



Policy Brief

NUMBER 8, 2006

Overview

The weapons of mass destruction are regulated by separate international treaties. The chemical weapons convention (CWC) profited from the experience of the other two treaties. It was fortunate also in its timing, being concluded during the optimism of the immediate post-Cold War years. Principles of universality, equality and non-discrimination have ensured greater participation in the CWC. It is unique in outlawing an entire class of weapons, instituting a comprehensive verification regime, establishing its own implementing organization, and integrating the relevant industry into its programme of work.

This policy brief, drawing on a recent book, examines the record to date of the CWC's implementing agency as well as the challenges yet to be met.

Written by TEJAL CHANDAN and
RAMESH THAKUR
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ISBN-10: 92-808-3025-2
ISBN-13: 978-92-808-3025-5
ISSN 1814-8026

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The Chemical Weapons Convention: Implementation, Challenges and Opportunities

THE TERRORIST ATTACKS OF SEPTEMBER 11

2001 concentrated minds on the potential of terrorism with weapons of mass destruction (WMD), combining a timeless tactic with the most destructive weaponry. The margins of international tolerance of non-compliance with the WMD nonproliferation and disarmament norms and obligations narrowed dramatically after that date. Affirming WMD proliferation as a threat to international peace and security and expressing concern over the threat of WMD terrorism and of illicit trafficking in WMD material, weapons and delivery systems, UN Security Council Resolution 1540 (28 April 2004) called on all states to enact and enforce laws to prohibit nonstate actors to develop, acquire, transfer or use WMD; and to take and enforce effective domestic control, physical protection, accounting and border control measures to prevent proliferation.

Biological, chemical and nuclear weapons differ in their technical features, in the ease with they can be acquired and developed and in their capacity to cause mass destruction. Because they can cause mass casualties, the chemical weapons phobia can be exploited tactically to impose caution and limit the mobility of enemy forces. Nevertheless, their military utility is limited by difficulties in storage, transportation and dispersal, and by the need to have large amounts. They are weapons of political terror rather than military force. They are not like nuclear weapons where once critical mass is reached, a chain reaction is triggered leading to uncontrollable escalation. Chemical weapons would be needed in large quantity to cause the level of damage and death that just one nuclear weapon can inflict. And, unlike nuclear weapons, defences are available against chemical weapons.

The stringent verification provisions of the Chemical Weapons Convention (CWC) and the Organization for the Prohibition of Chemical Weapons (OPCW) at the Hague as the implementing arm of the convention are an effective bulwark against terrorists using chemical weapons. The CWC is unique among disarmament treaties for having outlawed a class of weapons, instituted a comprehensive verification regime, establishing its own organization responsible for implementing

all provisions of the treaty, and placing its own restrictions on export of dual-use technology.

The Threat of Chemical Warfare

The use of chemicals as tools of war is almost as old as human history, for example poisoned arrows and noxious fumes. The means, range, accuracy and lethality of chemical weapons and their delivery systems increased exponentially over the course of the last

death toll could have been substantially larger.

Interest in limiting the use of chemicals as weapons of war is also of long standing. France and Germany agreed to prohibit the use of poison bullets in the Strasbourg Agreement of 1675. In 1874, the Brussels Convention on the Law and Customs of War banned the use of poison and arms, projectiles or material to cause unnecessary suffering. An agreement was

The CWC provides for international verification of the destruction of these weapons and the conversion of their production facilities to peaceful purposes

century. Their efficient harnessing for large scale deployment and use owes much to modern industrial processes and organization. Although their use during the First World War had produced revulsion and horror making countries reluctant to want to be the first to use deadlier variants in the next war, most states did make preparations to retaliate in kind should they be the victims of chemical weapons use by their enemy. In the event, they were indeed widely used during the Second World War. After 1945, the United States and the Soviet Union maintained active chemical and biological warfare programmes and held tens of thousands of tonnes of chemical weapon stockpiles. Iraq used chemical weapons against Iran during their eight-year war in the 1980s, and used mustard gas and nerve agents against the Kurdish people of Halabja in 1988. In Japan, the Aum Shinrikyo doomsday cult used sarin in Matsuyama in 1994 followed by releasing it in a Tokyo subway station in 1995 that killed ten people. Had their delivery capability not been so primitive, the

signed at the first Hague international peace conference (1899) prohibiting the use of projectiles filled with poison gas, followed by the Geneva Protocol of 1925 prohibiting the use (although not the production) of asphyxiating, poisonous and other gases and bacteriological warfare. Yet many countries continued to manufacture and maintain stocks of known and newer forms of chemical agents.

The Chemical Weapons Convention (CWC)

The CWC was the final element in the trinity of global treaties regulating the three categories of WMD. The principles of universality, equality and non-discrimination have encouraged more widespread adherence to the CWC. Unlike the case with nuclear weapons, both biological and chemical weapons have been outlawed under universal international conventions. Unlike the 1968 Nuclear Non-Proliferation Treaty (NPT), the CWC is universal and does not create a world of chemical apartheid in which a small group of countries holds legitimate possession

About the Authors

Tejal Chandan is an intern at the United Nations University, Peace and Governance Programme.

Ramesh Thakur is Senior Vice-Rector of the United Nations University in Tokyo, Japan and Assistant Secretary General of the United-Nations.

of weapons that are banned for everyone else. Because there is no standing agency or secretariat, the NPT depends on five-year review conferences for resolving implementation problems. Unlike the Biological Weapons Convention (BWC), the CWC contains rigorous, state-of-the-art provisions on monitoring and verification. For example its monitoring procedures routinely reach into the private sector to a depth and breadth neither contemplated before nor emulated since. US leadership during the multiyear negotiations was crucial for this.

The CWC comprises a preamble, 24 articles and three annexes on chemicals, verification and confidentiality.

eral framework. It was distinctive and significant for the active involvement of the global chemicals industry and its ongoing cooperation with the convention's industrial verification regime. Finally, the convention encourages international cooperation among countries in the peaceful uses of chemicals and provides for assistance and protection to signatories under chemical weapon threat or attack.

The CWC was carefully crafted to permit the peaceful uses of chemicals while defining and capturing those activities that are forever forbidden. Given the dual-use nature of many chemicals that are used for legitimate purposes, but may also be suitable

In spite of progress, states have lagged behind in the mandated deadline for the destruction of chemical weapons stocks

The product of 20 years of negotiations, it provides a multilateral cooperative mechanism committed to disarmament, non-proliferation and assistance to the victims of chemical weapons use. It bans the production, possession, proliferation, transfer and use of chemical weapons and aims at their total elimination. It provides for international verification of the destruction of these weapons and the conversion of their production facilities to peaceful purposes through the OPCW as its implementing arm.

The CWC is unique as the first multilateral treaty to ban an entire category of weapons of mass destruction and provide for international verification of the destruction of these weapons and the conversion of their production facilities to peaceful purposes. It remains the only disarmament treaty to have been negotiated within the institutionalized multilat-

for chemical weapons purposes, there needed to be a balance between the desire to control and contain the proliferation or the possible misuse of the chemical industry and the economic interests of the industry. Article II of the CWC, therefore, uses the intended purpose of the chemical as a defining criterion rather than its toxicity.

Implementation

The CWC is a highly technical treaty and its implementation is a continuous obligation. The OPCW is required to oversee and verify the total destruction of all declared chemical weapons; to inactivate and destroy or convert to peaceful purposes all chemical weapons production facilities; and to inspect the production and, in some cases, the processing and consumption of dual-use chemicals, and receive declaration of their transfer in order to ensure their exclusive peaceful use. The OPCW

has three principal organs: the Executive Council, the Conference of States Parties and the Technical Secretariat. The responsibility for making decisions on policy matters and disputes over interpretation or implementation vests with the Executive Council and the Conference of States Parties while the day-to-day administration and implementation, including inspections, is the responsibility of the Technical Secretariat.

The OPCW requires all States Parties to establish a National Authority as the focal point in the interaction between the State Party, other countries and the OPCW. The National Authority would make the initial and subsequent declaration on chemical weapons stocks or facilities, coordinate and participate in the receipt of OPCW inspections of military and industrial sites, participate in protecting and assisting member states under threat or actual chemical attack, and promote the peaceful use of chemicals.

The OPCW has had its own set of challenges in the midst of some definite progress. All declared CW production capacity has been inactivated, with 55 of the 65 CW production facilities certified as destroyed or converted to peaceful purposes. The inventory of all declared CW stockpiles has been completed, though only 2.5 million of the 8.7 million munitions have been destroyed. The OPCW has conducted over 2500 inspections of around 200 military and 700 industrial sites in 76 countries. Apart from this the OPCW provides technical assistance to member states to implement the CWC and has also developed an analytical database of over 1500 chemical compounds used by the OPCW inspection teams but also available to the member states. In spite of this progress, states have lagged behind in the CWC-mandated deadline for the destruction

of chemical weapons stocks which was earlier the year 2007 and has now been extended to the year 2012.

Challenges

With less than one-fifth of the world's declared stockpile of 71,000 tonnes of chemical agents verifiably destroyed, meeting the deferred deadline remains a challenge. Although the “architecture” for banning chemical weapons is complete and effective, many critical components of the inspection regime remain untested; and impending efforts are directed at achieving universality, reporting dual-use exports and imports and ensuring effective verification and enforcement. The First CWC Review Conference (April–May 2003) re-affirmed the importance of the CWC in the changed international environment, produced a list of recommendations and pledged the continued support of all States Parties for the principles of the CWC and OPCW. Some of the topics dealt with at the First Review Conference remain at the crux of CWC related discussions even today.

Universality

The members of the OPCW already comprise about 95 percent of the world's population and landmass and 98 percent of the global chemical industry. Given this, is universal coverage really necessary or achievable? Interestingly, nearly two-thirds of the states who are not party to the CWC have already joined one or more of the International Atomic Energy Agency (IAEA) Statute, the 1925 Geneva Convention, the BWC or the Ottawa Convention which bans antipersonnel landmines. Therefore, with regard to achievability, it is possible that most or all of the holdout states will eventually join the CWC considering the opprobrium or political unacceptability aris-

Efforts to limit the use of chemicals as weapons of war date back many years. France and Germany agreed to prohibit the use of poison bullets in the Strasbourg Agreement of 1675. In 1874, the Brussels Convention on the Law and Customs of War banned the use of poison and arms, projectiles or material to cause unnecessary suffering. An agreement was signed at the first Hague international peace conference (1899) prohibiting the use of projectiles filled with poison gas, followed by the Geneva Protocol of 1925 prohibiting the use of asphyxiating, poisonous and other gases and bacteriological warfare.

ing from not doing so. In the shorter term, however, some of the developing countries may have a constraint in terms of the legal and administrative resources needed to meet their treaty obligations.

The effective implementation of Article VII obligations (National Implementation Measures) creates an environment for enforceability which in turn will be achievable only when all States join and implement the CWC. Another aspect that needs to be borne in mind is the fact that the CWC is essentially a non-discriminatory treaty which does not permit any possessors of chemical weapons. It is not a case of having a small number of possessors within the system and a small number outside it. Moreover, the stakes are considerably higher given the possibility that even the potential for possession or production of such weapons may be asserted as constituting a justification for waging preventive war.

In efforts to achieve universality, the OPCW has been engaged in a range of initiatives designed to attract non-party states to join the CWC wherever possible and, to this end, cooperation with regional and sub-regional organizations has increased in importance.

National Implementation Mechanisms and Verification

True universality can be achieved when States Parties have incorporated the CWC provisions within their national legislations and are open to verifications. In this sense, effective national implementation and the issue of verification go hand in glove with the challenge of universality. Oftentimes, strengthening treaty regimes requires national legislation and measures on criminalisation of proliferation activities, effective protection of proliferation-sensitive personnel, materials and

The Status of Participation in the Chemical Weapons Convention

Countries in green are State Parties (a total of 179). Yellow denotes Signatory States that have not yet ratified (Bahamas, Central African Republic, Congo, Dominican Republic, Guinea-Bissau, Israel and Myanmar). Red denotes Non-Signatory States (Angola, Barbados, Democratic People's Republic of Korea, Egypt, Iraq, Lebanon, Somalia and Syrian Arab Republic).



Source: OPCW, <http://www.opcw.org/factsandfigures/index.html#participation>. The presentation of this map does not imply the expression of any opinion by OPCW or UNU about the legal status of any country, territory or area or the delimitation of its boundaries.

equipment, control and accounting systems for monitoring materials and stocks, and regulation and surveillance of dual-use transfers.

States Parties must adopt three basic steps. First, they must develop legislation to give effect to the more general requirements of the CWC which entails placing provisions covering toxic chemicals generally as well as regulating scheduled chemicals, related facilities and other chemical production facilities. Second, they must enact provisions indicating purposes for which the use of toxic chemicals is permitted. And third, they must enact laws covering relevant persons and provide access to OPCW inspections.

The gaps in national implementation and the increasing importance of transparency in arms control treaties are indicators of how much importance states attach to the functioning

of each other’s national implementation mechanisms. The CWC provides two sets of verification mechanisms, namely, the clarification procedure and the challenge inspection system. The first clarifies questions concerning possible non-compliance, either bilaterally or through the executive council of the OPCW, while the second allows for inspectors of the OPCW Technical Secretariat to conduct on-site inspections on the territory or any other place under the jurisdiction or control of a State Party when another State Party has raised a concern about non-compliance.

The challenge inspection system was formulated as the ultimate guardian of effective implementation and strict compliance with the CWC. The biggest practical problem of the challenge inspection system is however that it has never been used or requested. On the one hand, it can be lauded as a perfect deterrent; on the other hand its effectiveness remains in question until it has been tested. One reason for this non-use perhaps is the fact that the verification for chemicals is inherently difficult and complex. There remains a possibility that even the most advanced challenge inspection system under the CWC would not reveal evidence of non-compliance, particularly if the relevant site is unknown. This in turn may lead to non-detection of weapons, serving as a means to declare the innocence of the suspected party. Although non-detection of weapons does not amount to compliance, the chances that these two may be equated are high. Another reason for non-use arises from the possibility that there may be a request for a retaliatory challenge inspection.

The OPCW has been involved in efforts to operationalize the challenge inspection system, but there are diverging views regarding routinizing the system. While most developed countries

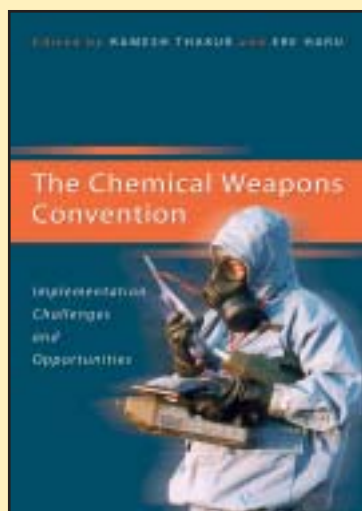
are of the view that in the long term the challenge inspection system can be made more routine, the developing countries hold to a contrasting view. As a solution, some States Parties have pointed out the need to create another level of mechanism which falls between the routine industry inspection and the politically loaded challenge inspection. This in the case of CWC may be possible if the States Parties adopt a new document allowing something in line with the complementary access type inspections in the Additional Protocol of the IAEA. Given the lack of a shared view among the participants, a solution perhaps exists in utilizing the existing framework by applying a broad interpretation to the language concerning challenge inspections in the CWC, thereby allowing the possibility of complementary access type inspections.

Opportunities

In the changed security environment today with potential links between WMD possession, proliferation and terrorism, it becomes important to ensure that toxic industrial chemicals and precursor materials remain out of the reach of terrorists. In the coming years, it will indeed be a real challenge to develop effective strategies to counter the threat of chemical terrorism as it is much more complex and dispersed than the traditional military chemical weapons threats. This in a way underlines the importance of the national implementation of the CWC. One way of encouraging non-party states to join the Convention could be as part of the broader goal to encourage counter-terrorism efforts.

Another concern about the threats posed by chemical weapons currently relates to the introduction of new chemical warfare agents. The technical versatility today allows the use of

This Policy Brief is based on a new book, *The Chemical Weapons Convention: Implementation, Challenges and Opportunities*, edited by Ramesh Thakur and Ere Haru (United Nations University Press, 2006) ISBN 92-808-1123-1



production equipment for multiple products and switch production in accordance with the demands. The verification in this case becomes much more of a challenge than it used to be at the time the CWC was adopted. Nevertheless, the emphasis on transparency under the CWC complements verification activities and work is under way by the OPCW to respond effectively to these evolving conditions.

tion capacities for suspected nuclear and chemical violations, drawing on the OPCW and IAEA capacities.

The OPCW achievements include declaration and destruction of stockpiles, the dismantling and conversion to civilian uses of chemical weapons infrastructure, and the adoption of an action plan to achieve treaty universality. Civic groups too have played a helpful role in the CWC mandated

Civic groups...offer positive examples of how local environmental justice concerns can intersect with a global disarmament effort

The United Nations can contribute by building collective political will for the reduction and elimination of all weapons of mass destruction and the strengthening and expansion of various arms control regimes. In this context Security Council Resolution 1540 sets the tone for legitimate UN action against specific proliferation threats to international peace and security.

The prescriptions of the UN Secretary-General's High-level Panel on Threats, Challenges and Responses (2004) focus on four layers: demand reduction, supply-side restrictions, enhanced enforcement and improved public health defences against biochemical warfare. The Panel recommended that the implementation committee of Resolution 1540 should establish a permanent liaison with the IAEA, the Nuclear Suppliers Group and the OPCW; the Directors-General of the OPCW and IAEA should be invited by the Security Council to report to it twice-yearly on the status of safeguards and verification processes, and on any serious concerns they have short of actual treaty breaches; and the Security Council should be prepared to deploy inspec-

destruction and disposal of chemical weapons in some countries, offering positive examples of how local environmental justice concerns can intersect with a global disarmament effort. While the Review Document provides a roadmap, by no means does it assure a favourable outcome in meeting these challenges.

Compared to other disarmament treaties, the Chemical Weapons Convention deserves much praise for its many achievements, the pace of its growth and its implementation and verification record since coming into force. Overcoming the interlinked challenges of universality, implementation and verification and the broader chemical terrorism threat however will require the OPCW to adapt continually to the evolving international environment.



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INSIDE: Policy Brief

The Chemical Weapons Convention: Implementation, Challenges and Opportunities

A multilateral and enforceable protocol is necessary to ensure the safety of modern populations from chemical and biological weapons development.

United Nations University Press
The United Nations University
53-70, Jingumae 5-chome
Shibuya-ku, Tokyo 150-8925
Japan

