destroyed, a site diagram, and a schedule of activities for each annual destruction period. These plans are to be submitted not less than 60 days before the annual destruction period begins. India was also required to submit annual reports on the

---

[739] According to this Plan, India was required to provide a general schedule for the destruction, together with details of the number of destruction facilities existing or planned, of the plans and training programmes for the personnel who will operate those facilities, national safety and emissions standards; information on the development of new methods of destruction and on the improvement of existing methods; estimates of the costs of the destruction programme; and information of any issue that could have an adverse impact on the national destruction programme.

[740] India unilaterally decided to throw open its chemical weapons stockpile for international expert inspection, complying with the Chemical Weapons Convention. It should be noted that the most important thing about India's chemical weapons programme was that it has maintained very high secrecy with regards to its declaration and destruction programme.

[741] It is believed that during the Cold War, India developed and produced limited quantities of CW agents as part of an offensive CW program. However, it abandoned its offensive CW program at some point prior to 1997. http://www.nti.org/e_research/profiles/india/chemical/index.html, accessed on 2 November 2009.

[742] India has submitted declarations on its "testing and development of chemical weapons and their related facilities which were developed only to deal with the situation arising out of the possible use of chemical warfare against India." Chinese defense researchers have claimed that India possesses 1,000 tons of chemical warfare agents, which are located at five chemical weapons production and storage facilities. It is indicated that these agents include mainly mustard and there are several possible delivery munitions. http://www.nti.org/e_research/profiles/india/chemical/index.html, accessed on 2 November 2009.

destruction of their stockpiles, which will enable the Secretariat to assess the rate of progress – and reasons for the lack thereof – at each destruction facility.[743] Based on the annual reports and statements made by the Director-General during Executive Council, it is considered that India provided such information in a timely manner.

8.2.4. Declarations with regards to CWPF programme

India was required to declare, not later than 30 days after entry into force for it, any chemical weapons production facilities (CWPFs) it owns or possesses, or which are located in any place under its jurisdiction or control at any time since 1 January 1946. It was also required to declare whether it has transferred or received, directly or indirectly, any equipment for the production of chemical weapons, specifying the dates of transfer or receipt. Along with its initial declaration, India was also required to provide a general plan for destruction, specify what actions will be taken to close each facility, and provide a general plan for its temporary conversion to a destruction facility. India fulfilled these obligations by submitting its initial declaration on 28 May 1997. Furthermore, under the norms of the Convention, India was required to destroy all equipment, buildings, and facilities for producing unfilled chemical munitions, and all equipment for chemical weapons (Verification Annex Part V, paragraphs 26 and 27). India was required to start the destruction of CWPFs no later than one year after EIF, and must complete no later than 10 years after the EIF of the Convention.[744] Under the terms of the Convention, it could however request for the conversion of a CWPF for purposes not prohibited under the Convention, whether the facility was already being used for such purposes at EIF of the convention, or it is planned to use it for such purposes. India availed this option to use its CWPF for Chemical Weapons Destruction Facility (CWDF) purposes on a temporary basis. In order to do so, India was required to fulfil various conditions for conversion stipulated in paragraphs 70 to 72 of Part V of the Verification Annex of the CWC. For example, it was required to submit a detailed plan for conversion of each facility not less than 180 days before conversion is planned to begin, including measures for the verification of conversion.[745] India took more than 10 years after entry into force of the Convention to fully meet the obligations under the CWPF destruction/conversion regime. Once India submitted its initial declaration, it was obliged to allow OPCW inspectors access to all declared facilities. From the OPCW perspective, the aims of the initial inspection are first of all to verify the information declared and to obtain any additional information needed for planning future verification activities at the facility. Next, the Convention requires the OPCW and India to enter into a facility agreement within 180 days after EIF. This agreement should include details of the inspection procedures for the facility, and arrangements for the conduct of verification activities by the Secretariat, under Articles IV, V and VI. The facility agreement is in fact intended to supplement the Convention's inspection procedures with site-specific requirements. Thereafter, the OPCW conducts routine inspections throughout the year. This procedure becomes important since the decision of India to convert all the CWPF into CWDF has mandated inspections of the above nature, and India in the various inspections conducted, has been successful in proving its commitment to the abhorrence of Chemical Weapons. India announced on 26 March 2009 the destruction of its declared chemical weapons, in accordance

[743] VA, Part IV(A), para. 36.

[745] The Convention details the procedures for review and consultation with regard to such combined plans for conversion and verification. The verification measures should not unduly interfere with the conversion process, and should be conducted in the presence of OPCW inspectors to confirm the conversion

with its obligations under the CWC, becoming the third nation to completely and verifiably destroy all of its chemical weapons and associated facilities.[746]

8.3. CW Defense Programme of India

India has a defensive CW program, overseen by the Ministry of Defense. The main research institutes overseeing India's military and civilian involvement with chemicals and dual-use materials are the Defence Research and Development Organization (DRDO) and the Department of Chemicals and Petrochemicals respectively. With regards to the routine inspections, India was, like all other States Parties, required to undertake main six tasks regarding the selection and treatment of inspectors; (1) approve inspectors, (2) provide visas, (3) extend diplomatic privileges and immunities to inspectors, (4) inspect equipment brought by inspectors and permit authorised equipment to accompany inspectors, (5) designate national points of entry and facilitate inspectors' safe transit to the inspection site, and (6) arrange for and provide necessary amenities for the inspection team. These are some of the most sensitive issues from the security and intellegence matters. The available public records show that India has not faltered on any of these obligations nor there any concern from the OPCW with regards to India's full cooperation with regards to the inspection procedures.

8.4. Non-proliferation of chemical weapons and chemical industry of India

While India declared the CW and CWPF and complied with the obligations, albeit beyond 10-year period, another most fundamental obligation laid down under the CWC is the prevention of proliferation of chemical weapons.[747] It is interesting to analyse whether the Indian chemical industry poses a challenge to an international organization to achieve the task, whether Indian companies, like the governmental actors, are in full compliance with the non-proliferation regime, which challenges India faces with regard to this aim and how it has been overcoming the same. This examination is essential, as the Indian chemical industry is one of the oldest domestic industries, contributing significantly to both the industrial and economic growth of the country since it achieved independence in 1947.

The Indian chemical industry produces nearly 70,000 commercial products, ranging from cosmetics and toiletries, to plastics and pesticides. The wide and diverse spectrum of products can be broken down into a number of categories, including inorganic and organic (commodity) chemicals, drugs and pharmaceuticals, plastics and petrochemicals, dyes and pigments, fine and specialty chemicals, pesticides and agrochemicals, and fertilizers.[748] The Indian pesticide industry has advanced significantly in recent years, producing more than 1,000 tons of pesticides annually. India is the 13th largest exporter of pesticides and disinfectants in the world, and in terms of volume, is the 12th largest producer of chemicals. The Indian agrochemical, petrochemical, and pharmaceutical industries are some of the fastest growing sectors in the economy. With an estimated worth of $28 billion, it accounts for 12.5% of the country's total industrial production and 16.2% of the total exports from the Indian manufacturing sector. With a special focus on modernization, the Indian government takes an active

[746] As of 31 July 2013, 55,939 or 78.57% of world's declared stockpile of 71,196 metric tons of chemical agent have been destroyed. www.opcw.org accessed on 5 August 2013.

[747] Timothy L. H. McCormack, "Some Australian Efforts to Promote Chemical Weapons Non-Proliferation and Disarmament", 14 *Australian YbIL* 157-178 (1993); Randall Forsberg, *Nonproliferation Primer: Preventing the Spread of Nuclear, Chemical and Biological Weapons*, (Cambridge: MIT Press, 1995); Graham Pearson, *The UNSCOM Saga: Chemical and Biological Weapons Non-Proliferation*, Basingstoke: MacMillan Press (1999); Bailey, Kathleen, *Strengthening Nuclear Nonproliferation*, Westview Press (1993).

[748] http://www.indianchemicalportal.com/chemical-industry-overview, accessed on 9 May 2010.

role in promoting and advancing the domestic chemical industry. The Department of Chemicals & Petro-Chemicals, which has been part of the Ministry of Chemicals and Fertilizers since 1991, is responsible for policy, planning, development, and regulation of the industry. In the private sector, numerous organizations, including the Indian Chemical Manufacturers Association (ICMA), the Indian Chemicals and Petrochemicals Manufacturers Association (ICPMA), and the Pesticides Manufacturers and Formulators Association of India, all work to promote the growth of the industry and the export of Indian chemicals. The Indian Chemical Manufacturers Association, for example, represents a large number of Indian companies that produce and export a number of chemicals that have legitimate commercial applications, but also can be used as precursors and intermediates for chemical weapons production.

8.4.1. Challenges to prevent proliferation of chemical weapons

The first and foremost important challenge is that India's capability to produce chemical weapons is greatly enhanced by the sophistication of its domestic chemical industry. A number of government-owned and private sector companies, as mentioned before, produce an array of dual-use chemicals that are potential chemical weapons precursors and intermediates. A number of the domestically produced chemicals can be found on the CWC lists of Schedule 2 and Schedule 3 chemicals[749], as well as on the Australia Group's chemical export control list (India is not a member of the Australia Group).[750] For example, Indian companies are capable of producing, 2-chloroethanol and thiodiglycol (both mustard precursors), phosgene, hydrogen cyanide (blood agent), and trimethyl phosphite and thionyl chloride (nerve agent precursors). United Phosphorus Ltd., for example, a Mumbai-based company, produces a number of precursor chemicals that are listed on Schedule 3 of the CWC, including phosphorus trichloride, phosphorus pentachloride, triethyl phosphite, and trimethyl phosphite. In 1992, United Phosphorus's export license was suspended for shipping trimethyl phosphite to

[749] The CWC requires states-parties to declare chemical industry facilities that produce or use chemicals of concern to the convention. These chemicals are grouped into “schedules,” based on the risk they pose to the convention. There are three schedules of chemicals – Schedule 1, Schedule 2 and Schedule 3. Schedule 1 is a list of chemicals which have been developed and used as chemical warfare agents and such chemicals must be destroyed. Schedule 2 contains chemicals that pose a significant risk to the Convention. These chemicals are highly toxic or incapacitating, or may be used as a precursor in the final stages of making of Schedule 1 chemical. Schedule 3 chemicals which pose a risk but which are produced and used in large quantities in industry. In addition, India like any other State Party was required to declare OCPF (Other Chemical Production Facilities). OCPFs comprise of two different categories of organic chemicals and these are Discrete Organic Chemicals (DOCs) and PSF chemicals. "Discrete organic chemical" is defined as any chemical belonging to the class of chemical compounds consisting of all compounds of carbon except for its oxides, sulfides and metal carbonates, identifiable by chemical name, by structural formula, if known, and by Chemical Abstracts Service (CAS) registry number, if assigned. "PSF-chemical" is defined as an unscheduled discrete organic chemicals containing one or more elements phosphorus, sulfur or fluorine. The last types of chemicals are included for declaration because facilities producing OCPF can easily be misused for production of Chemical Weapons. In order that the Convention provides an effective disarmament mechanism, monitoring of facilities capable of producing chemical weapons is essential.

[750] The United States wanted India to require licenses for the export of all 54 chemicals listed by the Australia Group, a consortium of 25 countries that have agreed to combat chemical weapon proliferation. The Australia Group controls about 20 more chemicals than the Chemical Weapons Convention. India, like many developing countries, has vehemently opposed the parallel existence of a machinery which also oversees the non-proliferation of CW. It may be noted that during the final days of negotiations, it was understood by the developing countries that once the CWC comes into effect, other multilateral machinery performing some functions of the CWC will cease to exist, which has not happened as yet even today.

Syria.[751] Another Indian company, Transpek Industry Ltd., also produces a number of dual-use chemicals, including thionyl chloride and sulfur dichloride.[752] In 1990, Transpek Industry Ltd. won a bid to install and commission a turn-key chemical plant in Iran, worth an estimated $12.5 million, and in 1996 the company built the world's largest manufacturing facility for thionyl chloride outside of Europe[753]. Similarly, the Indian government indicted the privately owned NEC Engineers Ltd. for illegally exporting chemical weapons-related technology to Iraq in 2002.[754]

8.4.2. Government control and problem of enforcement with non-proliferation[755]

In view of the above, it can be argued that it is very difficult to exercise full and 100% effective control over the non-proliferation of CW and/or CW precursors.[756] With thousands of chemical manufacturing units located throughout the country managed by one national authority placed in New Delhi, it may not be an exaggeration to

[751] "India Punishes Firm for Allegedly Selling Syria Weapons-Grade Chemicals," *United Press International*, 24 September 1992; "Indian Firms Probed for Alleged Weapons Technology Sales to Iraq: Report," Agence France Presse, 26 August 2002, in Lexis-Nexis Academic Universe, 14 February 2002, www.lexis-nexis.com.

[752] "Weapons Grade Chemicals Made in Gujarat Factories (Over 50% of India's Discrete Organic Chemical Units are Located in Gujarat)," *Business Insight,* February 11, 2004; In Lexis-Nexis Academic Universe, 16 February 2005, www.lexis-nexis.com.

[753] The threat was demonstrated graphically in April, when a U.S. intelligence official displayed two sales brochures from an Indian company called Transpek Private Ltd. to a gathering of American exporters. The first brochure, published sometime before India began tightening its export control laws in 1990, frankly advertised dual-use chemicals for mustard gas. A later brochure omitted mention of mustard gas precursors, but offered procurement services. http://www.wisconsinproject.org/countries/india/india-chemical-export.html, accessed on 2 November 2009.

[754] http://www.nti.org/e_research/profiles/india/chemical/index.html, accessed on 9 May 2010; http://www.armscontrol.org/print/3252; http://www.cnn.com/2003/WORLD/asiapcf/south/01/25/sprj.india.iraq.

[755] One of the important pillars of the CWC is non-proliferation of chemical weapons. The Convention provides a detailed mechanism to find and deal with any breach of non-proliferation regime of the CWC. It restricts the transfer and use of certain chemicals according to their potential to pose a threat to or to damage the object and purpose of the CWC. Certain types of chemicals cannot be traded outside the OPCW community, and thus, non-member states with higher dependence on these chemicals may face economic problems. To implement the non-proliferation principle of the Convention, the States Parties provide their detailed information on imports and exports of chemicals, the Technical Secretariat checks all declared information and provides necessary information to the policy-making organs. If there is any discrepancy or cause of concern, the Technical Secretariat and concerned State Party or the States Parties themselves, as the case be, undertake clarification and consultation with a view to reach a resolution of the problem. Enactment of national implementation measures facilitates this task, among others.

[756] Bimal N. Patel, "*Resolution 1540 and the Non-Proliferation of Weapons of Mass Destruction"* 2003 African Yearbook of International Law (2003); UN Security Council Resolution S/1540 was adopted at 4956th meeting of the Council on 28 April 2004. In terms of substance and procedure, resolution 1540 has many similarities with resolution 1373 which was adopted to fight the terrorism. Resolution 1373 imposes binding obligations on all States, with the aim of combating terrorism in all its forms and manifestations. _____*Theory and Practice: Implementation of the Chemical Weapons Convention Destruction Regime under the Chemical Weapons Convention,* 11 The Non-Proliferation Analysis Journal Summer (2000); There are a number of countries, not party to the CWC, that have publicly been associated with proliferation ambitions. It would cause serious concerns if experts formerly involved in offensive CW programmes would be hired by countries suspected of having clandestine offensive CW programmes. This is particularly true in the early phases of such clandestine programmes, when indigenous expertise will be limited. Mehmood, Amna, "American policy of non-proliferation towards Pakistan: a post-cold war perspective" In 56 *Pakistan horizon* 1, 35-58.

believe that some intentional or unintentional violations in this regard are bound to occur.[757] Developed countries, too, may be facing the same complexity. So far, there has not been any report on significant breach of non-proliferation.

8.4.3. Lacunaes in Indian CWC Act

To give effect to its international obligations at national level, India enacted the CWC Act.[758] However, the Indian Act, like the CWC itself, lacks the definition of the term "activity prohibited", although it is safe to consider that at minimum, this term encompasses the prohibitions of article 1, paragraphs 1 and 5 of the Convention. However, the Act provides for penalties for activities that undermine CWC enforcement at national level. India has chosen to apply criminal and financial penalties for CWC violation. One glaring observation is that the Act does not cater for redressing concerns over rights to privacy, protection from self-incrimination and the admissibility of evidence as well as due process concerns. The Act has given the National Authority of India administrative tasks and envisages appointment of enforcement officers for the purposes of the act.

It is important to note that in the area of CW non-proliferation, controls exercised by India over export of dual-use chemicals are stricter than the provisions of the Convention in some areas. For example, the exports of Schedule 3 chemicals to other States Parties to the CWC, which are permissible under the Convention, are also controlled and are subject to submission of requisite documents by the exporters, including end-use cum end-user certification. Also emphasis has been laid down to cover important facet of terrorism. Amendment Ordinance, 2004 promulgated on 21 September 2004 *inter alia* covers terrorism and its links with weapons of mass destruction. India, in the wake of possible use of CW by terrorists, released guidelines on the Management of Chemical Terrorism.[759] These guidelines deal with several issues like counter-terrorism strategies, surveillance and environmental monitoring, prevention of illegal trafficking of hazardous waste, and human resource development, which includes education and training, knowledge management and community awareness.

8.5. International Cooperation and Assistance and the Promotion of peaceful uses of chemistry[760]

---

[757] India appears on the U.S. Commerce Department control list (supplement 5 to Part 778 of the Export Administration Regulations) which names countries and projects of concern for chemical and biological proliferation. India has the world's eighth largest pool of dual-use chemical suppliers, according to Canada's Chemical Weapons Convention Verification: Handbook on Scheduled Chemicals. India does not control the following chemical precursors that are controlled by members of the Australia Group: 3-Hydroxyl-1-methylpiperidine; Potassium Fluoride; 2-Chloroethanol; Dimethylamine Dimethylamine Hydrochloride; Hydrogen Fluoride; Methyl Benzilate; 3-Quinuclidone; Pinacolone; Potassium Cyanide; Potassium Bifluoride Ammonium Bifluoride; Sodium Bifluoride; Sodium Fluoride; Sodium Cyanide Phosphorus Pentasulphide; Di-isopropylamine; Sodium Sulphide Triethanolamine Hydrochloride. http://www.wisconsinproject.org/countries/india/india-chemical-export.html, accessed on 2 November 2009

[758] "Penal Provisions in Chemical Weapons Bill," *The Hindu*, August 24, 2000, www.hinduonnet.com.

[759] See National Disaster Management Guidelines on Management of Chemical (Terrorism) Disaster. These guidelines focus on counterterrorism, surveillance, environmental monitoring, and prevention of hazardous waste smuggling. http://nidm.gov.in/PDF/guidelines/chemical_terrorism_disasters accessed on 5 July 2011.

[760] This is another important pillar of the Convention. One can immediately think of the so-called Peace Dividend: when a State Party gives up its arsenals of chemical weapons and undertakes obligation of the Convention, it may wish to also gain certain benefits in return. The Convention aims to promote economic and technological development among States Parties through various means. Furthermore, the Convention requires that measures taken to implement the Convention in no way hamper the economic and technological

International cooperation and assistance and the promotion of peaceful uses of chemistry remains an important pillar along with the pillars of CW destruction and CW non-proliferation.[761] It is, therefore, imperative to see what have been India's activities and pronouncements in this area. India, throughout the CWC negotiations, had advocated for the peaceful uses and promotion of technology and development through the peaceful uses of chemistry. In fact, this has been the Indian position in all multilateral negotiations concerning the arms control and disarmament.[762] What were the Indian positions during the negotiations phase and implementation phase? How India has reconciled the gap between the demands and actual results since 1997? Which challenges India faces to promote its agenda of technology and development through the peaceful uses of chemistry? Despite the fact that India has reiterated its call for Article XI support,[763] it has never been elected or taken a lead to chair a committee to foster international cooperation for peaceful purposes.

---

development of the States Parties and each State Party has a right to participate in the exchange of chemicals, equipment and information to the fullest possible extent.

[761] During the current phase of the treaty implementation, the emphasis is obviously on the implementation of the provisions related to the destruction of chemical weapons. This is partly the result of the time lines established by the Convention, partly a reflection of the character of the Convention as a global disarmament treaty. Over time, the relative weight of the non-proliferation measures and, simultaneously, the benefits to be expected from cooperation in the chemical field would be expected to increase. Measures related to assistance against the use of chemical weapons should be of a temporary nature, reflecting on the one hand the degree of confidence reached by the participating States in the regime stability, and on the other hand the perceived capabilities associated with those States that have not (yet) joined the Convention. Trapp, Ralf, "The Duality of Chemistry: Chemistry for Peaceful Purposes versus Chemical Weapons", 80 *Pure and Applied Chemistry 8*, 1763-72 (2008); The CWC and OPCW After 10 Years An update and commentary on the 10th anniversary of the entry into force of the CWC, 2007, http://www.reachingcriticalwill.org/legal/cw/cwc10thanniversary.html; Yepez-Enriquez R. and Tabassi, Lisa (ed.), *Treaty Enforcement and International Cooperation in Criminal Matters: With Special Reference to the Chemical Weapons Convention*, The Hague: T.M.C. Asser Press (2002).

[762] J. B. Tucker, *Verifying a Multilateral Ban on Nuclear Weapons: Lessons from the CWC*, 5 *The non-proliferation Review* 2, 81 (1998).

[763] An effective implementation of article XI that speaks about economic and technological development is one of the key yardsticks in measuring the success of the CWC. Article XI reflects two supplementary principles pursued in multilateral disarmament efforts in the UN context: that disarmament accords shall not hamper the economic and technological development of SPs and that disarmament, as the result of implementing such accords, shall generate a 'peace dividend'. The Convention follows an objective that is quite common in other multilateral disarmament instruments. The BWC, ENMOD Conventions also have similar provisions. One can argue that this provision establishes a link between disarmament and development in an appropriate manner and thus contributes to the evolving principle of disarmament law. Indeed, this article can be seen as providing most important stimuli for attracting universal membership to the Convention. Article XI stipulates the associated rights to the general obligations that shall be implemented in a manner which avoids hampering the economic or technological development of States Parties, and international cooperation in the field of chemical activities for purposes not prohibited under this Convention. The article aims to provide guidance on how to implement the Convention towards achieving the broader goals of economic and technological development of States Parties. This article stipulates, subject to the CWC and without prejudice to the principles and applicable rules of international law, that each State Party, have the right to conduct research to develop, produce, acquire, retain, transfer and use of chemicals. The States Parties shall undertake to facilitate and have the right to participate in the exchange of chemicals, equipment, and information to the fullest possible extent. The article also establishes the principle that there will be no justification for the application of any trade restrictions for reasons of non-proliferation of chemical weapons vis-à-vis States Parties in full compliance with the Convention. It also specifies the general requirement under article VII to review all existing legal and administrative measures of States Parties in order to implement the Convention, and hence become consistent with the object and purpose of the Convention.

8.5.1. Indian initiative on the establishment of international cooperation committee

India, together with Bangladesh, Cameroon, Cuba, Ethiopia, Indonesia, Iran, Pakistan, Saudi Arabia and Sri Lanka,[764] supported the establishment of International Cooperation Committee for the implementation of Article XI and mandated that the OPCW Executive Council prepares terms of reference, composition and functions of the said committee. It should be noted, however, that this committee never came into being thereafter.[765]

8.5.2. Legislative assistance

While there is lack of specific provision on legal cooperation and assistance, the National Authority of India is required to interact with the OPCW and other states parties for the purpose of fulfilling the obligations of the Government of India under the Convention. Kellman identifies six types of legal assistance which a state party might be asked to provide and which also applies to India. The forms of legal assistance most immediately relevant to CWC implementation are mutual legal assistance and immobilisation and forfeiture of illicit proceeds.[766] In addition, extradition, transfer of proceedings, recognition of foreign penal and administrative judgements and transfer of prisoners are also included. Although India does not have a specific statute which covers international assistance in criminal matters with all other states, it has concluded bilateral treaties with various states on mutual legal assistance in criminal matters.[767] The Indian Act, like the Convention, does not shed any light on what is the appropriate form of legal assistance under the CWC and what is the extent of its obligation as to legal assistance. In view of this, it is safe to assume that whenever a need for legal cooperation and assistance will arise, it will be provided in the context of international relations and take into account the particular needs of India and its legal system as well as the needs and legal system of other States Parties.

8.6. Administrative, legal, and organizational matters

Which are the major positions of India with regards to the administrative, legal, and organizational matters of the OPCW?

8.6.1. As a member of Executive Council

The Executive Council, which is the main executive organ of the CWC, consists of 41 members, with each State Party having the right, in accordance with the principle of rotation, to serve on the Council. The members of the

---

[764] OPCW document EC-XXIV/Nat.6, 6 April 2001.

[765] OPCW document EC-XXIV/DEC/CRP.8 dated 6 April 2001.

[766] For a detailed understanding of the structure, power and role of national authority in the implementation of the Convention see Barry Kellman, *Manual for the National Implementation of the Chemical Weapons Convention*, 14-19 (1993)._____, "The Advent of International Chemical Regulation: the Chemical Weapons Convention Implementation Act", 25 *Journal of Legislation* 2, 117-39 (1999); Kellman, Barry and Tanzman, Edward (ed.), *Implementing the Chemical Weapons Convention: Legal Issues*, Washington DC: Lawyers Alliance for World Security (1994); _____, "Legal Implementation of the Multilateral Chemical Weapons Convention: Integrating International Security with the Constitution", 22 *New York University Journal of Int Law and Politics* 3, 475-518 (1990).

[767] India has concluded extradition treaties with Belgium (1958); Nepal (Old Treaty - 1963); Canada (1987); Netherlands (1989); U.K. (1993); Switzerland (1996); Bhutan (1997); Hong Kong (1997); USA (1999); Russia (2000); UAE (2000); Uzbekistan (2002); Spain (2003); Turkey (2003); Mongolia (2004); Germany (2004); Tunisia (2004); Korea (ROK) (2004); omen (2005); France (2005); South Africa (2005); Bahrain (2005); Poland (2005); Ukraine (2006); Bulgaria (2007); Kuwait (2007); Belarus (2008); Mauritius (2008); Portugal (2008); Mexico (2009); Tajikistan (2009) and arrangements with Sweden (1963); Tanzania (1966); Australia (1971); Singapore (1972); Papua New Guinea (1978); Sri Lanka (1978); Fiji (1979); Thailand (1982); Italy (2003).

Council are elected by the Conference of the States Parties for a term of two years. (For the first election of the Executive Council, 20 members shall be elected for a term of one year.) In order to ensure the effective functioning of the CWC, the composition of the Council is made up in a way that gives due regard to equitable geographical distribution, to the importance of the chemical industry, and to political and security interests. The Council is responsible to the Conference of the States Parties for its actions. In this capacity, the Council carries out the powers and functions entrusted to it under the CWC, as well as those functions delegated to it by the Conference. In so doing, it acts in conformity with the recommendations, decisions, and guidelines of the Conference and assures their proper and continuous implementation. In addition to promoting the effective implementation of and compliance with the CWC, the Council supervises the activities of the Technical Secretariat, cooperates with the National Authority of each State Party, and facilitates consultations and cooperation among States Parties at their request. The Council has the right and duty to consider any issue or matter within its competence affecting the CWC and its implementation, including concerns regarding compliance and cases of non-compliance, and, as appropriate, inform States Parties and bring the issue or matter to the attention of the Conference. In cases of particular gravity and urgency, the Council will bring the matter, including relevant information and conclusions, directly to the attention of the United Nations General Assembly and the United Nations Security Council.[768] At the same time, the Council will inform all States Parties of its action. India has been always elected as a member of the EC in accordance with article VIII. India was elected as the Chairman of the Executive Council (EC) for the year 1997-1998. India chaired the EC from the first to seventh sessions.[769] Under this Chairmanship, various important decisions were taken and policies framed with regards to the furtherance of the Convention. As no Indian has ever-occupied senior post at director level and above in the Technical Secretariat, India has expressed its desire to be represented at the top structure of the Secretariat. It has also, at times and again, expressed lack of transparency and information sharing on the issue having financial, political and legal implications and long-term consequences for the entire organization. It shall be noted that India has never been a vice-chair or coordinator for cluster of issues on important matters such as CW issues, chemical industry and article VI issues, administrative and financial issues and legal, organizational, and other matters. India's call for equitable geographical distribution throughout the Secretariat was echoed again through a joint statement together with some other Asian Member States.[770] Despite India's possession of chemical weapons, chemical weapons production facilities and large chemical industry, the fact remains that none of the senior members, i.e. at minister level, of the Indian establishment has paid a visit to the OPCW. The highest leader of the Indian delegation so far has been the Secretary in the PMO. India has participated in the administrative, budget and financial committee, an advisory body of the OPCW, since 1997[771]. India (Mr. V. K. Shunglu, Auditor-General) was appointed as the first External Auditor of the OPCW (1997-2000) for a single term of three years. However, India did not contend for the subsequent terms. Like most other international

[768] Article XII of CWC.

[769] The then Indian Ambassador Prabhakar Menon chaired the sessions - 13 May 1997 to 12 May 1998, covering nine sessions. Ambassador B. Mukherjee of India was elected as the Chairman of the EC in 2011.

[770] EC-XXI/NAT.4, 5 Oct 2000.

[771] First Indian, B. N. Jha from 27 August 1997, Pawan Chopra (when to when). Ms Manimekalai Murugesan participated in place of Mr Jha during the 7th session of the ABAF meeting which took place from 24-27 January 2000. Mr N. S. Sisodia replaced Mr Chopra with effect from 9 April 2001 on the ABAF. India was not a member of the first meeting of the ABAF (EC-V/ABAF.1) which met from 15 to 19 Sept 1997.

organisations, India has emphasized the principle of equitable geographical distribution, especially in the top structure and has expressed necessity to uphold transparency and full information sharing.[772]

8.7. Implementation of international obligations at national level:

Under the Convention, the Government of India has created a National Authority (NA). India has established this exclusive dedicated body at national level to effectively implement the provisions of the Convention. Unlike most other Member States who do not possess CW, India has to have strong cooperative relationship between the NA at the centre and various CW and related facilities, such as CWSF, CWPF, and CWDF. The latter falls under the mandate of the Defence Research and Development Organization (DRDO) of India and personnel related to these facilities will implement the obligation physically, whereas NA personnel serve as liaison. As far as fulfillment of substantive obligation with regards to the CW destruction is concerned, the National Authority is required to identify and oversee the closure and destruction of chemical weapons. Although not expressly mentioned, it is logical that the national authority will also oversee the closure of chemical weapons destruction facilities once the destruction operations are over. NA India consists of a chairperson, directors, enforcement officers and other employees.[773] The chairperson of the NA is of the rank of a Secretary– the second highest civil service rank after the Cabinet Secretary. The Act does not specify the qualification of enforcement officers or any other members of the NA. The NA is to interact with the OPCW and other States Parties for the purpose of fulfilling the obligations, monitor compliance with the provisions of the Convention, regulate and monitor the development, production, processing, consumption, transfer or use of toxic chemicals and precursors, make or receive request a State Party for assistance under Article X of the CWC, manage routine inspection or challenge inspection received from the OPCW. It is mandated to interact with the OPCW in respect of acceptance of request of India for challenge inspection or to counter any frivolous or defamatory request made by any State

[772] For example, India on behalf of the Asian Group submitted a statement at the 11th meeting of the EC held on 1 September 2000 concerning the implications of the decision of the ILO on the first classification exercise of posts within the Secretariat. Citing that it states the views of most delegations of the Asian Group, it stated that the principle of equitable geographical distribution should be maintained, only the Conference can decide and change decisions on top structure, expressed lack of transparency and information sharing on the issue having financial, political and legal implications and long-term consequences for the entire organisation, and supported that the second classification should be carried out in accordance with the ICSC guidelines (EC-MXI/NAT.1). India's call for equitable geographical distribution throughout the Secretariat was echoed again through a joint statement together with some other Asian Member States (EC-XXI/NAT.4, 5 Oct 2000).

[773] National Authority, Chemical Weapons Convention (CWC) was set up by a resolution of Cabinet Secretariat dated 5 May 1997 to fulfil the obligations enunciated in the Chemical Weapons Convention for the purpose prohibiting of the development, production, execution, transfer, use and stockpiling of all chemical weapons by Member-States is a non-discriminatory process. To fulfil its obligations, each State Party has to designate or establish a National Authority to serve as the national focal point for effective liaison with Organisation for Prohibition of the Chemical Weapons (OPCW) and other State Parties and hence the NA, CWC under the administrative control of the Cabinet Secretariat was set-up. A high-level steering committee under the Chairmanship of the Cabinet Secretary with Secretary (Chemical and Petrochemicals), Foreign Secretary, Secretary, Defence Research and Development, Defence Secretary and Chairman, National Authority as its other members would oversee the functions of the National Authority. The NA, CWC is responsible for implementation of CWC Act, liaison with CWC and other State Parties, Collection of data fulfilling of declaration obligations, negotiating facility agreements, coordinating OPCW inspections, providing appropriate facilities for training national inspectors and industry personnel, ensuring protection of confidential business information, checking declarations for consistency, accuracy and completeness, registration of entitles engaged in activities related to CWC, etc.

Party against India to the OPCW, scrutinize and accept list of inspectors and verify the approved equipment brought by the teams; provide escort to the inspection team and observe within the Indian territory, identify and oversee the closure of CWDFs, CWPFs, OCWs or ACWs, negotiate managed access during the challenge inspection, ensure decontamination of approved equipment after inspection completion, advise Union Government for laying down safeguards for transportation, sampling or storage of CW and fixation of standards for emission or discharge of environmental pollutants arising out of the destruction of CW, CWPFs, OCWs or ACWs.

India has a substantive corpus of domestic laws, regulations and administrative measures to prevent the proliferation of weapons of mass destruction, their means of delivery, and related materials. As a State with strong and unwavering tradition of democracy and the rule of law as well as a strong and unyielding sense of responsibility, India has over the years enacted effective laws and regulations and has institutionalized an array of administrative mechanisms to prohibit WMD access to non-State actors and terrorists. Among the many acts, the few prominent are - The Unlawful Activities (Prevention) Amendment Ordinance, 2004, the Atomic Energy Act, 1962 and the orders issued thereunder; the Environment Protection Act, 1986; the Chemical Weapons Convention Act, 2000; the Customs Act, 1962; the Foreign Trade (Development & Regulations) Act, 1992; Detailed regulations and procedures are notified by the Government of India under the above Acts. The Government of India has also specified a List of Special Chemicals, Organisms, Materials, Equipment and Technologies (SCOMET), the export of which is either prohibited or permitted only under license. One can expect that the sheer existence of several uncoordinated pieces of legislations and regulations, and a number of identified institutions activities impinge on CWC chemicals management, regulation and enforcement. Each of these institutions may have either/or a combination of usage, management, or regulatory functions. Their functions may not be coordinated, with some institutions experiencing conflicts in the execution of duties leading to duplication of efforts, gaps in regulation and controls, and wastage of resources. Such commitment to the Convention *sans* domestic legislation on matters of that regard is futile. Breakthrough legislation is required to ensure that the provisions of the CWC are not breached at the micro-domestic level. India has taken the forefront in these matters. In addition, India as a country has taken the mantle to ensure such compliance with the terms of the Convention. It has stipulated extensive and detailed provisions on offences and penalties for the breach of CWC act at domestic level.[774] As mentioned above, the Indian Act, like the Convention itself, lacks the definition of term "activity prohibited", although it is safe to consider that at minimum, this term encompasses the prohibitions of Article 1, paragraphs 1 and 5. However, the Act provides for penalties for activities that undermine CWC enforcement at national level. India has chosen to apply criminal and financial penalties for CWC violation. One glaring observation is that the act does not cater for redressing concerns over rights to privacy, protection from self-incrimination and the admissibility of evidence as well as due process concerns. The Act has given the national authority of India administrative tasks and envisages appointment of enforcement

[774] These provisions can be grouped into the following major headings: (1) Punishment for failure to register; (2) Punishment for contravention in relation to development, production, etc. of CW or riot control agents; (3) Punishment for contravention in relation to toxic chemicals as listed in schedule 1 of the Convention; (4) Punishment for contravention in relation to transfer of toxic chemicals as listed in schedule 2 of the Convention; (5) Punishment for contravention in relation to export or import of toxic chemicals; (6) Punishment for contravention in relation to disclosure of confidential information; (7) Punishment for contravention in relation to denial of access; and (8) punishment for contravention in relation to failure to furnish information, declaration or return (9) Punishment for contravention in relation to disclosure of confidential information.

officers for the purposes of the act. The Indian Act envisages a person guilty of a punishable offence if he refuses without reasonable excuse to comply with the request made by the OPCW inspector or team members for the purpose of facilitating the conduct of that inspection, or delays or obstructs any member of the inspection team, inspector, enforcement officer or the observer in the conduct of inspection, removes or tampers with any on-site instrument of approved equipment installed by the enforcement officer, inspector or inspection team with the intention of adversely affecting the operation of such instrument or equipment. These provisions enable India to meet its treaty obligations. These unqualified obligations to answer relevant questions contain in these provisions raise potential problems of self-incrimination. Nearly every nation's laws protect persons from being forced to give testimony that may later be used against him/her. Moreover, representatives of NA will accompany the inspectors and may overhear responses that may implicate violations of national laws (e.g. environmental or narcotics violations) even though these replies may be innocent with the OPCW context. It is crucial, therefore, for India to establish legal mechanisms to protect persons who cooperate with CWC inspectors from incriminating themselves, including grants of immunity from prosecution based on the evidence so revealed. It would have been useful if the Act was to provide that a self-incriminating statement made or given under the Convention is not admissible as evidence in criminal proceedings against that person except on a charge of perjury in relation to that statement. It is an interesting lacuna that the CWC Act provides that where the Union Government considers any inspection of a CWPF in India under this CWC Act to be against the interest of national security or economic interests of India, it may deny the request for such inspection. This can pose a serious problem in fulfilling the obligations of India under the Convention. It must be noted that by undertaking the obligations, national security or economic interests cannot prevail over its obligations under the Convention.

8.7.1. Safety and security of environment and people

CWC requires each State Party to assign the highest priority to ensuring the safety of people and to protecting the environment.[775] In this regard, the Indian CW lays down that the Union Government should lay down safeguards for transportation, sampling or storage of CW and fixation of standards for emission or discharge of environmental pollutants arising out of the destruction of CW, OCA, ACW and CWPFs. It also provides for ensuring protection of environment, health and safety of the people during the process.

8.7.2. Confidentiality

Confidentiality is of the utmost importance with regards to the CWC and is to be protected by the OPCW.[776] Accordingly, India is required to treat the information according to the level of confidentiality assigned by the OPCW. When requested, India must furnish details as to its handling of such information. In view of this, national implementation measures need to account for these requirements.[777] The CWC Act provides to ensure

[775] The strict respect for safety of the people and protection of the environment in implementing the Convention is pursuant to Article VII, paragraph 3, an important obligation of the States Parties.

[776] Chemical Weapons Convention has one of the most stringent regimes concerning the confidentiality and protection of confidential business information. The Convention provides a whole annex on the Confidentiality regime, envisages dispute settlement mechanism dedicated to the confidentiality, establishes the Confidentiality Commission, and has regularly updated rules of procedure for accessing confidential information.

[777] The CWC requires each State Party to enact national implementation measures to carry out its obligations at the national level, in accordance with the national constitutional procedures. The CWC requires States Parties to prohibit natural or legal person, under its jurisdiction from undertaking any activity prohibited to a State

data base confidentiality and maintain secrecy of confidential information and technology collected or received by the National Authority under the Act. Furthermore, whoever, in contravention of any provision of the Act, divulges any confidential information obtained by the National Authority from any declaration or return furnished or any statement made, information supplied to, or obtained by, an enforcement officer during the course of any inspection carried out under the provisions of this Act to any other person, can be punished with imprisonment for a term which shall not be less than one year but which may extend to term of life and shall also be liable to fine which may extend to one lakh rupees.

8.7.3. Challenge inspections

The Convention has set forth basic rights and obligations with regard to consultations, cooperation and fact-finding during the implementation of the Convention. Compliance with the arms control regimes and assurance on the part of all parties to the agreement that all other states parties are fully complying with their undertakings is a key to the successful implementation of any arms control/disarmament regime.[778] It may happen that India may have doubts regarding the compliance of another state party to the same regime. In such cases, a mechanism is needed to resolve the ambiguity, which may persist. It is obvious that this becomes even more so important in those disarmament regimes where the regime is dealing with dual-purpose weapons such as chemical weapons. It is well possible that a state party under the disguise of peaceful activities (purposes not prohibited under the Convention argument) may produce deadly chemical weapons. To avoid such violations, the Convention elaborates a regime of consultation, cooperation and fact-finding. The basic purpose is to stipulate means to resolve any ambiguity persisting with regards to compliance of the Convention by the states parties. Article IX requires States Parties to set out clarification procedures, which can be used, by a State Party, which has concerns regarding the compliance of another State Party. A State Party, which receives a request from another State Party for the clarification of a matter, which has concern about compliance, must provide sufficient information to clarify the situation. Nothing in the Convention must affect the right of any two or more State Parties to arrange by mutual consent for inspections or other procedures among themselves to clarify and resolve questions of compliance. In addition, each State Party has the right to request the OPCW an on-site challenge inspection[779] for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the Convention. The purpose of challenge inspection is to provide the State Party with additional

---

Party, to enact penal legislation (which may provide administrative or criminal penalties or both), to cooperate and afford appropriate legal assistance to the OPCW, to assign highest priority to ensuring the safety of people and to protecting the environment in implementing the CWC. In order to facilitate smooth communication between the OPCW and State Party on one hand between a State Party and other States Parties on the other, the Convention requires States Parties to designate a national authority. Last but not least, the Convention requires States Parties to cooperate with the Organization in the exercise of its functions and to provide assistance to the Technical Secretariat.

[778] Masahiko Asada, "The Challenge Inspection System of the Chemical Weapons Convention: Problems and Prospects", Thakur, Ramesh Chandra and Haru, Ere (ed.), *The Chemical Weapons Convention: Implementation, Challenges and Opportunities*, 75-100 (Tokyo: UNU Press, 2006); Tom Z. Colina, "The Chemical Weapons Convention (CWC) at a Glance, http://www.armscontrol.org/factsheets/cwcglance; Jean Pascal Zander, John Hart, Frida Khulau and Richard Guthrie (ed.), *Non-Compliance with the Chemical Weapons Convention: Lessons from and for Iraq*, SIPRI Policy Paper No. 5, (Stockholm: SIPRI, 2003).

[779] Verification procedures included in previous arms control and disarmament agreement are slightly comparable with it: the 'unannounced inspections' in the control regime of the IAEC, the inspection in the framework of the CSCE, the 'short-notice inspections' in the INF Treaty and the 'inspections on suspicion' in the CFE Treaty. Krutzsch and Trapp at 175

information on problems, which have not been resolved through routine verification or through consultation and co-operation. Challenge inspections are therefore aimed at maintaining or restoring confidence in the Convention at critical moments.[780] Another purpose that challenge inspections[781] serves is that the requested State Party will have the right and obligations to demonstrate its compliance with the Convention. Challenge inspections can take place anytime, anywhere, at short notice and without the right to refusal will be conducted by the OPCW Technical Secretariat. In addition to many of the activities required for routine inspections, an inspected State Party will have additional tasks to perform during challenge inspections, such as: determining whether to allow an observer from the State Party requesting the inspection; implementing managed access to protect information not related to the Convention; participating in the determination of the final perimeter; providing the appropriate level of access to the site; and assisting the inspection team in securing the site and exits and in monitoring the perimeter. The challenge inspections concept aims to assure full confidence in compliance with the Convention. As the United Nations Institute for Disarmament Research (UNIDIR) mentions, challenge inspections are regarded by most countries as an indispensable element of arms control regimes.[782] Challenge inspection regime is envisioned to be operated in an accountable manner. First, on the one hand it provides a right to a State Party to invoke right to request challenge inspection, on the other hand, it provides mechanism to prevent and treat appropriately abuse of this right by any State Party. Thus, it aims to build up confidence among State Parties that any concerns on non-compliance will be taken up seriously as well as serve as deterrence to prevent the abuse. Secondly, request of challenge inspection can be made by any State Party, which has serious doubts, concerns about another State Party compliance. Furthermore, a requested State Party does not have a right to refuse challenge inspection on its territory. Thus, the Convention treats requesting and requested state parties in a fair and equal manner, regardless of political, economic and military strength and weaknesses. Thirdly, as mentioned above, challenge inspection is considered as an indispensable element of arms control regime. Examples of International Atomic Energy Agency (IAEA) provide important evidence to the evolution of this rule in arms control regimes. It is argued that an absence of such mechanism can be considered as a significant drawback for any arms control verification system. Fourth, the decision-making of the OPCW Executive Council is quite regulated in order to prevent the abuse of right and to take decisions on allowing challenge inspection. Because if concerns of a requesting state party are not founded, not only that State Party has to bear the consequences, but the role of the OPCW Executive Council can also come under political and/or legal of scrutiny. Fifth, the scope of challenge inspection is specific.[783] A State Party shall make request with the sole purpose of clarifying and resolving any questions concerning possible non-compliance with provision of the Convention. Last but not the least, the element of transparency is permeated through this regime. The challenge inspection will be carried out in the presence of an observer either of the requesting state party or of a third State

[780] UNIDIR, *The Projected Chemical Weapons Convention: A Guide to the Negotiation in the Conference on Disarmament*, 175 (1989).

[781] Verification procedures included in previous arms control and disarmament agreement are slightly comparable with it: the 'unannounced inspections' in the control regime of the IAEC, the inspection in the framework of the CSCE, the 'short-notice inspections' in the INF Treaty and the 'inspections on suspicion' in the CFE Treaty. Krutzsch and Trapp at 175.

[782] *Ibid.*

[783] Article IX, paragraph 8, CWC.

Party. It should be noted, however, that the requested State Party can refuse the observer but such refusal shall be recorded in the final inspection report.[784]

The concept of 'challenge inspections' has failed owing to the widespread fear that the challenged country might retaliate with a *quid pro quo*. For this formula to succeed, it is necessary to understand that it is not an antagonistic, but a cooperative process. On the other hand, without use of challenge inspections, the CWC will not be robustly implemented and verified. In the context of this principle of international law on disarmament, it shall be noted that India has opposed and taken a firm stand against launching challenge inspections. India has been often supported or has supported developing countries including China, Iran, and Pakistan on this issue.[785] Although there has not been any incidence of formal request of challenge inspection either vis-à-vis India or any State party, it will be interesting to see how India would comply and cooperate with the OPCW, if the challenge inspection is to take place.

Article IX, paragraph 22 (c) leaves no doubt that abuse of the right to request a challenge inspection will be a case of non-compliance and will have to be treated as such, when the review of the report on a challenge inspection brings to light such abuse by the requesting State Party. The EC is discharged with an important responsibility with assisting the State Party to resolve its concern, particularly in serious situation like challenge inspection.[786] But at the same it also has a right to decide against carrying out challenge inspection if it considers that the request is frivolous. In view of this textual situation it can be concluded that the prevention of any abuse of rights granted under the Convention is to be a general principle especially emphasized with regard to the abuse of the right to request a challenge inspection.[787] It can be concluded that provisions of Article IX will apply if there are doubts or ambiguities concerning compliance, which cannot be solved by the routine verification scheme.[788] They can therefore be regarded as *safety net* to ensure compliance in the Convention if other means of verification fail or do not produce the information necessary to solve a problem.[789] It can also be argued that consultation is the least intrusive approach to solve the problem of compliance while challenge inspection is the most intrusive tool.

8.8. Universality of the CWC and role of India

Universality of CWC is considered as one of the most crucial political challenge for the OPCW and indispensable for the ultimate success.[790] In fact, chemical weapons destruction, non-proliferation of CW, universality and national implementing legislations are the four main pillars of the success of the CWC. As of 15 July 2013, there are 189 states parties to the CWC and additional two states have signed but yet to ratify the CWC. This leaves only five states that have yet to sign and ratify the instrument. No international arms control

[784] Article IX, paragraph 12, CWC.

[785] http://www.idsa.in/cbwmagazine/CWCfirstDecade_alele_0907, accessed on 9 May 2010; http://www.acronym.org.uk/dd/dd71/71cwc.htm; Jonathan Tucker, "Strengthening the CWC Regime for Transfer of Dual-Use Chemicals", *Pugwash Meeting* no. 324(2007); David P Fidler, "The Chemical Weapons Convention after Ten Years: Successes and Future", 11 *ASIL Insights* 12 (2007).

[786] Article IX, paragraph 4, CWC.

[787] Krutzsch and Trapp at 194.

[788] Article IX, paragraph 3, CWC.

[789] UNIDIR at 173.

[790] Jean Pascal Zanders, "The Chemical Weapons Convention and Universality: A Question of Quality or Quantity?", 4 *Disarmament Forum*, UNIDIR: Geneva (2002), pp. 23-31; Michael Bothe, Natalino Ronzitti, and Allen Rosas, *The New Chemical Weapons Convention: Implementation and Prospects*, (Leiden: Nijhoff, 1999).

treaty has ever attracted universal adherence like the CWC. Universality is an important principle of multilateral instruments, especially, as the success and effectiveness of such instruments depend crucially on the adherence to them by all actors. CWC serves the purpose of reconciling heterogeneous values and expectations by means of international law. As far as CWC is concerned, universality is a critical goal for the CWC because it underscores the rejection of chemical weapons by the international community and increases global security through the verified destruction of chemical weapons and elimination and prevention of chemical weapons capabilities, as well as monitoring of peaceful use of toxic chemicals and chemical weapons precursors. The Second Review Conference of the CWC emphatically invited all state parties to play an important role in bringing the universality aim closer.[791] The role of India in persuading other nations who were not members of the CWC is not known, however, India has embraced the CWC because of its universal, non-discriminatory, and multilateral character.[792] As such, its association with the calls of the OPCW and other States Parties can be considered as its role in the promotion of universality. Interesting enough, a close neighbor of India, Myanmar is yet to become a member of the CWC. India has close bilateral relations with Myanmar but how far India is pursuing it to become CWC member is not known.

8.9. India, Chemical Weapons and International Law

By declaring and destroying CW, India has strengthened the CWC but also contributed to the strengthening of international humanitarian law.[793] It is well established that according to international humanitarian law, the use of CW is prohibited.[794] One of the most important obligations of the CWC is the General Purpose Criterion (GPC).[795] This defines the substances to which its prohibitions apply. According to this, all State Parties are obliged to ensure that toxic chemical and their precursors are used only for purposes not prohibited under the CWC. The GPC allows the Convention to keep up with technological change and, in the case of dual-use

[791] Olivier Meier, "CWC Review Conference Avoids Difficult Issues", http://www.armscontrol.org/act2008_05/CWC; Monalisa Joshi, "The Second CWC Review Conference", http://www.idsa.in/backgrounder/secondCWCreviewconference.

[792] In 1987, during a debate in the First Committee of the UN General Assembly, India stated that its efforts to ban chemical weapons predated the birth of the UN. Statement of India before the 1st Committee of the UN General Assembly, UN document A/C.1/42/PV32, 4 November 1987, p. 33.

[793] International Institute of Humanitarian Law, *The Chemical Weapons Convention: Between Disarmament and International Humanitarian Law*, Sanremo: Villa Nobel (2008); Pedrazzi, Marco, "The Chemical Weapons Convention and International Humanitarian Law: A Brief Overview of Some Critical Issues, in International Institute of Humanitarian Law, *The Chemical Weapons Convention: Between Disarmament and International Humanitarian Law*, Sanremo: Villa Nobel 81-87 (2008); Smallwood, Katie, "Challenges for the Chemical Weapons Convention", In *The Proliferation of Weapons of Mass Destruction and International Humanitarian Lawi*, Sanremo: International Institute for Humanitarian Law 33-36 (2008).

[794] This norm is based on the ancient taboo against the use in war of "plague and poison", which has been passed down for generations in diverse cultures. It was most recently codified in the 1925 Geneva Protocol and subsequently in the 1972 Biological Weapons Convention and in the 1993 Chemical Weapons Convention. The great majority of States are parties to these three treaties. The prohibitions based on these texts cover not only the use, but also the development, production and stockpiling of biological and chemical weapons. It should be emphasized that in situations of armed conflict this absolute prohibition applies to all biological and chemical agents, whether labeled "lethal" or "non-lethal". For example, even the use of riot control agents which is permitted for domestic riot control purposes is prohibited in situations of armed conflict. http://www.icrc.org/web/eng/siteeng0.nsf/html/5KSK7Q accessed on 2 November 2009.

[795] Julian Philip and Perry Robinson, "Some Consequences of the General Purpose Criterion having to define the Scope of the Chemical Weapons Convention", Pugwash Meeting no. 207, 3rd Workshop of the Pugwash Study Group on Implementation of the Chemical and Biological Weapons Convention, 19-21 May 1995, Noordwijk, The Netherlands (1995).

chemicals, to exempt application for peaceful purposes from its prohibitions. The Convention lists 43 chemicals and families of chemicals for the application of special procedures, but, by virtue of the general purpose criterion, the prohibitions of the treaty are not restricted to them. CWC has far reaching significance for civilian chemical industry, in terms of intrusion, verification requirements, and attendant costs. India, having one of the largest chemical industries, obviously has to provide comprehensive declarations on its chemical industries as well as bear all inspection related costs for national personnel at domestic level.[796] By complying with these obligations, India contributed not only to the CW destruction regime but also to non-proliferation regime by allowing a successful inspection regime of its civilian chemical industry.

8.10. India, CWC, and Peace Dividend[797]

8.10.1. As any disarmament instrument is perceived to contribute to the establishment and maintenance of peace and security, it is first of all important to examine how Indian state practice has contributed through the CWC to the concept of peace dividend.[798] Six principles emerge from the analysis of India's contribution to the CWC. First, CW disarmament for India has (had) major economic consequences involving costs as well as benefits. On the cost side, it required a fundamental reallocation of resources for destruction of CW and CWPFs as well as from military to civilian production. This resulted in a major problem of allocation of funding for CW and CWPF destruction or conversion process as well as unemployment or underemployment of labour, capital and other resources in the process of disarmament. As a result, the economic dividends of CW disarmament are rather negligible but in fact costly. Ultimately, however, in the long term, CW disarmament can lead to significant and worthwhile benefits through the production of civil goods and services as resources are allocated to the civilian sector. Thus, in its economic aspects CW disarmament is like an investment process involving short-run costs and long-run benefits. Thus, India, without expectations of significant economic benefits, adhered to the CWC and has promoted this first principle of peace dividend of the CW.[799] CW disarmament does not restrict pursuance of industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes, protective purposes, military purposes not connected with the use of CW and not dependent on the use of the toxic properties of chemicals as a method of warfare and law enforcement including domestic riot control purposes.[800] This means that while defence

---

[796] The costs of destruction of CWs and CWPFs have to be borne by the possessor State Party. Accordingly, India has been required to bear all the expenses applicable under the Chemical Weapons Convention. Willett, Susan, *Costs of Disarmament – Rethinking the Price Tag: A Methodological Inquiry into the Cost and Benefits of Arms Control*, United Nations Publication, UNIDIR/2002/4.

[797] Bimal N. Patel, "*The Concept of Peace Dividend and the Chemical Weapons Disarmament,* 45 *Indian JIL* 2 153-79 (2005).

[798] Inga Thorsson, *In pursuit of Disarmament: Conversion from Military to Civil Production in Sweden*, 2 vols., Stockholm: Liber, (1984-85), at p. 301.

[799] Jörn Brömmelhörster shows a comparative analysis of various definition of peace dividend. Peace dividend is the "return of confidence and the consequent rise in investment following the establishment of peace after an armed conflict has ended" (Billenness 1995 citation from Dommen and Loukakos 1995, p. 4). The peace dividend [is seen] in terms of the conversion of talent, expertise, and technologies from the production of weaponry to commercial products and processes, which will have positive effect on the …economy (Ettinger, 1993, p.107). Jörn Brömmelhörster, "Peace Dividends Resulting from Defense Budget Cuts," In Bonn International Center for Conversion Report 12: *Converting Defense Resources to Human Development*, Proceedings of an International Conference, 9 – 11 November 1997 at 67-68.

[800] Chemical Weapons Convention, Article II (9).

spending will be reduced for the prohibited purposes, costs will increase or grow for the purposes of non-prohibited purposes such as non-prohibited purposes and destruction of CW stockpile. The direct effect of this change is that national aggregate demand and employment in prohibited-purposes area will slowly reduce, while, either an increase or stability in the aggregate demand and employment in the non-prohibited area may occur, albeit, in a no-proportionate manner. A state, therefore in order to minimize the dislocations and unemployment effects of CW disarmament may adopt compensating aggregate demand policies with reduction in non-armament spending which are gradual and predictable.[801] According to the neo-classical economy model, defence spending for prohibited purposes (production, development, stockpiling of CWs) involves a sacrifice of civil goods and services such as education, health, housing etc. Based on this model, a reduced defence spending will eventually be associated with a greater output of civil goods and services, which mean, in a long term, this should be regarded as an investment process. Such transition is bound to create short-term employment and dislocations. However, knowing that investment involves current sacrifices in return for expected future benefits, civil society of member States would regard such investment a worthwhile, even more so, if the future benefits exceeded the current costs.[802]

8.10.2. Secondly, by eliminating CW expenses and disarmament, India has led to make feel all other member states that their national security and economies are not threatened by their process. In fact, the threat of use of CW is eliminated from the OPCW community of states. Thus, declaration and eventual destruction of CW stockpile by India has significantly contributed to reducing the risk and threat of CW in the immediate region as well as the whole world.

8.10.3. Third, CW disarmament involves general problems of disarmament: overcoming the economic, technological, and environmental constraints on destruction and conversion of past CW production facilities required financial commitments, managerial innovations, manpower training, capital retooling, and other initiatives to minimize the costs and maximize the benefits of disarmament. In addition, the physical conversion of defence plants and equipment can be difficult and costly. India, like other CW possessor States Parties, did encounter such problems.

8.10.4. Fourth, CW disarmament contains unprecedented economic problems for certain countries, particularly, when it is occurring simultaneously with a shift from a centrally planned to a market economy. Although the funding spent by India for the destruction of CW is unknown, it is safe to assume, based on the perceived impressions that 1:10 funding ratio required to produce and destroy CWs, that India must have spent huge amounts of funds to eliminate its stockpile.

8.10.5. Fifth, since the Indian government provides defence expenditures, the government machineries needed to be involved in the adjustment process. Public policies which assist change and resource allocation can help to minimize the costs of disarmament. Examples include manpower policies which provide information on alternative employment opportunities and assistance for retraining and mobility, and incentives for creating new civil industries and for undertaking civil scientific and technological

[801] This analysis is based on Keynesian model of macro and micro economics which focus on defence spending as a component of aggregate effective demand.

[802] An analysis of this chapter shows that civil society is not necessarily concerned with narrow cost and benefit analysis of CW disarmament in economic sense. Thus, the civil society is prepared to pay any *economi*c cost for a better and safer future for humankind.

projects in areas such as energy, environment, and space exploration. Such problems and issues are not reported in the literature concerning India's CWC program.

8.10.6. Sixth, military research and development promotes a growth in the cost of defence equipment and creates pressures for increased defence spending. It generates technological expectations that promote large-scale investments which in turn create rigidities resisting reductions in military expenditure. Thus, disarmament requires control of military technology, especially military research and development. Real disarmament preventing future rearmament requires control of military development work. Upon completion of CW destruction program, it is possible that Indian military research is now diverted to other advanced programmes of military.

8.11. Concluding remarks

Above analysis of Indian state practice with regards to the implementation of the CWC leads to the following concluding remarks. An overall contribution of India in the codification and progressive development of international law of disarmament – Chemical Weapons Convention: India has fulfilled its commitment to the CWC in *letter and spirit*.[803] Although it announced in 1992 that it did not have chemical weapons, the subsequent events leading to India's ratification and declaration of possession of CW initially created doubts about India's commitments.[804] However, once declared, it destroyed all declared chemical weapons, although, it took more than ten after the entry into force of the CWC (29 April 2007) to complete the CW destruction. The reasons for delayed destruction, apart from possible political bargain as the USA and Russian Federation are yet to destroy their whole stockpile, were of technical nature. Having fulfilled the obligations on CW destruction, India strengthened the basic premises of the CWC and contributed to the promotion of multilateral, non-discriminatory international disarmament instrument. By allowing inspections at declared civilian chemical industry throughout the implementation of the CWC and by submitting declaration on civilian and military chemicals to the OPCW, India further strengthened the regime of non-proliferation of the CWC.

It has not played a remarkable role, however, in the implementation of promotion of chemical science and technology through the peaceful purposes in the benefit of developing countries, as lack of submission of clear policy papers, lack of chairing important clusters on the subject evidence this conclusion. Although CWC does not factor significantly in Indian establishment's security and military agenda, it could have played a significant role in this area and could have promoted in a much-strengthened fashion the principle of international cooperation for the development of science and technology through peaceful uses of chemicals.

Except that the first chairperson of the Executive Council of the OPCW was from India, it has never obtained any significant position in the implementing structure of the CWC, namely, the OPCW Techical Secretariat. Despite the remarkable track record of compliance, India's absence in the higher echelons of OPCW suggests that India has not been effective in driving new policies, which is normally done by the secretariats of international instruments, in this case, the Technical Secretariat.

---

[803] Felix Calderon, "Obligations and Rights of States Parties under the Chemical Weapons Convention", Organisation for the Prohibition of Chemical Weapons, The Hague Basic Course for National Authority Personnel, 6 (1994).

[804] Anthony Cordesman, "Weapons of Mass Destruction in India and Pakistan," Center for Strategic and International Studies, www.csis.org.

It is highly possible that India will fully support any multilateral arms control and disarmament instrument, which would have similar kind of provisions. Its opposition for NPT and CTBT are case in instance.