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## The Chemical Weapons Convention

This book was inspired by the symposium “Towards the Elimination of Chemical Weapons – The Roles of the OPCW and Japan”, sponsored jointly by the United Nations University and the Government of Japan and held on 1 October 2003 at the UNU in Tokyo. On behalf of the Director General of the OPCW, the editors express their sincere appreciation and gratitude to those who have helped promote the values of the Chemical Weapons Convention, first at the UNU symposium and then in this book. As time passes, the challenges and opportunities that face the CWC will change. The editors are therefore grateful for having had the opportunity to create this book to record the OPCW’s views and expertise for future reference.



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# The Chemical Weapons Convention: Implementation, challenges and opportunities

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Edited by Ramesh Thakur and Ere Haru

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United Nations University, 53-70, Jingumae 5-chome,  
Shibuya-ku, Tokyo 150-8925, Japan  
Tel: +81-3-3499-2811 Fax: +81-3-3406-7345  
E-mail: sales@hq.unu.edu general enquiries: press@hq.unu.edu  
<http://www.unu.edu>

United Nations University Office at the United Nations, New York  
2 United Nations Plaza, Room DC2-2062, New York, NY 10017, USA  
Tel: +1-212-963-6387 Fax: +1-212-371-9454  
E-mail: unuona@ony.unu.edu

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# Foreword

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*Rogelio Pfirter*

Director-General, Organisation for the Prohibition of  
Chemical Weapons

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Complete and permanent chemical disarmament, once a distant goal, is now being implemented daily around the world by the member states of the Organisation for the Prohibition of Chemical Weapons (OPCW). This multilateral and complex task inspired an international symposium held at the United Nations University in 2003, titled “Towards the Elimination of Chemical Weapons: The Roles of the OPCW and Japan”, and serves as the basis for the invaluable research summarized in this text.

The OPCW is the implementing agency of the Chemical Weapons Convention, a landmark disarmament and non-proliferation treaty that stipulates the total elimination of an entire category of weapons of mass destruction. On behalf of the OPCW, I wish to express my gratitude to the United Nations University and the Ministry of Foreign Affairs of Japan for their initiative and unstinting support for this text’s publication. I am confident that it will prove to be a useful resource for academics, as well as policy makers and policy shapers, since the Convention’s success depends in large part upon a detailed understanding of this disarmament agreement’s rights and obligations.

The global ban on these horrible weapons has now become an unquestioned norm in international law. Its effective implementation directly contributes to our enhanced security and to the peaceful development of chemistry and the chemical industry. This text provides an in-depth analysis of the challenges to be confronted and the opportunities to be seized in the realization of a world free of chemical weapons.

As the chapters in this volume will demonstrate, the Convention repre-



sents a unique achievement in the field of multilateral disarmament: it is the only international instrument that obligates all States Parties to ensure, through obligatory national measures, that all chemical weapons stockpiles are declared, secured and destroyed. All production capacity is to be declared, inactivated and likewise eliminated. To ensure that chemical weapons are neither transferred nor produced, all States Parties declare relevant chemical production and open relevant facilities for inspection, while monitoring the transfer of specific toxic chemicals in an effort to prevent their use as weapons by any person or group, including for terrorist purposes.

This treaty is buttressed by a comprehensive verification mechanism that grants the OPCW the mandate to inspect both chemical-weapons-related and industrial sites. The destruction of these weapons and the non-diversion of specific toxic chemicals for any purpose that is prohibited under the chemical weapons ban are stringently verified through both on-site inspections and obligatory and systematic declarations. The interlocking legislative and regulatory measures foreseen by the Convention, applied in coordination by States Parties and the Technical Secretariat in The Hague, enhance every State Party's confidence that chemical weapons cannot pose a threat to our security.

Toxic chemicals are widely utilized and are essential in many industrial processes. Ensuring their peaceful use has become an urgent priority for all governments since the advent of an ever-more violent form of terrorism, which could lead to the terrorist acquisition and use of these weapons of mass destruction.

The global scale of this disarmament effort requires effective, international cooperation. The OPCW was designed as a non-discriminatory intergovernmental organization, open to all nations. One of this organization's pre-eminent purposes, in conjunction with the destruction and non-proliferation of chemical weapons, is to develop and strengthen all member states' autonomous capacity to meet their obligations under the Convention. This cooperation is also a critical resource should any member state be threatened by any act that is prohibited under the Convention or if any member state is attacked with chemical weapons. All member states are obligated to provide this protection and assistance, whose effectiveness will hinge upon effective coordination among OPCW member states.

Effective international cooperation, be it to provide protection, to enhance national legislation and regulatory measures, or to foster the development of the peaceful uses of chemistry, is an integral element within the Convention, delivering concrete security and developmental benefits. These benefits also act as incentives that have led to the OPCW's unprecedented growth in membership since the treaty entered into force in 1997.

Over 95 per cent of relevant chemical industry and 98 per cent of the global population are now included within the Convention's jurisdiction. The OPCW's ultimate goal is universal, effective implementation of the chemical weapons ban. The chapters in this volume will serve to encourage all nations to join in this international disarmament endeavour by taking the sovereign decision to renounce chemical weapons forever.

Together, the authors of this book have made a substantial contribution to the Convention's effective and universal application. Their chapters will further stimulate discussion of chemical disarmament and enhance detailed understanding of the international measures in order swiftly to achieve the Convention's aims of a world freed of the threat posed by the use of chemicals as weapons.

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# Contributors

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**Masahiko Asada**

Professor of International Law  
Graduate School of Law  
Kyoto University  
Japan

Stanford University  
Stanford  
CA  
USA

**Ere Haru**

Head  
Training and Staff Development  
Branch  
Organisation for the Prohibition of  
Chemical Weapons  
The Hague  
The Netherlands

**Robert J. Mathews**

Principal Research Scientist  
CBRN Defence Centre  
Defence Science and Technology  
Organisation (DSTO)  
and  
Associate Professor  
Asia Pacific Centre for Military Law  
Faculty of Law  
University of Melbourne  
Australia

**Faiza Patel King**

Senior Policy Officer  
Verification Division  
Organisation for the Prohibition of  
Chemical Weapons  
The Hague  
The Netherlands

**Ramesh Thakur**

Senior Vice-Rector  
United Nations University  
Tokyo, Japan  
and  
Assistant Secretary-General of the  
United Nations

**Margaret E. Kosal**

Science Fellow  
Center for International Security and  
Cooperation

**Ralf Trapp**

Senior Planning Officer  
Office of the Deputy Director General  
Organisation for the Prohibition of  
Chemical Weapons  
The Hague  
The Netherlands

**Keith Wilson**

Political Affairs Officer  
External Relations Division  
Organisation for the Prohibition of  
Chemical Weapons  
The Hague  
The Netherlands



# Introduction: Chemical weapons and the challenge of weapons of mass destruction

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*Ramesh Thakur*

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The subject of weapons of mass destruction (WMD: nuclear, chemical, biological and radiological) – their proliferation, detection and interdiction, use and deterrence, dismantlement and destruction – is back on the international agenda with a vengeance. Chemical weapons share with nuclear and biological weapons the capacity to inflict mass casualties even in a single attack. The Chemical Weapons Convention (CWC), signed in 1993 and in force since 1997, was the final element in the trinity of global treaties regulating the three categories of WMD.<sup>1</sup> The most destructive category of weapons in the arsenal of major powers today is nuclear. Of the classes of weapons usually grouped together into WMD, nuclear weapons were the first to be subjected to an international regime. Hence the effort to contextualize the case of chemical weapons against the backdrop of the situation with regard to nuclear weapons. Unlike the 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 of weapons that are banned for everyone else. The principles of universality, equality and non-discrimination encouraged more widespread adherence to the CWC from the start. 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 agreement and indeed leadership during the multi-year negotiations was crucial for this.<sup>2</sup>

## The fallacy of the WMD trinity

The WMD agenda has three interlinked components: non-proliferation, arms control and disarmament. Proliferation refers to the dispersal of weapons, capabilities and technologies. Weapons can be sought for one or more of six reasons: deterrence of enemy attack; defence against attack; compulsion of the enemy to one's preferred course of action; leveraging adversary and great power behaviour;<sup>3</sup> status; and emulation.<sup>4</sup> Specific causes of proliferation are many, diverse and usually rooted in a local security complex. On the supply side, a major proliferation challenge is the globalization of the arms industry, the flooding of the global arms market and a resulting loosening of supplier constraints. The lengthening list of proliferation-sensitive concerns includes the failure to find WMD in Iraq, the strident bellicosity from Pyongyang proclaiming a weaponized nuclear capability, the concerns expressed by the International Atomic Energy Agency (IAEA) about Iran's nuclear programme, reports that Saudi Arabia may be contemplating an off-the-shelf purchase of nuclear weapons, and the revelations of an unsuspected underground nuclear bazaar run by Abdul Qadeer Khan, the "father" of Pakistan's bomb.

Nuclear non-proliferation efforts must be viewed within the context of the broader proliferation environment, which in addition to nuclear weapons includes biological, chemical and conventional weapons and their delivery systems. The chemical weapons phobia can be exploited tactically to impose caution and limit the mobility of enemy forces. Nevertheless, the military utility of chemical weapons 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. The same is true of biological weapons. They are subject to instability and rapid decomposition and easily affected by climatic factors such as rain, sun and wind. But biological weapons have the advantages of being cheaper, technically easier to produce (though not necessarily easier to weaponize) and more easily hidden within legitimate civilian use programmes than nuclear or chemical weapons.

Language is not always neutral, and often contains powerful codes of permissible and impermissible behaviour. The constant reference in recent times to the risks posed to America by "weapons of mass destruction" may well be part of the political-psychological strategy of making the use of nuclear weapons more palatable to domestic public opinion. But the effort to expand the role of nuclear weapons as a counter to the development or acquisition of WMD by US-hostile states could pose a threat to arms control, disarmament and non-proliferation. It is not clear

that biological, chemical and nuclear weapons belong in one conceptual category. They differ in their technical features, in the ease with they can be acquired and developed, and in their capacity to cause mass destruction. Treating them as one category of weaponry can distort analysis and produce flawed institutional responses. Looking at the long-lasting and particularly traumatic conflicts in Africa and Asia (Afghanistan, Angola, Cambodia, Mozambique, Rwanda, Sierra Leone), it is clear that the real weapons of mass destruction are small arms and landmines. Light arms are the weapons of choice in today's characteristic conflicts because they are inexpensive, extremely user-friendly, easily concealed and smuggled across borders, rugged and durable, easy to dismantle and reassemble, highly mobile and portable, and extremely lethal.

Biological weapons are unlikely WMD. The volatility and instability of the agents pose problems of storage and survivability of the pathogens even after release into the environment, and their deliverability is also problematic. Some defence at least is possible against biological weapons. So the extent of possible mass casualties is by no means known. Radiological weapons have been described as weapons of mass panic more than mass destruction. The radioactive fallout would most likely be localized, kill few people and cause little damage to property. Chemical weapons can cause mass casualties. But they are not like nuclear weapons where, once critical mass is reached, a chain reaction is triggered leading to uncontrollable escalation. And 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.

Nuclear weapons are the only true WMD, as indicated in the Cold War doctrine of "mutually assured destruction" (MAD). Just one weapon can kill hundreds of thousands, and a global nuclear war would imperil the human race and other species. And there is no defence against nuclear weapons.

There is also the danger of mission creep for nuclear weapons. The taboo against nuclear weapons use is so strong that it is difficult to imagine their use other than against enemy nuclear weapons. The creeping tendency to redefine their mission to counter WMD has two consequences: it lumps together biological, chemical and nuclear weapons in one conceptually fuzzy category; and it weakens the nuclear taboo. The military utility of chemical weapons (CW) is limited to the tactical level, and they have never played a decisive role in determining the outcome of a war. While biological weapons (BW) can theoretically be conceived of as a strategic weapon, there has been not a single case of such use in practice. If nuclear weapons are accepted as having a role to counter



biological or chemical warfare, then by what right or logic can we deny a nuclear-weapons capability to a country such as Iran that has actually suffered chemical weapons attacks?

In other words, mission creep carries the attendant danger of cross-category horizontal proliferation. The clandestine nature of all biological and chemical weapons programmes suggests that, unlike nuclear weapons, no prestige value attaches to them. They have been so successfully stigmatized and evoke such universal revulsion that they are not a source of national pride. This should lead us not into the temptation to legitimize a new role for nuclear weapons in combating the scourge of biological and chemical weapons. Rather, the successful efforts to build a taboo against BW and CW can serve as an important legal and moral step in advancing the larger disarmament project. The fact that nuclear weapons have not been used since 1945 in itself contains one of the most powerful taboos against their use today.

### The risks of WMD terrorism

The terrorist attacks of 11 September 2001 concentrated minds on the potential of WMD terrorism. Worst-case scenarios see terrorists using nuclear or radiological weapons to kill hundreds of thousands of people. In its annual report to Congress for 2004, the US Central Intelligence Agency (CIA) warned that al-Qaeda is fully capable of building a radiological “dirty bomb” (a conventional explosive wrapped in radioactive material) targeting the US and others, and has “crude procedures” for producing chemical weapons using mustard, sarin, VX and cyanide. This could be deduced from al-Qaeda documents recovered in Afghanistan in 2002. Recalling al-Qaeda’s stated willingness to use unconventional weapons and its demonstrated willingness and capacity to launch deadly attacks on a mass scale, the CIA concluded that the danger of terrorists using chemical, biological, radiological and nuclear materials “remained high”.<sup>5</sup> Similarly, an Aspen study group concluded that the danger of nuclear terrorism is greater than most people realize, and that the US government has not prepared adequately for it.<sup>6</sup>

We cannot be confident that an attack combining the sophistication and ruthlessness of “9/11” with the use of nuclear weapons will not happen. As far as we know, however, no terrorist group has the competence to build nuclear weapons and an element of scepticism is warranted about the capacity of non-state actors to manufacture nuclear weapons undetected by the intelligence agencies of the technologically advanced countries. Nor is there any evidence so far to suggest that nuclear weapons have been transferred to terrorist organizations. Bioterrorism

may be less unlikely because pathogens and toxins can be made easily and clandestinely in a small area and can cause widespread death and panic if dispersed in sufficient quantities. The absence of effective verification measures and an organization to implement the BWC is a serious loophole in the fight against bioterrorism. By contrast, the stringent verification provisions of the CWC and the Organisation for the Prohibition of Chemical Weapons (OPCW) at The Hague (the implementing arm of the Convention) are an effective bulwark against terrorists using chemical weapons. The most realistic concern is that al-Qaeda or a related group could detonate a dirty bomb that could spray radioactive fallout across an American or European city. While the death and devastation caused by it would be significantly less than from a nuclear bomb, it would cause some casualties and radiation sickness, producing mass panic.

### The Chemical Weapons Convention (CWC)

Unlike the case with nuclear weapons, both biological and chemical weapons have been outlawed under universal international conventions. Opened for signature in 1972 and in force since 1975, the BWC was significant for being the first regime to outlaw an entire class of weapons and warfare.<sup>7</sup> It prohibits the development, production, stockpiling, acquisition and retention of toxin and biological weapons. States Parties were required to destroy or divert to peaceful purposes all biological and toxin weapons under their control. The Convention also provides for cooperation in the peaceful uses of biological agents and toxins. The BWC established a norm against BW possession and is the symbol of the world's abhorrence of these weapons. But, because of weaknesses in its verification system, the BWC has not prevented the proliferation of biological weapons. The weaknesses reflect the scientific state of the world in 1972, when biological weapons did not have a high utility. Production barriers, such as problems concerning the preservation and dissemination of biological agents and the protection of troops handling them, had not yet been overcome. Moreover, production required large fermentation facilities, which were easily detectable by outsiders.

Advances in biotechnical engineering have solved some of these problems in the three decades since the BWC was signed. Large-scale production and storage of microbial agents are now relatively straightforward. Indeed, the stockpiling of weapons may no longer be necessary since a biological agent can be produced in militarily significant quantities fairly quickly and dispersed over agricultural, ecological or human targets using a simple spray system. Deadly BW agents can be produced in sufficient quantities for terrorist purposes using relatively primitive means. Major

difficulties remain in the reliable detection of BW activities before full-scale development. R&D and production require small facilities that can be hidden within or co-located with legitimate medical, pharmaceutical, agricultural and fermentation facilities. Most of the equipment and materials needed are of the dual-use variety. The number of people involved in the programme can be quite small, placing an obstacle to the collection of intelligence data through human sources.

The use of chemicals as tools of war is almost as old as human history (poisoned arrows, arsenic smoke and noxious fumes, for example). As with other types of weaponry, the means, range, accuracy and lethality of chemical weapons and their delivery systems increased exponentially over the course of the last century. The efficient harnessing of CW for large-scale deployment and use owes much to modern industrial processes and organization. During the First World War, chlorine and phosgene gases were stored in and released from canisters on the battlefield and dispersed by the wind. Chemical weapons (including mustard gas) are estimated to have killed around 90,000 and injured more than a million people during that war. Although their use had produced revulsion and horror, making countries reluctant 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, CW were indeed widely used during the Second World War.

After the Second World War, the United States and the Soviet Union maintained active chemical and biological warfare programmes and held stockpiles of tens of thousands of tonnes of chemical weapons. 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 (when the CWC was being negotiated). In Japan, the secretive religious sect Aum Shinrikyo, having built up a sizeable CW arsenal without detection and without access to large scientific resources, carried out a terrorist attack on the Tokyo subway on 20 March 1995 using the nerve gas sarin, killing 10 people, injuring thousands and terrifying millions. Had their delivery capability not been so primitive, the death toll would have been substantially larger.

Alongside the use of chemicals as weapons of war has been a long-standing interest in limiting such use. Thus 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 (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. Many signatories entered caveats leaving them free to use chemical and biological weapons in retaliation for being attacked by such weapons, or against countries that were not party to the Geneva Protocol.

The Eighteen-Nation Disarmament Committee (the precursor to the Conference on Disarmament) completed negotiations in 1971 on the text of the Biological Weapons Convention. Interestingly, the BWC included a clause committing countries to begin negotiations on an international treaty banning chemical weapons. The CWC improved on its BWC predecessor by making the ban subject to international verification. For this to be meaningful, the global chemical industry would have to be included inside the convention's coverage. It was with this in mind that the industry began actively participating in the negotiations from 1986, and trial inspections were conducted of industrial as well as military facilities from 1988 onwards. The draft text of the CWC was submitted to the Conference on Disarmament on 3 September 1992, opened for signature in Paris on 13 January 1993 and subsequently deposited with the United Nations Secretary-General in New York. It was due to come into force 180 days after the 65th ratification. Hungary was the 65th country to ratify in late 1996, and the CWC entered into force on 29 April 1997 to become binding international law.

The CWC was the end-product of 20 years of negotiations for a treaty-based ban on the production, possession, proliferation, transfer and use of chemical weapons, and their total elimination. It 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 was also the first and remains the only disarmament treaty to have been negotiated within the institutionalized multilateral framework. And 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 comprises a preamble, 24 articles and three annexes on chemicals, verification and confidentiality. It is remarkable for the comprehensiveness of its provisions.<sup>8</sup> It covers the development, production, stockpiling and destruction of chemical weapons, defining a chemical weapon as any toxic chemical or its precursor that, through its chemical action, can cause death, injury, temporary incapacity or sensory irritation. Toxic chemicals are integral to modern industry and medicine on a

daily and routine basis, for example as fumigants, herbicides, insecticides and printing ink. The CWC has been carefully crafted to permit the peaceful uses of chemicals while defining and capturing those activities that are forever forbidden. Thus the mandate of the OPCW as the implementing arm of the Convention is exceptionally clear and unambiguous.

The CWC has made an important contribution to accepted international practice in arms control because of its scope and ground-breaking verification and inspection regime. This is in contrast to the BWC, whose compliance and verification measures need to be strengthened. The compliance and verification measures need to be more rigorous for chemical than for nuclear weapons.<sup>9</sup> Russia and the United States can keep track of each other's nuclear weapons programmes through satellite technology and high-altitude reconnaissance planes. Such techniques are less useful in detecting nerve gas plants, which cannot be distinguished easily from plants making weed-killers or ink for ballpoint pens.

## The OPCW

Unlike both the NPT and the BWC, the CWC establishes an implementing secretariat. The international agency for monitoring nuclear weapons' non-proliferation obligations is the IAEA. Its counterpart for chemical weapons is the Organisation for the Prohibition of Chemical Weapons. 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;
- to inspect the production and, in some cases, the processing and consumption of dual-use chemicals, and receive declarations of their transfer, in order to ensure their exclusive peaceful use.

The OPCW is thus the implementing body of the Convention. The two bodies vested with the responsibility for making decisions on policy matters and disputes over interpretation or implementation are the Executive Council and the Conference of States Parties. The Executive Council, comprising representatives of 41 member states elected for two-year terms, meets four–five times per year. The Conference of States Parties includes all CWC states, meets annually (or more often if required), and oversees the implementation of the Convention. The day-to-day administration and implementation, including inspections, is the responsibility of the Technical Secretariat under the leadership of a Director-General appointed by the Conference of States Parties on the recommendation of the Executive Council. All three principal organs of the OPCW are

assisted by three subsidiary bodies: the Scientific Advisory Board, the Advisory Body on Administrative and Financial Issues, and the Confidentiality Commission.

States Parties are required to designate or establish a National Authority to ensure the effective implementation of the CWC. The National Authority makes the initial and subsequent annual declaration on chemical weapon stocks or facilities, coordinates and participates in the receipt of OPCW inspections of industrial and military sites, participates in assisting and protecting member states under threat or actual chemical attack, and promotes the peaceful use of chemicals. The National Authority is thus the focal point in a country's interaction with other countries and the OPCW. The Technical Secretariat of the OPCW helps in the provision of advice, assistance and capacity development of relevant skills and expertise in the staff of national authorities. The secretariat also hosts and coordinates regular meetings of the national authorities from all over the world.

The CWC requires destruction of all declared chemical weapons arsenals and production facilities within 10 years of the treaty's entry into force, that is, between 1997 and 2007. The operational question facing the OPCW and the international control community is how to monitor the stocks and destruction of chemical weapons and facilities without compromising the proprietary commercial knowledge of legitimate chemical industry activities. While industrial countries give relatively higher priority to protecting chemical secrets, developing countries attach more importance to reducing restrictions on export controls in order to develop their own industries in an environment of largely dual-use pharmaceuticals.

In pursuit of its overall objectives, the OPCW provides technical assistance to member states across a broad spectrum but custom-tailored to the individual requirements of each:

- to establish and operate an efficient National Authority;
- to draft and enact national legislation banning and criminalizing the misuse of chemicals as weapons;
- to identify and declare all relevant industrial activity;
- to monitor international chemical transfers;
- to conduct workshops and training programmes;
- to receive on-site inspections for verifying compliance;
- to advise and assist on enhancing implementation;
- to ban forever and completely the use of chemicals as weapons;
- to create an inventory of and secure stocks of toxic chemicals and their production and storage facilities.

The OPCW has developed a peer-reviewed and certified analytical database with information on over 1,500 chemical-weapons-related

compounds. The database, essential for on-site verification activities by OPCW inspection teams, is available also to member states. In addition, a network of protection experts consults on a regular basis on the means to improve the capacity to respond to chemical weapon attack and protect civilian populations.

The six countries to have declared chemical weapons are required to destroy some 8.5 million items, including munitions and containers. As of April 2005, 167 countries had joined the OPCW.<sup>10</sup> All declared chemical weapons *production capacity* had been inactivated, with two-thirds of the declared facilities either verifiably destroyed or converted for peaceful purposes. With respect to chemical weapons, the inventory of all declared *stockpiles* had been completed and verified, but less than one-quarter of the declared 8.5 million chemical weapon munitions had been verifiably destroyed. Of the 70,000 tonnes of declared chemical weapons *agents*, only about 15 per cent had been verifiably destroyed; just a tiny drop of nerve agent the size of a pin head can kill an adult within minutes of exposure. Almost 5,000 *industrial facilities* around the world are liable for inspection; the OPCW had conducted almost 2,000 inspections at 170 military and 600 industrial sites in 68 countries.

## The chapters that follow

This then is the background in brief to the threat of chemical warfare as a problem for the international community and efforts to manage the threat. The story of the challenges of implementing the CWC is the central focus of the chapters that follow.

The CWC can be portrayed either as a dinosaur of international relations, a relic left over from the Cold War; or as a model for multilateral undertakings to build global consensus, create confidence, and deter treaty violations in the field of international security through disarmament. Ralf Trapp provides a thoughtful critique in Chapter 2 of the manner in which the OPCW as the implementing agency needs to adapt to an evolving situation in which chemical weapons are part of a bigger picture of the possible use of hazardous materials by terrorists or criminal organizations. The challenge is as real, he notes, as the stakes are high.

The CWC stipulates that review conferences should be held every five years. They are meant to serve as a forum for evaluating and assessing the implementation of the Convention and identifying any changes that might be necessary in the context of the scientific, technological and engineering advances in chemistry and biotechnology and the changing verification environment resulting from those advances. Robert Mathews takes up the story in Chapter 3 with respect to the first Review Confer-

ence of the CWC in April–May 2003, describing the negotiations prior to and during the conference. He notes the achievements on the declaration and destruction of stockpiles, the dismantling and conversion to civilian uses of CW infrastructure, and the adoption of an Action Plan to achieve treaty universality. But he also notes the many political and technical challenges still remaining, arguing that the Review Document provides a roadmap but by no means an assured favourable outcome in meeting these challenges.

The CWC is unique among disarmament treaties for having outlawed a class of weapons, instituted a comprehensive verification regime, established its own organization responsible for implementing all provisions of the treaty, and placed its own restrictions on the export of dual-use technology. But while the “architecture” is complete and effective, many critical components of the inspections regime remain untested, and efforts are in train for achieving universality, reporting dual-use exports and imports, and ensuring effective verification and enforcement. Thus the OPCW is yet to refer a case of possible non-compliance to the UN Security Council under Article 12 of the CWC. This curious oddity, of a distinctively strong challenge inspection system that has never been utilized, is discussed by Masahiko Asada in Chapter 4. On the one hand, one could conclude from this that the Convention’s deterrent effect has been perfect. On the other hand, one could just as easily question the effectiveness of the system until such time as it has been tested. Asada asks whether there should be an intermediate mechanism between a routine industrial inspection and the politically charged challenge inspection system.

The international challenge inspection system would amount to naught unless backed up by national legislation. Strengthening treaty regimes entails national legislation and measures on the criminalization of proliferation activities, effective protection of proliferation-sensitive personnel, materials and equipment, control and accounting systems for monitoring materials and stocks, and regulation and surveillance of dual-use transfers. In these respects the OPCW shows the way for the NPT and the BWC by placing emphasis on national implementation of the CWC in addressing proliferation threats. Faiza Patel King examines implementing legislation in two key countries, Australia and France, in Chapter 5. Both have a significant chemical industry. But while Australia is from the common law tradition, France is from the civil law tradition. Nevertheless, King concludes that both have fulfilled their implementation obligations under the CWC.

National legislation must address itself to private persons as well as to industrial companies. Civic groups often mediate between citizens, firms and governments in many modern societies. In Chapter 6, Margaret



Kosal provides an interesting and informative account of the role that the public has played in the CWC-mandated destruction of chemical weapons in the United States. More particularly, chemical weapons disposal offers “a vivid example of how local environmental justice concerns can intersect with global disarmament and non-proliferation efforts”, she writes. Of course, national public input can be directed just as easily at impeding and obstructing as at supporting and facilitating the goals and implementation of global treaties.

Keith Wilson asks the all-important critical question in Chapter 7: can the CWC stand the test of time? The OPCW membership already represents 95 per cent of the world’s population and 98 per cent of the world’s chemical industry. Why then is universality necessary as opposed to the already achieved near-universality? The answer given is in terms of the increased urgency for enforceability of disarmament and non-proliferation norms. Assurances of enforceability will be problematical as long as some states refuse to join the CWC and the OPCW.

Finally, in Chapter 8 Ere Haru extols the importance of seizing the moment in order to complete the chemical weapons prohibition agenda. The CWC is a highly technical treaty and its implementation is a continuous obligation. The Libyan example of full compliance, discussed by Haru, demonstrates that the CWC can be implemented transparently and that tangible benefits can accrue from full implementation. Factories and facilities tailored for clandestine chemical weapons production have been converted to the production of medicines to alleviate diseases like malaria, tuberculosis and HIV/AIDS. After reviewing the challenges of inspections and universality, Haru turns his attention to the OPCW itself as an international organization.

## Conclusion

As Robert Mathews notes, the CWC “was the first comprehensively verifiable multilateral treaty that completely banned an entire class of weapons, and went further than any previous treaty in the depth, extent and intrusiveness of its verification”. The global treaty has been reinforced by national implementation legislation, and the implementation of Article 7 obligations under the CWC also creates an environment of enforceability. Yet states have lagged behind in the CWC-mandated destruction of chemical weapons stocks. The OPCW has verified the destruction of a mere 9,600 of the 70,000 tonnes of declared weapons agents.<sup>11</sup> At this rate, the Convention’s goal of complete destruction of all CW stockpiles by the agreed extended deadline of 2012 will not be met.

What might be the UN role in responding to the challenge of CW warfare? Standing behind the region's efforts, the UN can help to pursue non-proliferation in the global context. It can contribute through the Security Council, the First Committee, the Department of Disarmament Affairs, and the Conference on Disarmament to ensure that proliferation is viewed not in isolation but as a political problem and as a question of security, arms control and disarmament in the broadest sense. The United Nations is also the only body which can legitimately employ sanctions to address specific proliferation threats to international peace and security.

The UN contribution will be most effective when it succeeds in building collective political will for:

- the reduction and elimination of all biological, chemical and nuclear weapons;
- the improvement of global and regional security climates through a variety of efforts, of which regional security dialogue is a major one;
- the strengthening and expansion of the various global non-proliferation regimes as vital defences on a non-discriminatory basis until the underlying causes of proliferation can be addressed and eliminated.

As several of the contributors note, the margin of tolerance by the international community of non-compliance with WMD non-proliferation and disarmament norms and obligations has narrowed dramatically after the terrorist attacks of 11 September 2001. In this context, the United Nations Security Council, acting under the legally binding enforcement Chapter 7 of the UN Charter, adopted Resolution 1540 unanimously on 28 April 2004. The Resolution directed all states to take and enforce effective non-proliferation measures within their jurisdictions with respect to nuclear, chemical and biological weapons. It further called on all states to fulfil their commitment to multilateral cooperation on non-proliferation, in particular within the framework of the IAEA, the OPCW and the Biological Weapons Convention. In addition, all states were directed to adopt and enforce laws prohibiting non-state actors from developing, making, getting or transferring such weapons and their means of delivery.

This unprecedented intrusion into national law-making authority can be read as the toughened new determination of the international community to take effective action. It was taken still further by the High-level Panel on Threats, Challenges and Change, which recommended that the implementation committee of Security Council Resolution 1540 should establish a permanent liaison with the OPCW (and also the IAEA and the Nuclear Suppliers Group); 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 inspection capacities for suspected nuclear and chemical violations, drawing on the OPCW and IAEA capacities.<sup>12</sup>

## Notes

1. The three treaties are the Treaty on the Non-proliferation of Nuclear Weapons (opened for signature 1 July 1968, entered into force 5 March 1970), the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (opened for signature 10 April 1972, entered into force 26 March 1975), and the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (opened for signature 13 January 1993, entered into force 29 April 1997).
2. See Amy E. Smithson, "The Chemical Weapons Convention", in Stewart Patrick and Shepard Forman, eds, *Multilateralism and U.S. Foreign Policy: Ambivalent Engagement* (Boulder, CO: Lynne Rienner, 2002), pp. 247–265, and Nina Tannenwald, "The UN and Debates over Weapons of Mass Destruction", in Richard M. Price and Mark W. Zacher, eds, *The United Nations and Global Security* (New York: Palgrave Macmillan, 2004), pp. 3–20.
3. Many of the newer proliferating materials and processes are "leveraging" technologies that allow poorer countries to offset high-technology advantages. By demonstrating the acquisition of just a few key capabilities, developing countries can affect the perceptions and alter the decision calculus of diplomacy and war of the advanced military powers.
4. This is developed more fully in Ramesh Thakur, "Arms Control, Disarmament, and Non-Proliferation: A Political Perspective", in Jeffrey A. Larsen and Thomas D. Miller, eds, *Arms Control in the Asia-Pacific Region* (Colorado Springs: USAF Institute for National Security Studies, US Air Force Academy, 1999), pp. 39–61.
5. *Japan Times*, 25 November 2004.
6. Nicholas D. Kristof, "An American Hiroshima Is All Too Likely", *International Herald Tribune*, 12 August 2004.
7. For analyses of the BWC, see Brad Roberts, ed., *Biological Weapons: Weapons of the Future?* (Washington, DC: Center for Strategic and International Studies [CSIS], 1993).
8. For analyses of the CWC, see the issue of *Disarmament: A Periodic Review by the United Nations* 16:1 (1993) devoted to the Convention; Brad Roberts, ed., *The Chemical Weapons Convention: Implementation Issues* (Washington, DC: CSIS, 1992).
9. While this is true from an inspection point of view, of course from a consequentialist perspective the potential for damage resulting from a nuclear break-out is far greater.
10. For updated figures, see <http://www.opcw.org/factsandfigures/index.html>.
11. *A More Secure World: Our Shared Responsibility. Report of the High-level Panel on Threats, Challenges and Change* (New York: United Nations, Document A/59/565, 2 December 2004), para. 114.
12. *Ibid.*, paras 136, 140, 141.

# The Chemical Weapons Convention – multilateral instrument with a future

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*Ralf Trapp*

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## 1. Introduction

Depending on one's background and persuasion, and admittedly exaggerating the point in the interests of clarity, the Chemical Weapons Convention (the CWC) is seen either as the culmination of a now largely obsolete effort during the Cold War to establish control over an ongoing arms race through an array of bilateral and multilateral (including regional) arms limitation/reduction and disarmament accords, or as a milestone in a global multilateral disarmament endeavour based on the establishment of a rule-based global security system and the acceptance of international verification as a means of ensuring compliance with these rules. The Convention can thus be portrayed either as a dinosaur of international relations or as a model for multilateral undertakings to build global consensus in the field of international security through disarmament.

But which is it? How does the CWC relate to today's security challenges, and what are these challenges when it comes to chemical weapons? This chapter looks at the validity at the beginning of the twenty-first century of the principles enshrined in the Convention's provisions, and at the manner in which the Organisation for the Prohibition of Chemical Weapons (OPCW) as the implementing agency needs to adapt to the evolving situation. I attempt to understand whether and how the *rational* underlying the provisions of the Convention allows their application in the emerging political, security, economic and scientific/technological

conditions of an ever-changing world. The analysis is inspired by the results of the First CWC Review Conference, which took place in April and May 2003.

## 2. Some history

Ever since the first large-scale use of chemical weapons in the Second World War, and in fact even before that time, they have been seen as a type of weaponry that needed to be controlled and its use restrained. At the same time, conservative military assessment, although changing over time, had to acknowledge that chemical weapons had proven effective in certain circumstances – thus fostering demands to maintain readiness for protection against chemical weapons as well as, in the view of some states, to maintain a capability for retaliation in kind (i.e. the preservation of a retaliatory offensive chemical weapons capability). An indicator of this was the reservations filed by many powers in respect to the 1925 Geneva Protocol (and the absence of the United States of America from the Protocol for 50 years). This made chemical weapons (CW) disarmament difficult to pursue; retaliation in kind encouraged the acquisition and further development of chemical weapons by all major powers after the First World War. Although chemical weapons were not used in significant quantities during the Second World War,<sup>1</sup> this pattern continued after the Second World War too.

Chemical weapons may never have been fully integrated into the military doctrines of the two alliances emerging after the Second World War<sup>2</sup> and were clearly overshadowed by nuclear arms, but they were nevertheless seen as part of the overall deterrence policy that underpinned strategic as well as regional stability and that was seen to prevent war between the two military alliances. The control and, potentially, the disarmament of chemical weapons were thus part and parcel of a much larger security agenda. Any progress in CW disarmament negotiations, or lack of progress at times, as well as the development and procurement of new generations of chemical weapons, took place in this broader context of the political, military and economic competition between the two blocs. Although CW programmes, as well as CW disarmament negotiations, developed their own dynamics and had their own sources of support or opposition, they were firmly placed within an overall security framework based on strategic rivalry between East and West. They were influenced by developments in strategic (nuclear) arms limitations as well as the Intermediate-Range Nuclear Forces (INF) treaty and regional arms control and confidence-building measures in the conventional field. In turn,

they had the potential of setting precedents for arms control endeavours in these and other areas.

Traditionally, chemical weapons arms control had been dealt with together with the control of what today we call biological weapons. That reflected the close association of these two types of weaponry in history – in fact, in past centuries, a distinction between the two weapons types would have been considered arbitrary. Killing by disease or poison was considered pretty much the same thing. This common approach to chemical and biological weapons had to be given up, however, at the end of the 1960s. It had become apparent that the time was ripe to abandon biological weapons, given the perceived limitations to their use in war as an effective, predictable and controllable battlefield weapon, yet the same could not be said of chemical weapons. Following a British proposal, negotiators in what was then called the Eighteen-Nation Disarmament Committee in Geneva decided to separate the two weapons categories and agree on a global ban on biological (including toxin) weapons there and then, while continuing to negotiate the more elaborate and demanding details of a global ban on chemical weapons.<sup>3</sup>

The following years are best characterized as exploratory talks about CW disarmament in what eventually became the Conference on Disarmament. At the end of the 1970s, these exploratory talks were accompanied by bilateral US–Soviet negotiations on a limited agreement to ban the most dangerous (lethal) chemical weapons – the nerve agents. However, these bilateral negotiations failed and, with a hardening in the strategic East–West competition and an associated acceleration of the arms race at the beginning of the 1980s, CW development and acquisition programmes also accelerated. Binary weapons moved from development and testing to production and stockpiling, and the search was on for new types of chemical weapon – including novel nerve agents (in US terminology, intermediate-volatility agents or IVAs; in Soviet terminology, “Novichoks” or newcomers). At the same time, negotiations at the multilateral level finally got off the ground, with the Conference on Disarmament moving from exploration of concepts to actually working on a possible structure and text of a future treaty banning chemical weapons on a global scale.

This political and military environment influenced the concepts built into the CWC. On the one hand, the negotiators attempted to create a legal instrument that would provide reliable assurances that a global ban on the acquisition and possession of chemical weapons and on their destruction could in fact deal with the huge stockpiles that had been accumulated by the Soviet Union and the United States. This included the need to design verification and other measures in such a way that they

could cope with fears of possible incomplete declarations and diversion attempts, with the concept of binary weapons,<sup>4</sup> and with the possibility that there were new weapons under development that might not be publicly known/admitted.<sup>5</sup> Hence the inclusion of precursors into the definition of chemical weapons, the wide scope of the definition of chemical weapons in general, the desire to limit the time allocated to the completion of the disarmament process to 10 years, the heavy focus on routine verification of CW facilities and destruction operations,<sup>6</sup> and the inclusion of the long-controversial concept of challenge inspection into the CWC.

Negotiations proceeded in parallel with ongoing developments of new CW agents (including third-generation nerve agents as well as certain types of “non-lethal” agents including “knock-out gases”). There were reports about CW uses in certain parts of Asia and Africa, and there were increasing concerns about the acquisition of chemical weapons capabilities by countries outside the two major blocs. For example, chemical weapons were used by Iraq in the first Gulf war against Iran, but proliferation concerns also related to a number of other countries, mostly located in Asia and the Middle East. These concerns created pressures on the negotiators to provide for as comprehensive a scope as possible of the Convention’s prohibitions, for flexible and effective mechanisms to investigate suspicions of violations, and for the Convention to be able to adapt to changing circumstances.

Finally, negotiators had to find a balance between the desire to control and contain the proliferation or possible misuse of the chemical industry (given the dual-use nature of many chemicals that are used for legitimate purposes but may be suitable for CW purposes, either as precursor chemicals or because of their own toxicity, and given the intrinsic technological capabilities of modern chemical plants) and the economic interests of countries. There needed to be a balance between intrusion through verification in order to generate confidence in treaty compliance, and the industry’s demands in respect of the protection of commercial confidentiality, its interest in trade, and its desire to prevent other damage (for example in the form of “bad publicity” through association with chemical weapons issues in public). Industry was a stern supporter of the treaty, but demanded that it be a sound treaty and respected the interests of the industry. Beyond that, there was the desire of the developing countries to use the future Convention to gain easier access to chemical materials, equipment, technology and expertise in order to bolster their economic and technological development.

Many of these balances could be struck only at the very end of the negotiation process (some literally during the last few weeks). It is important to remember that, at the time, the East–West divide, which for many years had set the framework for the negotiations of many of the core pro-

visions of the treaty, no longer existed. The strategic competition between East and West was over, the Soviet Union had disintegrated, Germany was recently reunited, and much of Eastern Europe was (or would soon be) in political and economic transition. This created a historic opportunity to complete the work on the Convention within a narrow window of opportunity. It also, however, meant that the treaty was concluded at the beginning of a new era, with upcoming security challenges and rules as yet uncertain or even unknown. The question was: would the concepts built into the treaty still be sound in this changing world?

To answer this question, it is necessary to analyse some of the basic provisions and concepts of the CWC, including provisions on its scope, its mechanisms for compliance assurance, its institutional arrangements and approaches to the development of the relationship between the parties, its “fall-back” provisions to deal with regime failure or lack of universality, and its mechanisms to adapt to new requirements.

### 3. Some basic provisions and concepts of the CWC

#### *Scope of prohibitions*

Throughout the negotiations of the CWC, one of the central issues was how broad the scope of the prohibitions under the treaty should be. This question has several dimensions:

- should the ban be a total ban (a reduction to “zero”), or would States Parties be allowed to retain a certain minimum CW capability as a safeguard against regime failure;<sup>7</sup>
- should the scope of the prohibitions be limited to certain types of chemical warfare agents only (e.g. nerve agents), and, if not, where should the line be drawn;
- how should the Convention deal with toxic chemicals that have legitimate law enforcement applications (for example, riot control agents);<sup>8</sup>
- what should the relationship be between lists (“Schedules”) of chemicals and the scope of the prohibitions?

By and large, the negotiators managed to agree on a wide scope and a comprehensive set of prohibitions. Of particular importance in this context is the definition of “chemical weapons” used by the CWC.

This definition is contained in paragraph 1 of Article II. It covers toxic and precursor chemicals (paragraph 1(a)), munitions and devices specifically designed for chemical weapons purposes (paragraph 1(b)), and any equipment specifically designed for direct use in the employment of such munitions and devices (paragraph 1(c)). The term applies to them *together or separately*.



This way of defining a weapon is a departure from the practice of many other international arms control agreements. To the extent that weapons are in fact specifically defined in other treaties, a weapon is usually considered to be the entirety of its components, and characterized by certain more or less objective criteria and characteristics that allow a distinction between those types of weapon that are covered by a treaty and those that are not.<sup>9</sup> In the CWC, each of the components of a chemical weapons system *in itself* already has to be regarded as the prohibited weapon.

By including precursor chemicals in the definition, the term “chemical weapon” also extends to items that in conventional thinking would be considered not to have the quality of a weapon yet. For example, bulk precursor chemicals that have been manufactured for chemical weapons purposes are themselves to be regarded as a chemical weapon.<sup>10</sup>

The most striking feature, however, is the way in which toxic chemicals and their precursors are dealt with. Although toxicity is the basic characteristic of chemical weapons, it was considered inadequate as a criterion for definition purposes. This is particularly obvious in relation to the so-called “dual-use chemicals”, i.e. chemicals that have legitimate applications yet may also be used as chemical weapons, or had been in the past. Examples are chlorine and phosgene, which are basic industrial intermediates used widely in the chemical industry but which had been weaponized and used as chemical weapons in the past.

Article II therefore uses not the degree of toxicity of a chemical as a defining criterion but instead its intended purpose (“general purpose criterion”). Any toxic or precursor chemical is regarded as a chemical weapon *unless* it has been developed, produced, stockpiled or used for purposes *not* prohibited, and only as long as types and quantities are consistent with such purposes. The definition covers all toxic or precursor chemicals if intended for CW purposes – irrespective of whether they have been listed on one of the Schedules<sup>11</sup> and irrespective of their exact degree of toxicity.<sup>12</sup>

Combined with the general undertakings of the States Parties under Article I in respect to chemical weapons (not to develop, produce, otherwise acquire, retain or stockpile, not to transfer directly or indirectly to anyone, and not to use), which are preceded by the words “never under any circumstances”, a comprehensive and long-lasting safeguard was provided. This included chemical compounds not known at the time.

### *Compliance assurance*

With a comprehensive prohibition at the heart of the treaty, agreeing on effective mechanisms for compliance assurance was a challenge. The Convention contains a range of measures that are to enhance confidence

in treaty compliance, to enable the detection and determination of any violations, to provide for mechanisms to clarify compliance concerns, to establish relevant facts, and to compel States Parties to re-establish compliance if that was necessary.

These measures include:

- declarations by all States Parties on chemical weapons, CW production facilities, and related matters (former CW development facilities, riot control agents, past transfers of CW and related equipment);<sup>13</sup>
- international verification of these declared stockpiles and production facilities and of their destruction (or conversion, in respect to chemical weapons production facilities);<sup>14</sup>
- declarations by the States Parties of relevant chemical activities and facilities undertaken/used for legitimate purposes;<sup>15</sup>
- verification of certain of these declared facilities to confirm their non-involvement in CW production;<sup>15</sup>
- a requirement for States Parties to inform the OPCW of their national implementation measures, which are to include such steps as enacting implementing and penal legislation and enforcing trade regulations designed to stem the proliferation of relevant chemicals to states not party;<sup>16</sup>
- provisions for clarification and fact-finding to deal with concerns about possible non-compliance, including challenge inspection;<sup>17</sup>
- mechanisms and procedures to compel a State Party to re-establish compliance if it has been found to be in non-compliance, including sanctions as well as, ultimately, the possibility to transfer urgent and/or grave compliance cases to the United Nations General Assembly and/or Security Council for action.<sup>18</sup>

This is a comprehensive array of transparency measures and formal declarations, checks on key declaration data by independent international verification, complementary mechanisms to clarify matters (whether they relate to a declared or an undeclared facility), and procedures to follow up should verification confirm that there was non-compliance. The system relies to a considerable degree on the submission of information by the States Parties to the OPCW (and through it to other States Parties), and thus on a *bona fide* presumption of honesty and intent to comply. But the treaty has mechanisms to verify facts independently and to address *and resolve* compliance concerns, including with respect to undeclared facilities. Other regimes, such as nuclear safeguarding, did not have comparable mechanisms and had to go through a difficult period of negotiating supplementary protocols that would provide for such additional safeguards (and there was uncertainty about whether all States Parties of these treaties would actually sign up to the additional measures). Even the more advanced regional confidence-building

arrangements in Europe in respect to conventional forces and arms reductions had exclusion clauses concerning the verification of certain types of location and facilities. The CWC's formula of "short notice, anytime, anywhere, no right of refusal" was quite a novelty.

*The OPCW as a forum for consultation and cooperation among the States Parties*

A similarly broad approach was chosen by the negotiators in respect to the treaty organization and the principles that are to govern relations between the States Parties as well as between them and the OPCW.

The provisions of Article VIII establish the OPCW "to achieve the object and purpose of the Convention, to ensure the implementation of its provisions, including those for international verification of compliance with it, and to provide a forum for consultation and cooperation among States Parties".<sup>19</sup> Each State Party is a member of the OPCW.<sup>20</sup>

The Article then lists two basic principles for the work of the OPCW: the conduct of verification in the least intrusive manner possible, which includes the need for the OPCW to take measures to protect confidentiality; and the use of scientific advances to increase the effectiveness of verification.<sup>21</sup> The placement of these provisions into Article VIII demonstrates their central importance for the overall activity of the OPCW. In view of the scope and intrusiveness of the verification system of the CWC, the Organisation has an obligation to place restraint on its rights to acquire information, and must take measures to safeguard the information received from the States Parties. At the same time, the Organisation was conceived as a learning organization that would adapt to new developments in science and technology.

If seen in context, in particular in respect to the comprehensive nature of the CWC's definitions and prohibitions, the mandate of the Organisation given to it in Article VIII is actually very broad. "Achieving the object and purpose of the Convention" and "providing a forum for consultation and cooperation among States Parties" are by no means limited to the elimination of past CW stockpiles. The mandate clearly allows the States Parties to take up new security challenges related to chemical weapons, to adjust the practical implementation process to new requirements, and to adapt the regime as may be required. This is also apparent from the powers and functions given to the Conference of the States Parties, which include to "consider any questions, matters or issues within the scope of the Convention" and to "make recommendations and take decisions on any questions, matters or issues related to this Convention".<sup>22</sup> Finally, there is the mechanism of the Review Conference.<sup>23</sup>

*Provisions to deal with regime failure and/or lack of universality*

The CWC provides essentially two types of provision in respect to a possible attempt by a State Party to break out of the regime or to threats emanating from the absence of states with CW capabilities from the regime: clarification and fact-finding provisions in conjunction with the provisions to redress a situation and to ensure compliance, including sanctions (these have already been discussed above); and provision for assistance and protection against chemical weapons.

It is noteworthy that the assistance and protection provisions in Article X provide for a variety of mechanisms to deal with possible future CW threats, no matter how they might come about. The CWC not only establishes the right of States Parties to protect themselves against chemical weapons<sup>24</sup> but calls for enhanced cooperation between the parties in the area of exchanging equipment, material and information needed for protective purposes<sup>25</sup> and requires the Organisation as a whole to help States Parties improve their protective capacity<sup>26</sup> and to provide assistance to those States Parties that are not in a position to acquire protection for themselves, by the coordination and delivery of such protection under procedures of the Organisation.<sup>27</sup>

Any use of chemical weapons against a State Party gives it the right to request and, if the use is established, to receive assistance from and through the OPCW. The provision does not qualify the nature of the armed conflict in which the use of chemical weapons has taken place or whether chemical weapons were used by a state or any other armed force or group, including terrorists. The right of the State Party will exist even if identification of the user is not possible at all.<sup>28</sup> This important feature of the CWC was recognized when the OPCW discussed its role in the global struggle against terrorism after the terrorist attacks on the United States on 11 September 2001.

*Mechanisms to adapt to new requirements*

Finally, there is clear evidence that the drafters of the Convention approached it as a flexible and adaptable legal instrument that was meant to withstand the pressures of time, including progress in science and technology, changes in the economy, and security at large. The review mechanism has already been alluded to, and more will be added in the following section. But there is other evidence. The Convention is quite different from many other treaties, in that it has *two* different mechanisms for amending or changing its provisions. There is of course the usual amendment procedure,<sup>29</sup> involving an Amendment Conference with all its risks

for the stability and credibility of the regime, including a danger that such attempts might either unravel previously existing consensus or create split regimes where only some of the States Parties agree to accept an amendment. But there is also a simplified procedure called a “change”.<sup>30</sup>

This innovation was included in the treaty in order to make it possible to adjust technical and administrative procedures that might in future turn out to be impractical, insufficient, technically obsolete, or otherwise in need of adaptation. It applies to all adjustments in respect to the chemicals listed in the three Schedules.

This procedure was used once during the initial years of treaty implementation.<sup>31</sup> A second proposal for a change has recently been submitted.<sup>32</sup> This has shown that the OPCW is indeed capable of going through a technical/administrative change (against some resistance by States Parties that feared the precedent for possible other adjustments, including to amendments to the Schedules) and that the machinery can in fact be utilized to adjust the technicalities of CWC implementation to new (or previously unknown or ill-understood) conditions in the real world.

In sum, then, the CWC appears to have a variety of attributes that should enable States Parties to adapt its implementation to new challenges. The question is whether States Parties are in fact willing to use this in-built flexibility. This was a central question facing the First CWC Review Conference. Before providing an (albeit preliminary) assessment of how the OPCW member states responded to the new challenges, I shall first summarize the nature of the changes that have occurred since the conclusion of the CWC.

#### 4. The CWC in today’s security environment

The global order has changed considerably since the beginning of the 1990s, and so have threat perceptions. A bipolar world characterized by the strategic rivalry of two large political, military and economic blocs of states has given way to a world with one remaining superpower, whose relative weight has little if any precedent in human history, a number of medium-size powers competing for superiority in a regional setting, changing alliances, and, lately, the emergence of non-state actors operating on a global scale. After the Tokyo sarin incident in 1995, and more so after 9/11, the possible link between the proliferation of weapons of mass destruction and terrorism became a serious preoccupation for many states. The anthrax letter attacks that followed the terrorist attacks on New York and Washington, and a number of subsequent incidents, further highlighted the potential vulnerabilities of societies, not only in the

West, to threats emanating from a (real or perceived) link between terrorism and WMD proliferation.

When analysing the threats associated with chemical weapons today, the following issues need to be addressed:

- the still-existing declared stockpiles dating from the Cold War,
- the possibility of undeclared stockpiles,
- the absence from the regime of CW-capable countries<sup>33</sup> (particularly if they are presumed actually to have acquired CW stockpiles),
- new developments in science, technology and chemical manufacturing,
- chemical terrorism.

#### *Declared CW stockpiles*

In relation to threats posed by chemical weapons stockpiles, there is an important difference between undeclared stockpiles and the declared stockpiles of CWC States Parties. Not that the declared stocks can be ignored in any current threat assessment – they will need to be taken into account as long as they physically exist. But, given their current configuration, and given that they are being kept under international safeguards, the nature of the threat emanating from them has fundamentally changed.<sup>34</sup> Safety, physical security (including the prevention of sabotage and theft), accountability through systematic international verification, and the progress made with their destruction are the primary parameters in the threat assessment today.

The destruction of these declared stockpiles has made considerable progress. There have been difficulties and delays, but there is no doubting the full commitment of all possessor States Parties to complete the destruction of all their chemical weapons within the time frames established by the Convention. Furthermore, facilities that were used in the past to produce chemical weapons are being destroyed or converted for legitimate purposes. Destruction as well as conversion operations are subject to systematic verification by the OPCW, which has conducted more than 1,800 inspections, in 65 States Parties, since the beginning of inspections in 1997.<sup>35</sup> More than 1,000 of these inspections were conducted at CW facilities (CW storage facilities, former CW production facilities, destruction operations, and locations where old and/or abandoned chemical weapons are being recovered and destroyed). Some 80,000 inspector-days alone were spent at CW destruction facilities to ensure full accountability and the completeness of destruction operations.

The challenges the OPCW faces in respect of the elimination of these stockpiles and CW production facilities include both the assurance that the destruction time targets will be met by all possessor States Parties, and the further optimization of the verification system as the destruction

operations accelerate and more destruction facilities become operational in coming years. In addition, there is the continuing responsibility of the possessor States Parties to ensure the safety of the workers, the population and the environment during CW destruction operations, as well as their duty to ensure the physical security of the weapons and facilities as long as they remain in existence.

A particularly important new development was the accession of Libya to the CWC at the beginning of 2004. This accession, facilitated by more than a year of quiet bilateral endeavours by both the United States and the United Kingdom, brought into the realm of the Convention a country that had in the past been associated with sponsoring terrorism *and* that had acquired a CW stockpile.

The Libyan accession demonstrated two things: that breakthrough in respect to CWC adherence can also be achieved in regions that have a negative track record in CW proliferation, provided that key actors persist in using their influence and offer assistance at the same time; and that participation in the CWC and adherence to the global ban on chemical weapons have become one of the yardsticks the international community uses when assessing state conduct. It should be noted that Libya's accession was not a case of forced de-proliferation imposed on the country by outside pressure (although there may well have been considerable pressure); joining the CWC was a conscious Libyan decision and seen by the Libyan leader as a necessity to attain his foreign policy objectives and protect future interests.<sup>36</sup>

In terms of threat assessment, the Libyan accession therefore goes beyond the fact that an additional stockpile is now under safeguards and will be destroyed. The Libyan case has the potential of influencing the decision makers in other non-parties, including countries that may have current CW stockpiles.

#### *Undeclared stockpiles and gaps in the universal adherence to the CWC*

As of 15 July 2005, 169 states had joined the Chemical Weapons Convention. This is an immense achievement and compares well with other global arms control regimes. But it nevertheless falls short of providing universal assurance against the possible use of chemical weapons. Only when all states capable of producing and using chemical weapons have joined the regime and are implementing it faithfully can one fully rely on its universal protection.

When assessing the threat associated with chemical weapons today, therefore, the stockpiles and programmes of those possessor states that have not as yet joined the CWC must be considered a first priority. There

are, of course, no officially confirmed (let alone verified) data on where these stockpiles are and how big they may be. What really matters, however, is that such stockpiles do indeed exist, that they remain undeclared and un-safeguarded, and that the military programmes and doctrines associated with these chemical weapons continue. There is also the danger that, in some of these countries, such stockpiles and programmes may become associated with terrorist activities (willingly or through theft or other means of diversion).

The First CWC Review Conference specifically recalled that there are states whose absence from the Convention has caused serious concern, and called upon all states not party to join the Convention without delay.<sup>37</sup> That was in particular an address to countries in the Middle East (Israel as a signatory, Syria, Lebanon and Egypt as non-signatories) and certain parts of Asia (especially the Democratic Peoples Republic of Korea).

It is apparent that there will be some cases where joining the regime of the CWC may take extra time. In certain countries or regions, conditions may not as yet be ripe for decisive action in this respect. The Report of the First CWC Review Conference expressed its views on this matter as follows: “future universality efforts should be supported by the expansion of bilateral, regional, and appropriate measures on the part of States Parties and the [OPCW Technical] Secretariat. These efforts should take into account factors for non-accession, *in a manner that does not encourage delay*” (emphasis added).<sup>38</sup> It is therefore important that endeavours to address regional security issues include a consideration of when and in what circumstances issues related to CW disarmament will be taken up, and how chemical weapons issues relate to the overall security agenda under discussion. A proper balance needs to be struck between the priorities in such regional processes and the desire not to delay accession of all parties to the CWC.

The example of Libya has shown that concerted efforts by States Parties with influence in the region, as well as by the OPCW, can influence perceptions and intent, and be instrumental in persuading such countries to change their attitude towards the CWC. Together with the regime change in Iraq and the possibility that Iraq might also join the CWC,<sup>39</sup> there may well be a knock-on effect on other regional players. The trend is set, and the pressure on countries such as Syria, Egypt and Israel to join the CWC will grow.

Adherence by the Democratic Peoples Republic of Korea (DPRK) is the other difficult nut to crack. The current multilateral (six-party) process does of course focus on the nuclear issue. Concerns about chemical weapons are frequently raised in the North Asian context, but there does not appear at this moment to be a regional process that addresses these



concerns and has the DPRK as a party to it. There is of course the danger that, if the CW issue were to be taken up in a negotiation context with the DPRK at the wrong moment, it could complicate the negotiations on the nuclear issue even further. There is therefore a need for some patience, combined with preparatory work for a coherent strategy to bring the DPRK into the realm of the CWC when conditions are ripe. If one looks at the overriding policy objectives of the DPRK,<sup>40</sup> as they are understood by the outside world, CW disarmament may well be a future avenue for the DPRK to increase its access to economic assistance. It is in this context that the Libyan example will be watched very carefully, and may influence future decisions in the DPRK despite the geographical distance between the two countries.<sup>41</sup>

### *The emergence of novel chemical weapons?*

Other concerns about the threats posed today by chemical weapons relate to developments in science and technology as well as in the industrial production of chemicals.<sup>42</sup> Some of these developments could have the potential to undermine the international norm against chemical weapons if they are not assessed and managed properly. On the science side, we are rapidly moving into a situation where newly synthesized biologically active compounds will be counted in the millions. Combinatorial chemistry and large-throughput biological screening techniques will inevitably create a vast depository of knowledge about biologically active chemicals. Most of these compounds will never be used as medicines or pest control agents. But some of them will inevitably turn out to have properties that could make them candidates for the development of new chemical weapons. Similarly, work in genomics and proteomics will greatly facilitate the design of new drugs, but the same techniques could also be applied to the design of new CW agents. It would not be the first time in history that a compound discovered by entirely legitimate research activities was “siphoned off” into military development of next-generation warfare agents.

This is not to say that the emergence of new chemical warfare agents is inevitable. There remains, as in the past, a considerable way to go from the discovery of a potential CW agent to the fielding of an effective chemical weapon, which requires an active weapons development programme to address such questions as agent production, storage stability, dissemination, environmental stability, detection and decontamination, medical counter-measures, and so forth. It is in this context that there may be benefit in placing more emphasis on the transparency measures under the CWC that complement verification activities, in particular the

requirement annually to provide information on national chemical defence programmes to the OPCW.

On the side of industrial production, both technological and structural changes pose a challenge to the ban on chemical weapons. Before addressing these developments, it is worth recalling that the world's chemical industry fully and enthusiastically supports the CWC, and has been cooperating unreservedly with OPCW verification measures, including on-site inspections. Technological and managerial changes do not imply that there are companies that intend to get involved with chemical weapons production.

What is changing is the environment in which industrial production of chemicals takes place, the processes and equipment that are being used, and the “signature” of industrial production (for example, the introduction of micro-reactors or the wide use of multipurpose equipment), all of which have an impact on verification and therefore on the degree of confidence that the States Parties can attain from verification results.<sup>43</sup> In short, these changes have led to a much higher degree of technological versatility, the ability to use production equipment for multiple products and to switch production in accordance with market demands, an increase in trade in chemicals, and a more fluid situation in the structural organization of the industry. All of this increases the ability of the industry to adjust its output to changing demand. Verification, in this context, becomes much more of a challenge than it was in the days of a back-integrated, hierarchically controlled industry. And, if there *are* proliferators, there is considerably greater potential to abuse in today's industrial production and trade than there used to be.

These challenges have been taken up by the OPCW, and work is under way to ensure that the CWC verification regime can respond effectively to these evolving conditions. Inspection procedures must be further refined and inspectors need to maintain up-to-date knowledge of new scientific and technological developments that influence their verification work, and there is also a need to increase both the number and the geographical spread of inspections in what the CWC calls “other chemical production facilities” involved in the production of discrete organic chemicals (DOCs). Although many of these facilities are of only marginal relevance to the CWC, some 10 per cent of sites within this category of chemical plant sites appear to have technological and chemical features making them highly relevant to the CWC. This figure is based both on a survey of open source data and on actual inspection results in albeit a small sample of industrial plant sites producing DOCs, including those that contain one or more of the elements of phosphorus, sulphur or fluorine. It will be important that the further evolution of the industry verifi-

cation system adequately addresses these potentially CW-capable sites in terms of inspection intensity, inspection procedures and the mechanism applied to select inspection sites.

### *Chemical terrorism*

The terrorist CW threat differs fundamentally from the military CW threats of the past. Essentially, it is driven by accessibility of the material. On the one hand, there has to be concern about the security of existing CW stockpiles. But it is equally important to ensure that terrorist organizations cannot get access to relevant precursor materials or toxic industrial chemicals to produce their own make-shift chemical weapons. A related concern is the presence of toxic industrial chemicals in manufacturing, storage and transport, and the danger of deliberate releases of these chemicals by attacks with conventional explosives.

This chemical terrorism threat is much more complex and diffuse than the “traditional” CW threats. The relevant quantities of toxic material are very much smaller – in the gram range for naturally occurring toxins (albeit with significant dissemination problems), in the kilogramme range for nerve agents, and in the lower tonnes for toxic industrial chemicals.<sup>44</sup> These amounts are far below the design criteria that were used when the CWC was negotiated (for example, the thresholds for declaration and inspection of facilities producing Schedule 3 chemicals are set at 30 tonnes and 200 tonnes, respectively). The selection of CW agents by terrorists is driven by availability and ease of access or manufacture rather than by the criteria used by the military in the selection of CW agents (for example, agent purity and stability are less important). One could argue that this is a new type of proliferation for which the traditional counter-proliferation tools may not be best suited. Furthermore, the circumstances in which toxic chemicals might be used by terrorists are undetermined, but are likely to differ considerably from a battlefield scenario, which is what current protections and response systems have been developed for. In short, it will be a real challenge to develop effective strategies to counter the threat of chemical terrorism.

One can therefore conclude that the current threats associated with chemical weapons reflect something of a transition. Whereas the threat potential of the military CW stockpiles accumulated in past decades is generally on the decline (with the exception of the undeclared stocks of states not party to the CWC), a more complex, low-tech, lower-scale threat of deliberate releases of toxic chemicals by terrorist organizations has moved from fiction to fact, and needs to be dealt with. And, finally, there could be a danger that the discovery of a new potential agent might trigger an attempt to break out of the regime.<sup>45</sup>

## 5. Today's role of the CWC – assessments and recommendations from the First CWC Review Conference

The First CWC Review Conference was an opportunity to review the operation of the CWC over the previous six years, but more importantly to assess the role of the CWC now and in the years to come, and to provide strategic guidance for future CWC implementation, based on the consensus of the States Parties. It adopted two major documents: a political declaration of the States Parties, and a Final Report containing a significant number of assessments and recommendations or guidelines for future implementation. In a nutshell, it reaffirmed the importance of the CWC in the changed security environment, it pledged the continued support of all States Parties for the principles of the CWC and for the Organisation that it had established to implement the treaty, and it highlighted the kinds of contribution that the CWC and the OPCW can make to addressing the emerging CW threats. In the following, some key recommendations that directly relate to the current CW threat are discussed in more detail.

### *Expanding the rule of law*

On the preventive side, there is first the need to make the regime against chemical weapons truly universal. This has two aspects: the need to attract all states into the CWC regime, and the need to ensure that all States Parties fully implement the treaty. Of particular importance is that States Parties enact and enforce the prohibition of chemical weapons in their penal codes so as to ensure that the international ban on chemical weapons finds expression in national laws and that any violator can be apprehended, prosecuted and punished no matter where an offence is committed. This important relationship between quantitative and qualitative factors in relation to universality was clearly recognized by the First Review Conference, which called for two Action Plans: one on universality and one to ensure full national implementation of the Convention by all States Parties.<sup>46</sup>

This is an evolution of the traditional concept of international law, which sees agreements between states as essentially that: agreements/contracts between states (governments). There is an expectation that countries take domestic implementation measures, as may be necessary, to ensure that their citizens will follow the same rules, but how this is done is a matter of state sovereignty and constitutional framework.

The CWC itself is somewhat more specific, requiring States Parties to

- adopt the necessary measures to implement the Convention;<sup>47</sup>
- in particular, adopt the necessary measures to ensure that toxic chemi-

cals and their precursors are developed, produced, otherwise acquired, retained, transferred or used within their jurisdiction only for permitted purposes;<sup>48</sup>

- enact penal legislation within their jurisdiction for natural and legal persons, extend that penal legislation to its citizens abroad, and not permit prohibited activities in places under its control (but not its jurisdiction);<sup>49</sup>
- cooperate with other States Parties and afford legal assistance, for example in the context of requests for extradition or sharing information for prosecution purposes;<sup>50</sup>
- inform the OPCW about the legislative and administrative measures taken.<sup>51</sup>

The First Review Conference, however, went beyond this. It clearly recognized and highlighted the deficiencies that many States Parties had allowed to persist in their national implementation measures, and gave the Conference of the States Parties the task of developing and implementing an Action Plan to remedy the situation. The Conference subsequently adopted such an Action Plan.<sup>52</sup>

One of the reasons for this was, of course, the terrorist attacks on the United States on 11 September 2001. The effort to establish a global legal framework against terrorism and to enact counter-terrorism laws in many countries had a positive spin-off for the implementing legislation required under the Convention too. At the same time, the OPCW realized that its own (national as well as international) implementation process contributed to the counter-terrorism efforts, because it made toxic and precursor chemicals (and, of course, chemical weapons themselves) less accessible.<sup>53</sup>

Another reason had to do with the principle of equal treatment of States Parties. It had become apparent that many States Parties had difficulties identifying all the facilities they needed to declare to the OPCW and open for on-site inspection. Often, the reason for that failure was the absence of implementing legislation and regulations. The implication, however, was that States Parties with implementing deficiencies were not inspected (or were under-inspected in relative terms) by the OPCW.

Extending the rule of law has therefore become a major avenue towards making the CWC more effective and adapting it to the current security threats.

### *The timely destruction of declared CW stockpiles*

A second measure is the destruction of the declared stockpiles within the prescribed time frames and the application of measures to ensure the se-

curity of these stocks in the meantime. Security of the stockpiles is, of course, the responsibility of the possessor States Parties. At the same time, the CWC contains a specific requirement for States Parties possessing CW stockpiles to take the measures they deem necessary to secure the stockpiles and prevent any movement of the CW out of the facility other than for destruction purposes.<sup>54</sup> How a State Party protects its stockpile is left to the discretion of the State Party.

The Review Conference recognized, however, that the security of the remaining stockpiles is a common interest of all States Parties, and therefore emphasized that the OPCW can be a forum for consultation and co-operation in this respect as well.<sup>55</sup> It is at the discretion of the possessor States Parties to make use of this opportunity, for example to share experience, to develop and apply common standards, or to discuss any needs for assistance.

#### *Effective verification and CW non-proliferation*

A third area of implementation of the CWC is the application of the provisions to prevent CW proliferation. These provisions are contained in the general undertakings of the States Parties (Article I) in conjunction with the applicable definitions (Article II), the requirement for States Parties to take the measures necessary for them to fully implement all the provisions of the Convention and to render each other legal assistance (Article VII), and the provisions on declarations, inspections and transfer prohibitions under Article VI.

From a non-proliferation perspective, the proper functioning of national control systems for chemicals is as important as the application of international verification measures under the CWC. The CWC was designed to address state-to-state relations, and any proliferation concerns in this context need to be addressed through the provisions of Article VI (and, if need be, Article IX). But proliferation concerns relating to non-state actors cannot easily be addressed in this manner, and the CWC relies heavily on the implementation work of the States Parties within their jurisdiction to prevent such acts of CW proliferation. It is in this context that the Review Conference called for the Action Plan on Article VII implementation.

Article VI, which deals with the verification of legitimate activities in the chemical industry through declarations, inspections and transfer controls, has nevertheless an important role to play. It increases confidence in the legitimacy of their activities, and at the same time can highlight possible problem areas in the proper functioning of national control systems for chemicals.

*Enhanced chemical protection*

A fourth area is the enhancement of the protective capabilities of the States Parties. The relevant provisions of the Convention were developed some 10–15 years ago with a view to providing security assurances in respect to possible regime failure or lack of universality. Although these considerations continue to apply today, the OPCW has recognized that the same provisions on assistance and protection can also play an important role in enhancing the States Parties' capacities to limit the impact of chemical weapons use by terrorist organizations. This is not just a matter of being able to limit the impact of any such attack in terms of human losses – history has shown that a strong chemical defence capacity has a deterrent effect against the use of chemical weapons.

It should be noted that this reasoning leads to a change in emphasis in respect to the different provisions of Article X of the CWC. During the negotiations, as is quite apparent from the balance in the Article and the degree of sophistication built into its provisions, the thinking focused very much on the investigative and assistance-delivery aspects after a CW attack. Little detail was included on the ways in which the CWC and the OPCW might be of help in developing the protective capacities of the States Parties. As threat perceptions change, the activity of the OPCW is now as much concerned with that preventive side of Article X as with preparations for an international emergency response after an attack.

That shift recognizes that, for effective prevention and preparedness, an instant reaction at the incident site is critically important. International or even national assistance may have a role to play, but what really matters is the local response capacity. This relates not only to the local emergency response systems (“first responders”) but also to the action (or inaction) of citizens (family, neighbours, passers-by) and volunteers arriving at the scene.<sup>56</sup>

## 6. Challenges and opportunities ahead

*Readiness and willingness for change*

One of the primary challenges for the OPCW as the agency administering and implementing the CWC is whether, and how quickly, it can adapt to the changing international environment. The problem, of course, reaches well beyond chemical weapons disarmament. If it is true that the emerging CW threat increasingly concerns a new type of proliferation involving non-state actors, and if it is also true that, in this context, chem-

ical weapons (and other toxic materials) are part of a bigger picture of the possible use of hazardous materials by terrorists or criminal organizations, then this is a challenge for the international community as a whole. The established mandates of international agencies such as the OPCW remain largely as they are, but reality may not always fit the design criteria that were applied when these agencies were initially established.

Does that mean that the OPCW should concentrate exclusively on its core mandate of verified destruction of the declared CW stockpiles? The implication, of course, is that the OPCW could soon lose its *raison d'être*. Once the declared CW stocks are gone, there remains the issue of CW non-proliferation, but perhaps the tools that the CWC offers are less fitting given the nature of the emerging proliferation process? Would not reliance on national export controls, counter-proliferation, law enforcement, intelligence-sharing and, ultimately, recourse to the use of military force do the same, perhaps even better?

On the other hand, can the international community afford to rely on unilateral action, ad hoc mechanisms and shifting alliances when it comes to addressing long-term security concerns? Should it not use the capacities that the States Parties and the OPCW Technical Secretariat have developed since 1997 as one of the tools to address these new challenges? Can we afford to improvise and to create new machinery every time the nature of the threat changes?

The Report of the Review Conference recognizes that the CWC, and thus the OPCW, have a role to play in the new security environment. The mandate contained in the CWC is sufficiently broad and comprehensive to allow for adaptation to new requirements. From an institutional point of view, then, the real challenge is to sustain the political will for change, change not in the OPCW mandate *per se* but in the way the organization operates and interacts with other players.

But there is another dimension to all of this, one that relates to the basic design of a multilateral disarmament accord and in particular to the role that verification has to play. This may well be an issue that goes beyond the CWC, but the following discussion is intended specifically to highlight some issues from the CWC perspective.

### *The changing role of international verification*

The concepts underlying verification of arms control agreements were developed during the Cold War. The basic approach has been described as follows:

Because arms control treaties are agreements between adversaries, a central feature of them are provisions for verification of compliance. Each side may believe



that the other side has some incentive to cheat and all modern arms control agreements contain detailed descriptions of what is or is not permitted along with procedures of various kinds that attempt to make evasion difficult and unattractive. . . . Generally speaking, however, minimum requirements for a verifiable treaty would include the following:

1. No significant risk to the national security of either party that might be caused by a treaty violation shall go undetected and unidentified.
2. No violation that would undermine in a basic way the purpose of the treaty should go undetected and unidentified.<sup>57</sup>

As the world emerged from the Cold War, verification concepts were adjusted to reflect the changing security environment of a multi-polar world. An example is the following statement: “Monitoring is needed not only between potential enemies. It is necessary on a global scale as threats may easily shift from one region of the world to another, from one power or group of powers to others following changes in political, economic or social structures. Verification is thus the main ingredient in agreements on arms control and disarmament.”<sup>58</sup>

Although this comment appears to be acknowledging a more complex, multidimensional and fluid world, it still seems to be tainted by traditional Cold War thinking. It might even lead to demands for a global verification system that may not be sustainable in the long run – a kind of global early warning system for regime failures in unexpected places at unpredictable times. What it essentially ignores is the role of confidence-building and how it interacts with and influences verification objectives.<sup>59</sup>

In this context, one needs to recall the objectives of the multilateral verification system. Traditionally, two aspects were emphasized: confidence-building and deterrence of treaty violation. In the CWC case, confidence-building relates to the confirmation (a) that the declared CW stockpiles and production capabilities are actually being destroyed, and (b) that chemical activities in those facilities inspected under Article VI are legitimate. The deterrence effect of the CWC verification system relies essentially on two interconnected factors: the probability that an Article VI inspection can actually detect a violation (and, relatedly, that the inspection system is optimized in such a way that it induces compliance and maximizes the selection of relevant facilities<sup>60</sup>), and the confidence of States Parties in the OPCW’s ability to conduct an effective and conclusive challenge inspection should it be requested to do so.

In terms of the national security of the States Parties, however, how important are these procedures, and how do they relate to other aspects of compliance assurance at hand (whether provided by the Convention, e.g. in the context of its clarification procedures, or by other mecha-

nisms)? Several findings of the First Review Conference are worth recalling, namely (emphasis added):

1. the CWC makes an *essential* contribution to confidence-building and cooperation, international peace and security, and national security;<sup>61</sup>
2. the verification system of the CWC was *one of its most important provisions*;<sup>62</sup>
3. national implementation was an *essential* element of the implementation of the verification and other provisions of the Convention;<sup>63</sup>
4. national implementation is *important* for the ability of the Convention to respond to changes in the security environment;<sup>64</sup>
5. bilateral consultation to clarify issues was a *valuable* mechanism in ensuring compliance;<sup>65</sup> and
6. the States Parties continue to *uphold the value of challenge inspection*.<sup>66</sup>

What we have seen over the past five or so years is a very gradual but unmistakable shift in emphasis in relation to the work of the OPCW. There is no question that verification remains the core activity, and will do so in the future. But, at the same time, the frustration with the gaps and delays in national implementation in a large number of States Parties was not just a bureaucratic reaction to a lack of implementation; it was also an indication of how much importance the States Parties attach today to the functioning of *other states'* national implementation mechanisms. A decade ago, national implementation was seen as a necessary tool for participation in the CWC implementation process. Today, transparency is a matter not only of confidence-building through verification but also of an assurance that domestic control mechanisms can be relied on by the rest of the international community. This mirrors changes in security perceptions and expectations about what the CWC regime ought to deliver. With proliferation no longer merely seen as a state-to-state issue, states individually and the international community as a whole need to be able to rely on the robustness of national control mechanisms and national legal systems in all countries as well as on the international verification systems.<sup>67</sup>

That leaves the verification objective of deterring treaty violations by States Parties. Maintaining and further improving the OPCW's competence in inspection conduct, including in respect to States Parties that have not as yet been inspected, and its readiness to implement challenge inspection should a request be received were characterized by the Review Conference as essential. This underlines again the conceptual linkage in the OPCW programmes between providing implementation support, conducting routine inspections and maintaining readiness for challenge inspection. It is the combination of these factors, and the overall confi-

dence in the maturity and competence of the OPCW as a learning organization with high technical and political expertise, that creates the deterrence effect against violations and at the same time enhances confidence in the functioning of the regime.

## 7. Epilogue

The First CWC Review Conference showed that the OPCW is capable of taking on new challenges and that there is political will to adapt the work of the OPCW to evolving conditions. It is now up to the States Parties and the Technical Secretariat to ensure that the challenges are met.

There should be no mistake: the challenge is real and the stakes are high. If there were a growing perception that the CWC, and hence the OPCW, were no longer suited to dealing with the changing threats posed by chemical weapons today and in the future, the ramifications would go far beyond the chemical weapons area. The temptation could easily be to question the whole concept of multilateral and verified disarmament and to portray it as a model that was rooted in the past East–West confrontation and has less and less relevance under today’s conditions. The international framework is perceived to be changing, with increased emphasis on non-state actors on the one hand and a somewhat ill-defined set of requirements related to asymmetrical or low-intensity warfare on the other. There may well be an attempt to relegate global multilateral disarmament efforts to history, to depict legal undertakings in disarmament as straight-jackets, and to move ahead with concepts that are ostensibly more practical and effective. That, however, would undermine global security and cooperation in the long run and weaken the legal norms that govern state action. It is therefore crucial that the OPCW and its member states ensure that the machinery that has been created to implement the CWC is adapted to the changing conditions of today’s world and takes account of new and evolving threats associated with chemical weapons.

## Notes

The author is a staff member of the OPCW Technical Secretariat. The views expressed in this chapter are exclusively those of the author and in no way reflect or constitute official positions of the OPCW or its Technical Secretariat.

1. With the exception of Japanese uses in China, and some localized incidents in Russia – see, for example, SIPRI, *The Problem of Chemical and Biological Warfare. Volume 1: The Rise of CB Weapons* (Stockholm: Almquist & Wiksell International, 1971).
2. Compare Julian Perry Robinson, *Chemical Warfare Arms Control: A Framework for*

*Considering Policy Alternatives*, SIPRI Chemical and Biological Warfare Studies No. 2 (Oxford: Oxford University Press, 1984).

3. See, for example, Jozef Goldblat, *Arms Control Agreements – A Handbook*, SIPRI (London: Taylor & Francis, 1983), pp. 47–50.
4. For a detailed discussion, see SIPRI, *Chemical Disarmament – New Weapons for Old* (New York: Humanities Press; Stockholm: Almqvist & Wiksell International, 1975).
5. Much of the information on such developments remains classified even today. Some detail was published in the mid-1990s; see J. Matousek and I. Masek, “On the New Potential Supertoxic Lethal Organophosphorous Chemical Warfare Agents with Intermediary Volatility”, *ASA Newsletter* 94:5 (7 October 1944), pp. 1, 10–11. A recent summary of what is known in public was presented in J. Matousek, “Emerging Threats to the Chemical Weapons Convention”, Discussion Paper No. 2, 19th Workshop of the Pugwash Study Group on the Chemical and Biological Weapons Conventions, Oegstgeest, the Netherlands, 26–27 April 2003.
6. Note that, with a change in the relations between the Soviet Union and the United States at the beginning of the 1990s, the concept of CW verification was adjusted to reflect the increased trust between the two, with a significant drop in emphasis on round-the-clock verification of the declared stockpiles. Although they remain subject to systematic verification throughout, permanent monitoring is now limited to active destruction operations.
7. One proposal to this end was the retention of what was then called “security stockpiles”, whose destruction would be decided only when all other stocks had been eliminated, in the light of universal adherence to the Convention as well as treaty compliance.
8. Equally significant, if of less importance for this discussion, was the question of how the Convention should deal with plant poisons such as defoliants and herbicides.
9. A typical example is the way nuclear weapons were defined in the Treaty of Tlatelolco. Article 5 of that treaty reads: “For the purpose of this Treaty, a nuclear weapon is any device which is capable of releasing nuclear energy in an uncontrolled manner and which has a group of characteristics that are appropriate for use for warlike purposes. *Any instrument that may be used for the transport or propulsion of the device is not included in this definition if it is separable from the device and not an indivisible part of it*” (emphasis added).  
 The two international agreements closest to the CWC are the 1925 Geneva Protocol and the 1972 Biological and Toxin Weapons Convention. Both lack a specific definition of the weapons covered by their respective prohibitions. The Geneva Protocol of 1925 speaks of “the use in war of asphyxiating, poisonous and other gases, and of all analogous liquids, materials or devices . . . [and] the use of bacteriological methods of warfare”. Because the Protocol prohibited only the use of such weapons, not their production or possession, the lack of definition was in fact an advantage, providing the necessary flexibility to cover developments unforeseen at the time of its signing. The Biological and Toxin Weapons Convention of 1972 also lacks a specific definition of the weapons covered. In Article I, paragraphs 1 and 2, it prohibits “microbial and other biological agents, and toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes, [and] weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict”. Implicitly, this prohibition took a similar approach to that of the CWC, by including weapons, equipment and means of delivery designed for using biological or toxin agents, and by linking the definition to the concept of justified needs for legitimate purposes.
10. That kind of definition resulted from the fact that binary chemical weapons had to be

covered. These are weapons for which it is not the actual toxic chemical warfare agents that are produced and stockpiled but two “precursor chemicals”, i.e. the two chemicals that would form the toxic agent in a chemical reaction only after the weapon has been fired.

11. The Schedules list chemicals that have been identified for the application of verification measures. They are contained in the Annex on Chemicals. They are not a substitute for the definition in Article II, as is made clear in the identical wordings in parentheses in paragraphs 2 and 3.
12. Initially, toxic chemicals were classified as “supertoxic-lethal”, “other lethal”, or “other harmful” chemicals. That distinction goes back to bilateral US–Soviet negotiations at the end of the 1970s, which resulted in a joint working paper – USSR and United States of America, “Joint USSR-United States Report on Progress in the Bilateral Negotiations on the Prohibition of Chemical Weapons”, Conference on Disarmament document CD/48 of 7 August 1979. Discussions in the expert meetings of the Conference on Disarmament during that period focused to a large extent on how to standardize methods for determining the toxicity of a certain chemical in order to decide whether it ought to be placed in this or that category, depending on lethality. However, all these attempts failed, not merely because of political disagreement but more importantly because of the very nature of chemical weapons and the dual-use character of many agents. Dosage, however, is the true crux of the problem: any line drawn for distinguishing between toxic and “non-toxic” chemicals is scientific nonsense because, ultimately, the dose decides whether a chemical is toxic or not. In other words, if such a line had been arbitrarily drawn between chemical warfare agents and chemicals that by definition are not to be regarded as weapons, a door for easy circumvention of the Convention would have been opened.
13. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Article III.
14. Articles IV and V, and Verification Annex (VA) (Parts IV and V).
15. Articles VI and VA (Parts VI–IX).
16. Article VII.5.
17. Articles IX and VA (Part X).
18. Article XII.
19. Article VIII.1. See also the preamble and Article I for the concept of “object and purpose of the Convention”.
20. Article VIII.2.
21. Article VIII.5 & 6.
22. Article VIII.19.
23. There were in fact arguments, that, with a standing organization in place, there might not be a need for a separate review mechanism as in other treaties, because new requirements could be taken up by the Conference at its annual sessions. In practice, the backlog from the Preparatory Commission, as well as difficulties in respect to the adoption of the annual programmes and budgets, meant that the Conference at its regular sessions had to go through difficult and time-consuming decision-making on a large number of detailed issues. Therefore, the Review Conference offers an opportunity to take a broader view on the implementation process and to address such questions as: progress made towards universal adherence to the Convention, assessments of key implementation aspects such as national implementation, destruction of chemical weapons and CW production facilities, functioning of the non-proliferation regime under the CWC, international cooperation and assistance, the effectiveness of the OPCW, and possible security concerns of States Parties.
24. CWC, Article X.2.

25. Article X.3.
26. Article X.5.
27. Article X.8–11.
28. The use of chemical weapons by a State Party against its own citizens – a possibility that, based on historical precedence, cannot be ignored – would not establish such a right since chemical weapons will clearly not have been used “against it”. This, however, would not prevent the Organisation from deciding, for humanitarian reasons, to provide the victims with assistance.
29. Article XV.1,2,3.
30. Article XV.4&5.
31. On 13 November 1998, in accordance with paragraphs 4 and 5 of Article XV of the Convention, Canada submitted to the Director-General a proposal for a change with respect to transfers of the Schedule 1 chemical Saxitoxin. In accordance with the procedure stipulated in paragraph 5 of Article XV, the proposed change was approved and a new paragraph *5bis* was added to Section B of Part VI of the Annex on Implementation and Verification (“Verification Annex”), as follows: “For quantities of 5 milligrams or less, the Schedule 1 chemical saxitoxin shall not be subject to the notification period in paragraph 5 if the transfer is for medical/diagnostic purposes. In such cases, the notification shall be made by the time of transfer.” The United Nations Secretary-General, in his capacity as Depositary of the Convention, notified the change in the following: (a) the change to Section B of Part VI of the Verification Annex, effective 31 October 1999 (Depositary Notification C.N.916.1999.TREATIES-7 issued on 8 October 1999); together with (b) the correction to the change, effective 9 March 2000 (Depositary Notification C.N.157.2000-TREATIES-1 issued on 13 March 2000). Pending completion of the Article XV change procedure, an interim practical guideline for the transfer of Saxitoxin for medical/diagnostic purposes was applied (Executive Council decisions EC-XII/DEC.5, dated 9 October 1998, and EC-XV/DEC.5, dated 29 April 1999).
32. On 16 July 2004, the Director-General received a proposal from the Socialist People’s Libyan Arab Jamahiriya to the OPCW for a technical change to Part V (destruction of chemical weapons production facilities and its verification) of the Verification Annex to the Chemical Weapons Convention. This proposal was co-sponsored by Algeria, Cameroon, Eritrea, Italy, Kenya, Morocco, South Africa, Sudan, Tunisia, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and Yemen. If agreed, it would establish a procedure for dealing with conversion requests in respect of chemical weapons production facilities of States Parties that join the CWC after the conversion deadline established in paragraph 72 of Part V of the Verification Annex (six years after the entry into force of the Convention, i.e. 29 April 2003). The proposal has been submitted to the Executive Council and is being considered by the Council and the States Parties in accordance with the procedure of Article XV.5.
33. The concept of “CW-capable states” is a difficult one. Given the existing range of chemical weapons, the technological threshold for making an effective chemical weapon can vary considerably. Production of a modern binary nerve-agent weapon with a long shelf-life and adequate agent dissemination is quite a challenge. At the other end of the spectrum, manufacturing mustard gas and preparing a crude yet working chemical weapon to disseminate it require no high-technology equipment and can be straightforward as long as one has access to the necessary starting chemicals, or the means to make them. In the context of the discussion here, the benchmark is set by the Convention itself, which resolved the capability problem through inclusion of Part IX in the Verification Annex. Essentially, any state that has plants producing organic chemicals by chemical synthesis, in industrial quantities, is presumed to have some relevant capability.

34. In fact, filled chemical weapons have in many cases been defused, so they cannot readily be fired.
35. As of 31 July 2004.
36. According to some reports, Libya had decided in principle to join the CWC as early as 2001. It is also noteworthy that Libya had maintained contact with the OPCW and followed its decision-making on implementation issues since the very beginning of the preparatory work in 1993, which is very different from some other Arab countries, such as Egypt or Syria, that approached the CWC primarily in the context of the conflict with Israel.
37. *Report of the First Special Session of the Conference of the States Parties [of the Chemical Weapons Convention] to Review the Operation of the Chemical Weapons Convention (First Review Conference)*, document RC-1/5, 9 May 2003, para. 7.16.
38. *Ibid.*, para. 7.17.
39. A Press Release issued on 11 July 2004 by the Office of the National Security Advisor of the Interim Government of Iraq states that the Iraqi government “is committed to all international norms related to non-proliferation, including prohibition of the development, production and acquisition of nuclear, chemical, and biological weapons and their delivery systems”. The statement declares Iraq’s intention to adhere to all applicable non-proliferation treaties and regimes, including the provisions of the Chemical Weapons Convention, once an elected Iraqi government came into office with the authority to adopt legally binding obligations and commitments. See OPCW Press Release 34/2004 dated 20 July 2004.
40. For a recent discussion, see H. Smith, “Northeast Asia Frustrated by US Pyongyang Policy”, *Jane’s Intelligence Review* 15:11 (November 2003), pp. 32–35.
41. Note that, in an interview in 2004, Qadhafi’s son reportedly claimed that among the factors that influenced the Libyan decision to forgo WMD were political, economic, cultural and military gains promised by the Western powers. Reported by Agence France-Presse on 3 March 2004: [http://www.nti.org/d\\_newswire/issues/2004\\_3\\_10.html#BFB03789](http://www.nti.org/d_newswire/issues/2004_3_10.html#BFB03789).
42. For a detailed discussion, see the report from the IUPAC Workshop, “Impact of Scientific Developments on the Chemical Weapons Convention”, Bergen, Norway, 30 June–3 July 2002, published in *Pure and Applied Chemistry* (official journal of the International Union of Pure and Applied Chemistry), 74:12 (December 2002). See also the Note by the Director-General “Report of the Scientific Advisory Board on Developments in Science and Technology”, document of the First Review Conference, RC-1/DG.2, dated 23 April 2003.
43. For details see IUPAC Workshop, *op. cit.*
44. NATO Long-term Scientific Study (LTSS) on CB Defence, 2002. See Background Paper No. 13 submitted by Jan Medema to the 17th Workshop of the Pugwash Study Group on the Implementation of the Chemical and Biological Weapons Conventions: *The Impending First CWC Review*, Oegstgeest, The Netherlands, 15–16 June 2002.
45. An area that will need careful monitoring is related to the development of what are called “non-lethal weapons”. In the context of counter-terrorism and counter-insurgency warfare, considerable efforts are made in some countries to develop and introduce such weapons. There is the potential that such new weapons, if utilizing toxicity, could undermine the CWC regime and/or create a break-out capability leading to the emergence of new generations of chemical weapons based on the technological and scientific superiority of some countries.
46. See RC-1/5, paras. 7.18 and 7.83(g). Both Action Plans have in the meantime been adopted.
47. CWC, Article VII, chapeau of para. 1.

48. Article VI, para. 2.
49. Article VII, para. 1.
50. *Ibid.*, para. 2.
51. *Ibid.*, para. 5.
52. Conference of the States Parties, Eighth Session, decision “Plan of Action Regarding the Implementation of Article VII Obligations”, document C-8/DEC.16, dated 24 October 2003.
53. More recently, this connection has been recognized in UN Security Council Resolution 1540 (2004).
54. CWC, Verification Annex Part IV(A).7.
55. See Article VIII.1; this formula is fairly open-ended and enables States Parties to use the OPCW and its mechanisms regarding chemical weapons issues even if the CWC has no specific provision(s) for a particular issue. Another example is how the OPCW dealt with the issue of terrorism – a problem that negotiators had deliberately left untouched but that the OPCW needed to confront after 9/11.
56. See, for example, Yoram Sofrin, “Strategies for Defence against WMD”, *Proceedings of the 12th Hwarangdae International Symposium on the Threat of Weapons of Mass Destruction and the Security on the Korean Peninsula, Seoul, Republic of Korea, 23–24 October 2003*, pp. 159–168.
57. F. Calogero, M. L. Goldberger and S. Kapitza, *Verification – Monitoring Disarmament* (Boulder, CO: Westview Press, 1991), p. 1.
58. J. Altmann, T. Stock and J.-P. Stroot, *Verification after the Cold War* (Amsterdam: VU University Press, 1994), preface.
59. For a recent treatment of such matters in the context of the Biological Weapons Convention, see Iris Hunger, “Ohne Vertrauen keine Kontrolle – zur Rolle der Vertrauensbildung in der Evolution des Biowaffen-Kontrollregimes” (dissertation, Technical University Darmstadt, 2003).
60. For a detailed discussion, see R. Avenhaus and M. J. Canty, *Compliance Quantified – An Introduction to Data Verification* (Cambridge: Cambridge University Press, 1996).
61. RC-1/5, para. 7.3.
62. *Ibid.*, para. 7.26.
63. *Ibid.*, para. 7.59.
64. *Ibid.*, para. 7.75.
65. *Ibid.*, para. 7.86.
66. *Ibid.*, para. 7.89.
67. This has found its latest expression in Security Council Resolution 1540.



## The First Review Conference of the Chemical Weapons Convention: A drafter's perspective

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*Robert J. Mathews*

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### 1. Introduction

At the conclusion of the negotiation of the Chemical Weapons Convention (CWC)<sup>1</sup> in 1992, this treaty was heralded as a major breakthrough in multilateral arms control.<sup>2</sup> It was the first comprehensively verifiable multilateral treaty that completely banned an entire class of weapons, and went further than any previous treaty in the depth, extent and intrusiveness of its verification. Verification under the CWC includes compulsory national declarations about relevant industrial and military activities, destruction of chemical weapons within a time frame with intrusive verification, and a regime of routine inspections of declared industrial and military facilities. Additional features are the possibility of a challenge inspection, whereby a State Party can request an inspection of any site in another State Party at short notice, and provisions for the investigation of alleged use of chemical weapons.

This chapter discusses the negotiation of the provisions of the CWC related to Review Conferences, and then considers the preparations for, and the conduct of, the first Review Conference (RevCon), which was convened at the headquarters of the Organisation for the Prohibition of Chemical Weapons (OPCW) in The Hague from 28 April to 9 May 2003. The outcomes of the RevCon are then considered, followed by an assessment of the potential value of the RevCon in guiding the activities of the OPCW until the next RevCon, which is scheduled to take place in 2008.

The chapter concludes with a consideration of the current status of the CWC, in light of the outcomes from the first RevCon.

## 2. Negotiation of the CWC RevCon provisions

It was clear to the negotiators in the Conference on Disarmament in Geneva that a multilateral treaty as complex as the CWC, with significant impact on military activities as well as a large part of the global chemical industry, would require regular comprehensive review to ensure that it was operating effectively. However, although the requirement for a regular Review Conference was not controversial per se, there were different views about where these provisions should be located within the Convention text, in particular whether the RevCon should be characterized as a “special session” of the Conference of States Parties,<sup>3</sup> and included in the relevant section of Article VIII, or whether the Convention should contain a separate Article specifically covering the Review Conference,<sup>4</sup> as was already the case with the 1972 Biological Weapons Convention (BWC),<sup>5</sup> and subsequently agreed for the Comprehensive Test Ban Treaty (CTBT)<sup>6</sup> and the “Ottawa Treaty”.<sup>7</sup> In the case of the CWC, the former option was chosen.

Thus, the negotiators agreed that “special sessions” of the Conference of States Parties (CSP)<sup>8</sup> should be convened to “undertake reviews of the operation” of the CWC and that the reviews would “take into account any relevant scientific and technological developments”.<sup>9</sup> It was understood that the reviews undertaken by these “special sessions” would complement the reviews undertaken by the “regular sessions” of the CSP, with the regular sessions of the CSP reviewing short-term operations, activities and developments (in particular, those aspects more relevant to the planning of the following year’s programme of work and budget), and the less frequent “special” (RevCon) sessions reviewing the various operations, activities and developments with a longer-term perspective, to provide guidance to OPCW activities over the following several years.<sup>10</sup>

By the time of the development of the CWC RevCon provisions in the late 1980s, the convening of Review Conferences of other multilateral arms control treaties at approximately five-yearly intervals had become an established norm, in particular for the 1968 Nuclear Non-Proliferation Treaty (NPT)<sup>11</sup> and the BWC. The CWC negotiators readily agreed that CWC RevCons should be held “no later than one year after the expiry of the fifth and the tenth year after entry into force of this Convention”.<sup>12</sup> Although the actual procedures to initiate RevCons under the CWC dif-

fer from those of the NPT and BWC, in practice the outcome for each treaty is RevCons held at approximately five-yearly intervals.<sup>13</sup> This practice was subsequently adopted by the negotiators of the Ottawa Treaty<sup>14</sup> and has more recently become the norm for the 1980 Certain Conventional Weapons Convention (CCW),<sup>15</sup> whereas a 10-yearly interval between RevCons was adopted for the CTBT.<sup>16</sup>

However, the final agreed RevCon provisions were not completely without controversy. In particular, the issue of whether “CW-capable” or “other chemical production facilities” (OCPFs) producing discrete organic chemicals (DOCs)<sup>17</sup> should be declared and be subject to routine inspection was not considered until quite late in the negotiation process, and was a major outstanding issue in the CWC “end-game”.<sup>18</sup> As part of the “end-game” package, it was agreed that the declaration and inspection provisions for OCPFs would be included in the CWC text provided these provisions would be re-examined, based on experience gained, at the first RevCon.<sup>19</sup> Thus, the CWC text states that the provisions related to the declarations and verification of the OCPFs producing discrete organic chemicals “shall be re-examined in the light of a comprehensive review of the overall verification regime for the chemical industry... on the basis of the experience gained”, and that the RevCon shall “make recommendations so as to improve the effectiveness of the verification regime”.<sup>20</sup>

### 3. Preparations for the RevCon

In May 2001, the sixth regular session of the CSP tasked the Executive Council with beginning preparations for the first RevCon.<sup>21</sup> To this end, at its 26th session in September 2001, the Executive Council established an open-ended Working Group for the preparation of the Review Conference (WGRC).

It had been the intention of the OPCW that preparations for the RevCon would be a major focus of activities for the 19 months from September 2001 until the convening of the RevCon in late April 2003.<sup>22</sup> However, despite the early commencement of such preparations, there were a number of distractions in the latter part of 2001 and in most of 2002. In particular:

- the replacement of the original Director-General, José Bustani of Brazil, took several months and caused considerable tensions within the OPCW;<sup>23</sup>
- the negotiation of the 2003 OPCW budget, following the financial crisis in 2001, resulted in lengthy and time-consuming budget negotiations

between April 2002 until the conclusion of the seventh regular session of the CSP in October 2002;<sup>24</sup>

- the terrorist attacks on the United States of 11 September 2001 led to the establishment of an OPCW anti-terrorism working group in December 2001, which met several times to discuss how the OPCW could assist in raising the barriers to chemical terrorism and in providing emergency assistance following a chemical terrorism incident;
- there was a sense in many capitals that the CWC was working reasonably well, and that there were more important security issues facing defence and foreign ministries, including terrorism and BWC issues.<sup>25</sup>

By October 2002, the WGRC had met several times and discussed administrative arrangements and the objectives and methodology of the RevCon. In particular, it had agreed that, rather than the traditional Article-by-Article review, the RevCon would review the CWC on the following themes: implementation of the Convention (including universality, changes to the security environment, terrorism); destruction of CW and former CW production facilities; non-proliferation measures; verification; assistance; and international cooperation.

However, substantial discussion of the various issues within the OPCW did not commence until after the seventh regular session of the CSP had concluded in October 2002. At that time, the Chair of the WGRC (Ambassador Alberto Davèrède of Argentina), supported by the Technical Secretariat (TS), began developing drafting notes, which became the basis of the future discussion of the WGRC and ultimately formed the basis of the draft Political Statement and draft Review Document that were submitted to the RevCon.

Background review documents were also prepared by the Director-General,<sup>26</sup> the Scientific Advisory Board<sup>27</sup> and the Technical Secretariat.<sup>28</sup> However, once again, because of the delays (as discussed above), the final versions of these papers were not available until a couple of weeks before the commencement of the RevCon. There were also 32 national papers on various topics, prepared by 17 States Parties.<sup>29</sup>

In addition, useful workshops were conducted in the lead-up to the RevCon, including an International Union of Pure and Applied Chemistry (IUPAC) workshop held in Bergen, Norway, in June 2002,<sup>30</sup> a NATO workshop held in Bratislava, Czech Republic, in October 2002,<sup>31</sup> and Pugwash workshops. These workshops reviewed developments in science and technology and changing industry practices that might have an impact on the CWC. Topics reviewed included the development of novel methods of production of toxic chemicals (including through biologically mediated processes) and novel toxins, and the development of new monitoring techniques, including miniaturized sensors and portable

chemical analysis equipment.<sup>32</sup> The NATO workshop and Pugwash workshops also reviewed the OPCW verification procedures based on the early experiences of the OPCW Inspectorate, including issues related to access to records, the extent of access to chemical industry plant sites, and sampling and analysis.<sup>33</sup> These workshops resulted in useful background papers for the RevCon as well.

#### 4. The Review Conference<sup>34</sup>

The RevCon commenced with a message from the UN Secretary-General, Kofi Annan, and a statement by the recently appointed Director-General, Rogelio Pflirter of Argentina.<sup>35</sup> This was followed by the “General Debate”, which opened with a provocative statement by the United States<sup>36</sup> in which it alleged non-compliance by Iran and concerns about Sudan<sup>37</sup> (this was in spite of the indicated intentions of key delegations before the RevCon that the RevCon should be conducted in a harmonious constructive atmosphere). However, following Iran’s response to the US allegations,<sup>38</sup> the RevCon settled down during the remaining couple of days of national statements.

Following the General Debate, work commenced in the Committee of the Whole (COW), chaired by Ambassador Marc Vogelaar of The Netherlands, on finalizing the Political Declaration<sup>39</sup> and the Review Document,<sup>40</sup> which had been drafted during the lengthy preparatory process. Whereas the COW retained the central role in negotiating and redrafting these documents, a so-called Friend of the (COW) Chair “editing group” (chaired by Ambassador Dato’ Noor Farida Ariffin of Malaysia) was allocated responsibility for “fine-tuning” both documents.

The Political Declaration was finalized first, on the evening of the Wednesday of the second week of the RevCon, following six days of difficult negotiations and drafting. At that stage (only two days before the end of the RevCon), it had become clear that the editing group would not have time to finish redrafting the longer Review Document. To expedite the finalization of the Review Document, the United States and India took the initiative of reviewing the existing text, initially amongst themselves and subsequently in an open forum with the participation of all interested delegations, in order to identify those elements that were non-controversial or could be fixed on the spot. That still left quite a number of paragraphs that required detailed negotiations and, on the final day of the Review Conference, the COW Chairman formed a small “drafting group” involving the United States, the United Kingdom, India and Iran (and assisted by the Director-General), which developed agreed language on the controversial elements. This agreed language was then

incorporated into a revised draft document that was returned to the COW for consideration, where it was subsequently adopted with relatively minor modifications. The document was then endorsed by the Rev-Con, allowing the RevCon to finish shortly before midnight on the final day.

In addition to the formal conference sessions, an Open Forum entitled “Challenges to the Chemical Weapons Ban” was held at The Hague Peace Palace on the afternoon of 1 May. This forum, organized by the Technical Secretariat and non-governmental organizations (NGOs), discussed a number of issues including CW destruction, industry issues and scientific developments, including non-lethal weapons.<sup>41</sup> Indeed, for many delegates, the opportunity for discussion of scientific and technical issues during the Open Forum was the highlight of the RevCon.

## 5. Major issues and Conference recommendations

### *5.1 Measures to ensure the universality of the CWC*

The statement by the Director-General as well as a number of national statements acknowledged that reaching 151 States Parties within six years of the CWC's entry into force represented significant progress towards universal adherence.<sup>42</sup> Although it was recognized that some countries (particularly in the Middle East) were claiming they could not yet join the CWC because they believed that doing so might harm their security, several national statements also cited a perception among some developing countries that there was a lack of tangible benefits from treaty membership, which deterred them from joining the CWC.<sup>43</sup> The Review Document recommended that the Executive Council, with the cooperation of the Technical Secretariat, develop and implement a plan of action to further encourage, in a systematic and coordinated manner, adherence to the Convention and to assist states ready to join the CWC in their national preparations to implement it.<sup>44</sup>

### *5.2 The functioning of the OPCW*

The OPCW had its share of challenges in its first six years. These included the financial crisis in 2001, which resulted in the need to impose “austerity measures” for several months, and the replacement of the original Director-General, which took several months and caused considerable tensions within the OPCW and among States Parties. Since his appointment in July 2002 as Director-General, Ambassador Rogelio Pfirter of Argentina has undertaken an active programme to improve the trans-

parency of the Technical Secretariat's management procedures, ensure a greater sense of common purpose between States Parties and the Technical Secretariat, and ensure adequate and proper use of financial resources. His positive influence was apparent during the seventh regular session of the CSP in October 2002, and even more so during the subsequent preparations for the RevCon. By the time of the RevCon, there was a strong sense that the States Parties and OPCW had moved beyond the difficult situation they had faced in 2002.

The Executive Council, which has oversight of the operations of the OPCW on behalf of the States Parties, has had substantial achievements since entry into force. However, there has been disappointment that the Executive Council has not been able to reach decisions on many important issues, including some dating back to the "Paris Resolution" (tasks that the Preparatory Commission was requested to resolve before entry into force)<sup>45</sup> that are considered important for the effective operation of the OPCW. The unresolved issues include legal and technical ones related to industry declarations and verification.<sup>46</sup> The Review Document expressed concern about these delays and urged the Executive Council to increase its momentum and strive to conclude all unresolved issues.<sup>47</sup>

Based on a number of national statements as well as comments from delegates in the margins of the RevCon, there has clearly been a high level of satisfaction with respect to the functioning of the OPCW inspectorate. However, because of the recently implemented staff tenure policy, many of the most experienced OPCW staff (including the originally recruited inspectors) will be required to leave the organization in the next few years.<sup>48</sup> Although there are reasonable arguments in favour of a maximum term of seven years for general management and administrative staff, it is unfortunate that the same tenure rule is to apply to the specialist staff within the Secretariat managing verification functions and the OPCW inspectors. Not only will this add significantly to the cost of maintaining a properly trained and experienced inspectorate, unless the process is managed carefully, the loss of these highly experienced staff may substantially reduce the effectiveness of the inspections. The impact is even more significant in small sections with a small number of staff, which is typical of the Verification Division, where verification activities are planned and inspection results are evaluated.

Clearly, the budget planning process caused considerable difficulties for the Executive Council in the first six years of the OPCW's existence. A major obstacle in developing the annual budgets has been the lack of agreement on the size of the OPCW: some States Parties (primarily some of the major financial contributors) have argued that the OPCW should have only limited growth (if any), whereas the Technical Secretariat has argued that, for the OPCW to fulfil its mandate, there will need to be a

substantial increase in its size, requiring an increase in its budget. A related issue that the Executive Council continues to grapple with is how the OPCW should allocate the available resources between the competing demands of: verification of destruction of chemical weapons and production facilities (treaty Articles IV and V); industry verification (Article VI), including allocation of resources for inspections of Schedule 1, Schedule 2, Schedule 3 and OCPFs; and international cooperation and assistance, including support in developing national legislation (Article VII), assistance protection (Article X) and economic and technological development (Article XI).

### *5.3 National implementation measures*

National implementation of the CWC by States Parties requires the adoption of a range of domestic legislative and administrative measures to enable each Party to enforce its international obligations at a national level, including the collection of information required for declarations and enabling the OPCW inspectors to conduct inspections within their territory. Concerns were expressed in the statement by the Director-General and in some national statements about the status of national implementation measures, in particular the problematic fact that, six years after entry into force, national implementation requirements had not been met by many States Parties.<sup>49</sup> The Director-General suggested an Action Plan to develop a proactive, effective and well-targeted programme of implementation support.<sup>50</sup> The RevCon recommended that such an Action Plan be adopted at the subsequent regular session of the Conference.

The RevCon confirmed the essential role of national legislation for the proper functioning of the Convention. It called on States Parties that had not already done so to, *inter alia*, designate a National Authority and inform the OPCW by the eighth regular session of the CSP (in October 2003) of the status of their national implementation measures. The Review Document also encouraged the Technical Secretariat, as well as States Parties, to develop partnerships with relevant regional agencies that could render implementation support to States Parties.<sup>51</sup>

Another national implementation issue raised was that a number of States Parties have tended to focus exclusively on specific CWC obligations, and have not developed legislation relevant to the more general requirements of the CWC, such as those in Article I, which embodies the prohibition on chemical weapons. Important in this regard is implementation of the general-purpose definition of chemical weapons, which recognizes that, in addition to the chemicals listed in the CWC Schedules, other toxic chemicals could be used as chemical weapons, either as part



of a state CW programme or by a terrorist group.<sup>52</sup> The Review Document emphasized that, for effective implementation, it is necessary for States Parties to adopt a broad perspective on what constitutes “CWC-relevant chemicals”,<sup>53</sup> which clearly goes beyond the chemicals listed in the three Schedules.<sup>54</sup>

#### *5.4 Destruction of CW and former CW production facilities*

The two main CW-related issues raised in the General Debate were the importance of adhering to the CWC destruction timelines and the level of inspection resources currently being used for verification of CW destruction.

The United States, India and the Republic of Korea have each destroyed a substantial portion of their Category 1 chemical weapons.<sup>55</sup> Russia, which is having considerable difficulty in destroying its chemical weapons, announced during the RevCon that it had recently completed the destruction of 1 per cent of its CW arsenal – three years after it was originally scheduled to do so.<sup>56</sup> This had occurred despite the fact that Russia is currently receiving both technical and financial assistance from several States Parties, including the United States and some members of the European Union, to help it to meet its CW destruction obligations. Another State Party, Albania, recently discovered CW agents on its territory, and has declared itself as the fifth CW-possessor state.<sup>57</sup>

Although most references in national statements to the need to meet the Convention’s CW destruction timelines were expressed in general terms,<sup>58</sup> the United Kingdom expressed disappointment in Russia’s performance.<sup>59</sup> Yet it is important to keep this issue in perspective. The 10-year time frame for destruction of all chemical weapons was agreed in Geneva in the late 1980s at a time when the United States and the former Soviet Union were both confident that they could destroy all of their chemical weapons within 10 years of the Convention’s entry into force.<sup>60</sup> The RevCon itself took a pragmatic approach, stressing that all CW stockpiles should be securely stored while they awaited destruction, which is of even greater importance in the light of increasing concerns about chemical terrorism.<sup>61</sup>

The majority of inspections conducted so far by the OPCW inspectorate have been associated with verifying the destruction of chemical weapons.<sup>62</sup> There are two major reasons for this situation. The first is that the United States and Russia never concluded the bilateral destruction agreement that had been envisaged during negotiations on the CWC, which would have seen the bulk of the verification of destruction of the US and Russian CW stockpiles being conducted by bilateral inspection teams, with OPCW inspectors providing only complementary verifica-

tion.<sup>63</sup> The second reason is the interpretation of the CWC text adopted by the Preparatory Commission (PrepCom) with respect to the continuous presence of inspectors.<sup>64</sup>

There will be a substantial increase in the inspection workload for verification of CW destruction facilities (CWDFs) in the next few years because several additional CWDFs are scheduled to commence destruction operations.<sup>65</sup> There are concerns that there will not be enough resources in the OPCW inspectorate to provide the level of verification of destruction based on currently agreed procedures. As pointed out to the RevCon by the Director-General, the “verification methodology applied at CWDFs needs to be reviewed if the verification regime as a whole is to remain sustainable and affordable”.<sup>66</sup>

The Review Document reaffirmed the obligation of the CW-possessors to destroy their CW stockpiles within the CWC-specified timelines, and urged them to exploit scientific and technological developments to enable more effective use of verification resources.<sup>67</sup> It also called on other States Parties to support these efforts and provide assistance where possible. In addition, the RevCon reiterated the obligation of States Parties possessing converted former CW production facilities to report annually for 10 years on the activities at those sites and to open them to inspection.

### *5.5 Chemical industry declarations*

The overall poor rate of submission of initial Article VI declarations, related to activities not prohibited under the CWC, was a major disappointment in the first few years after entry into force.<sup>68</sup> Although most States Parties have now provided initial and annual declarations, it has become clear that a considerable number of these are incomplete. It has also been recognized that the declaration requirements for States Parties are complex, and that some States Parties have experienced technical difficulties in compiling the required information.<sup>69</sup> The Technical Secretariat, in cooperation with a number of interested States Parties, has been assisting States Parties that have had difficulty in completing their declaration requirements. The Secretariat has also been undertaking clarification procedures to follow up on inconsistencies in and between declarations submitted and assisting States Parties to identify additional industry facilities that should have been declared by comparing declared information with chemical production information available from open sources.

In the area of Article VI declarations, the Director-General identified three issues that need further attention: the quality of national implementation; the agreement on outstanding declaration issues (including unresolved “industry issues”); and an increase in the effectiveness of the

system (for example, through the introduction of “nil declarations” in those cases where a State Party has nothing to declare).<sup>70</sup> With respect to Article VI declarations, the Review Document called on all States Parties to submit declarations in a complete, accurate and timely manner.<sup>71</sup>

### *5.6 Routine inspections of chemical industry*

When the CWC was being negotiated, it was recognized that it would be necessary to review and adjust, as appropriate, the relative proportion of inspection effort for Article VI verification activities allocated to inspections of Schedule 1, Schedule 2, Schedule 3 and DOC facilities. Accordingly, the Article VI regime was designed to be flexible and open to future adjustment in the light of practical experience gained and changes in chemical technology and chemical industry operations.<sup>72</sup>

During the first few years after entry into force, there was an obvious focus on the initial inspections of Schedule 1 and 2 facilities, to meet specific Convention timelines. However, following completion of these initial inspections, a greater proportion of the available resources has been provided for Schedule 3 and DOC inspections.<sup>73</sup> In addition to spreading the inspection load among a greater number of States Parties, this results in more inspections being conducted at “CW-capable” facilities, which many experts regard as most applicable with respect to recent CW proliferation programmes.<sup>74</sup> Overall, there has been a high degree of satisfaction by the OPCW, States Parties and industry facility personnel in the way that industry inspections have been conducted.<sup>75</sup> Fortunately, no OPCW routine inspections have been delayed so far because of lack of national legislation.

Since the entry into force of the Convention, 63 States Parties have declared a total of over 4,000 inspectable OCPFs. Of these facilities, more than 100 had received inspections by the time of the RevCon. The Technical Secretariat has concluded that these inspections have shown that some of the OCPFs “are highly relevant to the object and purpose of the Convention. These facilities produce chemicals that are structurally related to Schedule 1 chemicals. Of particular relevance to the Convention are facilities that combine this kind of chemistry with production equipment and other hardware designed to provide flexibility and containment.”<sup>76</sup>

The Scientific Advisory Board (SAB), in its study of developments in the production of CWC-relevant chemicals, concluded that OCPFs are the area where the impact of recent technological developments was most relevant, and recommended that it would be prudent to increase the number of inspections of such facilities.<sup>77</sup>

These assessments were not fully shared by all States Parties.<sup>78</sup> However, based on the recognized relevance of OCPFs, the Review Document referred to the need to “take account of the OCPFs declared by States Parties, of their technical characteristics and activities, and trends in science and technology that impact on these parameters, to increase the number of OCPF inspections to the extent found appropriate as the budget unfolds in the ensuing years”, as well as to improve the selection algorithm by fully implementing all parts of the selection mechanism for OCPF inspections.<sup>79</sup> This should result in the redirection of industry inspection towards those OCPFs considered most relevant to the CWC. Such measures should increase confidence in the verification results obtained under Article VI and in the deterrent effect of the Article VI regime.

### *5.7 Consultations, cooperation and fact-finding*

A number of States Parties have used the informal bilateral consultations procedures, provided for in Article IX of the treaty, to consult and seek clarifications from a number of States Parties on the information provided in their declarations. For example, in its national statement, the United States stated that it “has utilised the consultative provisions of Article IX on numerous occasions to address our compliance concerns often with great success”.<sup>80</sup> In its national statement, the United Kingdom also stated that it had made use of these clarification provisions.<sup>81</sup> However, no State Party has yet utilized the formal consultation procedures involving the Executive Council.<sup>82</sup>

By the time of the RevCon, no challenge inspections had been requested or conducted.<sup>83</sup> However, several practice challenge inspections had been conducted, including a number in collaboration with OPCW inspectors.<sup>84</sup> The Technical Secretariat has also put into place the necessary internal procedures so that it can react rapidly and effectively when a request for such an inspection is made by a State Party. In relation to inspection team members, approved equipment and logistical support, a state of readiness is maintained that would allow the Secretariat to dispatch an inspection team at short notice.

By the time of the RevCon, no investigations of alleged use (IAU) had been requested or conducted. There have been a number of training exercises on IAU and delivery of assistance conducted by the OPCW and States Parties. These have highlighted the importance of human factors, such as interviewing techniques and the collection of evidence, and the need for appropriate equipment. As in the case of challenge inspections, the Secretariat has put in place the necessary internal procedures for an IAU to allow it to dispatch an inspection team at short notice.

A number of national statements referred to challenge inspections. The key issue raised was whether a State Party could request a challenge inspection without having undertaken prior consultations about the compliance concern. The United Kingdom made clear its interpretation of the Convention text, stating that “[t]he UK would not wait for prior consultations if concerns were serious and urgent enough to warrant an immediate Challenge Inspection”.<sup>85</sup> However, the Non-Aligned Movement and China proposed that challenge inspections “should be undertaken as a last resort and as part of the process of consultation and fact-finding”.<sup>86</sup>

This issue has been bubbling away since the “end-game” of the negotiations on the CWC and was a major issue in the PrepCom. Clearly, Article IX allows for a challenge inspection to be requested without prior consultation.<sup>87</sup> Unable to obtain agreement on this issue during the RevCon, the Review Document, after emphasizing the importance of challenge inspections, simply repeated the relevant parts of the Convention text (in particular the first sentence of Article IX, para. 2).

### *5.8 Sampling and analysis*

The CWC has general provisions permitting sampling and analysis during OPCW inspections, together with more specific requirements for particular types of inspection. To implement these provisions, the Technical Secretariat (with the support of States Parties) has developed and tested procedures for sampling and analysis, established a quality system, purchased equipment (including five transportable gas chromatography–mass spectrometer systems), and built up an analytical database. However, sampling and analysis have so far played a less prominent role in the conduct of OPCW inspections than was originally anticipated, which is partly a reflection of the requirements of initial inspections, and partly a result of technical, logistical and cost constraints.<sup>88</sup>

During the IUPAC workshop, recent technical developments in analytical chemistry methodologies were reviewed, with particular focus on those that might be applicable to routine and challenge inspections as well as investigations of alleged use of chemical weapons. The RevCon recognized the importance of sampling and analysis, including encouraging the Executive Council and the Technical Secretariat to work towards improving the effectiveness of industry inspections through sampling and analysis procedures.<sup>89</sup> However, there was no detailed discussion on some of the decisions taken previously that would limit the utility of the sampling and analysis, such as the use of “blinded analytical instruments”,<sup>90</sup> and the limitation of the OPCW analytical database to those chemicals listed in the CWC Schedules and their degradation products.<sup>91</sup>

### *5.9 Protection of confidential information*

One of the difficult issues faced by the OPCW since entry into force has been finding an acceptable balance between the need for transparency in its operations and the need to protect sensitive information. The Review Document reiterated the importance that it attaches to the need for the OPCW to thoroughly protect confidential information, in accordance with the provisions of the Convention; noted that there had been incidents that had not compromised the effectiveness of the OPCW's regime to protect confidentiality;<sup>92</sup> and encouraged the Technical Secretariat and States Parties to review their respective practices in assigning levels of classification of information with the intention of reducing the quantity of classified information. This would facilitate the smooth functioning of the OPCW system for protecting confidentiality.<sup>93</sup>

### *5.10 Review of relevant scientific and technological developments*

As discussed above, there were substantial reviews of relevant scientific and technological developments in a number of workshops during the 12 months prior to the formal two-week session of the RevCon, and a number of useful documents were prepared. The findings of the SAB were provided to the Executive Council for review. Unfortunately, apart from the half-day Open Forum, there was only limited opportunity to discuss these issues during the formal two-week RevCon session because of the priority given to concluding the drafting of the Political Declaration and the Review Document.<sup>94</sup>

### *5.11 Protection and assistance*

With respect to protection assistance (Article X), it was noted with concern that only 42 States Parties had provided information on national protective purposes programmes.<sup>95</sup> The requirement to evaluate the various assistance measures that States Parties have offered to a State Party if chemical weapons are used against it was also recognized.<sup>96</sup> The Director-General and a number of national statements referred to the importance of Article X, including in response to heightened concerns about CW terrorism, as well as the need to coordinate with other relevant international organizations.<sup>97</sup>

The terrorist attacks on the United States on 11 September 2001 increased the international community's awareness of the threat posed by non-conventional forms of terrorism, including chemical terrorism. Several national statements referred to the importance of universality, full

compliance of all States Parties with the CWC national implementation measures, and criminalization of the Convention's prohibitions as means to raise the barriers to chemical terrorism.<sup>98</sup> Providing emergency assistance under the provisions of Article X was also recognized as a key role for the OPCW in responding to an incident of chemical terrorism. The RevCon reaffirmed the decision of the Executive Council on the OPCW's contribution to the global struggle against terrorism, and noted that this work was continuing in the OPCW's working group on terrorism.<sup>99</sup>

### *5.12 Economic and technological development*

With respect to economic and technological development (Article XI), the RevCon reaffirmed the commitment of States Parties to implement the provisions of the Convention fully, and stressed the importance of international cooperation and assistance (ICA) in the promotion of the Convention as a whole, including universality, in keeping the chemical industry aware of the CWC and in maintaining its commitment to the full implementation of the Convention. Despite the progress to date with various ICA projects, a number of States Parties were critical of these achievements and argued for more ICA activities to take place. On the issues of "free trade" in chemicals and trade regulations, the RevCon saw a repeat of the debate that dates back to the CWC negotiations over whether the export licensing system of the Australia Group (AG) represents a legitimate means of assisting CWC States Parties in fulfilling their non-proliferation obligations stemming from the Convention, or whether the AG is inconsistent with the provisions of the CWC and should be abolished.<sup>100</sup> Given the differences of view being expressed, the RevCon chose simply to reiterate the relevant parts of Article XI in the Political Declaration and Review Document, and urged the Executive Council to "continue its facilitation efforts to reach early agreement on the issue of the full implementation of Article XI".<sup>101</sup>

### *5.13 Non-lethal weapons*

Another issue that was considered during the RevCon was non-lethal weapons (including riot control agents), as well as the use of toxic chemicals for law enforcement. As stated by the Director-General, "these issues need to be carefully analysed so as to prevent any potential harm to the Convention".<sup>102</sup> In the General Debate, the head of the Swiss delegation emphasized that the CWC prohibits all chemical weapons, including non-lethal chemical agents, and suggested that the Conference could ask States Parties to declare toxic chemicals held for more general law enforcement purposes as well as riot control purposes.<sup>103</sup> The non-

lethal CW issues were also referred to in the Report of the SAB<sup>104</sup> and were discussed at length during the Open Forum. Although there was no agreement to include specific mention of these issues in either the Political Declaration or the Review Document, these issues will need to be carefully considered by States Parties in the near future.<sup>105</sup>

## 6. Assessment of the first RevCon

At the conclusion of the RevCon, there were mixed feelings. On the one hand, there was a sense of relief among delegates that the meeting had not collapsed into disarray but had been able to finish almost on time, with an agreed Political Declaration and Review Document, without the acrimony and ill-will that had been displayed during the 2001–2002 BWC RevCon. (The CWC RevCon outcome was all the more remarkable in view of the provocative statement by the US delegation on the first morning of the meeting.)

On the other hand, some delegates questioned whether a thorough review of the Convention had actually taken place. In the margins of the meeting, some delegates commented that “this RevCon is like an annual session of the Conference of States Parties without the budget negotiations”. Outside observers noted that, “[w]ith respect to States Parties having critically evaluated their own individual and collective performance in implementing the CWC, there was a clear trend towards papering over shortcomings” and that “the similarity between topics raised and positions held during the most recent regular session of the CSP last October [i.e. 2002] and the Review Conference is revealing, suggesting that a large number of delegations were stuck in ‘business-as-usual’ mode, not inclined to take the step back necessary to look at the CWC’s operation in more generic terms”.<sup>106</sup> With respect to two of the most important specific issues under review, the RevCon “seems to have resolved little in respect of the Article VI inspection allocation debate” and “the disagreements and differences in approach amongst States Parties to Article XI are still unresolved”.<sup>107</sup> The RevCon outcomes were disappointing for those States Parties, NGOs and representatives of the International Committee of the Red Cross that had been hoping for substantive outcomes on issues such as riot control agents and non-lethal weapons.<sup>108</sup>

Disappointment was also expressed by NGOs at what they perceived to be their limited opportunity to contribute to the RevCon, noting that “increased participation by NGOs, academics and the industry representatives active in the CBW community, at an earlier stage, would be a welcome initiative”.<sup>109</sup> Nonetheless, in the IUPAC, NATO and Pugwash workshops, various NGOs (perhaps without realizing it) did play a key



role in the substantive review of key issues in the lead-up to the RevCon, including in relation to CW destruction issues, industry issues, scientific developments relevant to the CWC and non-lethal weapons. These workshops permitted useful informal interaction between NGOs and government officials, which helped form national positions.

Without question, the major focus of the two-week formal session was the final negotiation and drafting of the Political Declaration and the Review Document. So the RevCon was not a particularly enlightening experience.<sup>110</sup> Some of the above concerns are quite understandable coming from those capital-based officials and observers (including NGOs) who had not had the opportunity to be involved in the preparatory work for the RevCon, and who had become fully engaged only at the commencement of the formal two-week session.<sup>111</sup>

Arguably the most useful outcome of the RevCon was the remarkably harmonious atmosphere during its latter stages, in no small part owing to the very positive influence of the recently appointed Director-General, which made it possible to achieve the Political Declaration and Review Document by consensus, and also restored a substantial degree of consolidation and common purpose to the OPCW. However, that should not detract from the review itself. In my view, taking into account the magnitude of the task of reviewing a treaty as complex as the CWC, the RevCon did achieve a substantial review of most of the aspects of the operation of the CWC in light of the changing international relations climate, the early experience of the OPCW and scientific and technological developments.

## 7. Issues that might have been key RevCon issues

From the perspective of one who has been involved in the negotiation and the various phases of implementation of the CWC for the past 20 years, one of the most interesting aspects of the RevCon was how a number of issues that were considered to be potential “treaty stoppers” in the “end-game” of the negotiations of the CWC in 1992, and that at that time might have been expected to feature very prominently at the first RevCon, did not cause major concerns. These issues included: the declaration and routine verification of “other chemical production facilities”; the composition of the Executive Council; the initiation and conduct of challenge inspections; the destruction of CW stockpiles and former CW production facilities; and export controls on CW dual-use items.<sup>112</sup>

For example, with respect to the OCPF issue,<sup>113</sup> the reviews of this issue conducted during 2002 by the SAB and the IUPAC and NATO

workshops concluded that OCPFs are the area where the impact of recent technological developments is most relevant and recommended that it would be prudent to increase the number of inspections of such facilities. Thus, by late 2002, this issue was no longer considered controversial, and this RevCon outcome was used prior to the formal RevCon session (by the seventh regular session of the CSP in October 2002) as the basis for agreeing on a programme of 132 Article VI inspections for 2003, which included 60 DOC inspections.<sup>114</sup>

With respect to challenge inspections, in 1992 there were divergent views about the intrusiveness of inspections compared with the need for States Parties to protect sensitive information unrelated to the CWC, and the role of the Executive Council to protect States Parties against any frivolous or abusive inspection request. These divergent views still exist, although the fact that no challenge inspections had been conducted yet reduced the prominence of this issue during the RevCon.<sup>115</sup>

The composition of the Executive Council caused a major headache in 1992. There were concerns among a number of negotiators and future States Parties that, based on the composition formula that was being developed, they would not receive a reasonable opportunity to participate in the deliberations of the Executive Council. However, as a result of the liberal use of Executive Council Rule of Procedure 22, any State Party can actively participate in the various issues being considered by the Executive Council, including the presentation of national papers, which has resulted in a reasonably high level of satisfaction with the operation of the Executive Council.<sup>116</sup>

With respect to the various issues related to the destruction of CW stockpiles and former CW production facilities and associated verification activities, the negotiations of these provisions (primarily by Russia and the United States) were marked by serious concerns about “undiminished security” during the 10-year destruction programmes through the “levelling-out” of stockpiles. The total destruction of CWPFs was seen as essential to ensure that no “stand-by” capacity for production of chemical weapons could be retained by any State Party. However, with the changing security environment, the States Parties are no longer focused on undiminished security during the destruction phase, and are more comfortable about extending destruction deadlines and reducing the level of OPCW verification associated with CW stockpiles, provided the CW stockpiles are stored securely to avoid the theft of chemical weapons that could then be used for terrorist purposes.<sup>117</sup> Similarly, many of the former CWPFs have been approved for conversion to “purpose not prohibited”, even though in 1992 an approval for conversion was expected to be a decision approved “in exceptional cases of compelling need”.<sup>118</sup>

The issue of export controls on CW dual-use items, particularly if applied to other States Parties, continued to be a contentious issue through the PrepCom period and in the first few years of the operational CWC. However, as discussed in section 5.12, with greater concerns about the possibility of chemical terrorism since 11 September 2001, there is increasing recognition by many States Parties of the security benefits of having national export controls in place, based on the AG listed items, as well as domestic monitoring procedures for the AG listed items.

Hence, a number of formerly very contentious issues that might have been expected to figure very prominently at the first RevCon barely caused a ripple. This was the result of several factors, including the changing security environment and the fact that a number of “worst-case” scenarios in the minds of the Geneva negotiators did not eventuate. In my view, this is not an indication that the RevCon did not achieve a substantial review of most of the aspects of the operation of the CWC.

## 8. Concluding comments – two years later

In an ideal world (and indeed as predicted by the optimists in the euphoric days following the CWC signing ceremony in Paris in January 1993), there would have been 65 ratifications (including Russia and the United States) by July 1994, followed by a smooth transition from the Preparatory Commission to the operational Convention at an entry into force in early 1995; by the end of 1995 the OPCW would have been humming along smoothly with 160-plus States Parties; the first RevCon would have been convened in early 2000; and by June 2005 the OPCW would have been approaching its tenth anniversary, and the destruction of the US and Russian CW stockpiles would have been almost completed. Everybody would have marvelled at what could be achieved in arms control and disarmament in the post-Cold War era.

Back in the real world, we have rather a different situation. The OPCW has just passed its eighth anniversary, with both of the major CW-possessors indicating that they will not achieve their 10-year CW destruction deadlines and will be seeking extensions. We also still have a majority of States Parties that have not yet fully complied with their national implementation obligations under Article VII. But it is important to recognize the positives. In particular, since entry into force, six States Parties have declared CW stockpiles, totalling more than 71,000 tonnes. In over 1,200 CW-related inspections, the OPCW’s inspectors have verified the destruction of more than 2.2 million munitions and containers, as well as more than 11,500 tonnes of CW agents. All of the 64 CW production facilities declared by 12 States Parties have been de-activated, de-

stroyed or converted. OPCW inspectors have conducted more than 900 routine inspections of chemical industry sites in 72 States Parties, to provide assurance that these facilities do not engage in any activity that is prohibited by the Convention. The OPCW budget for 2004 was increased by 6.7 per cent from the 2003 budget, which provided a considerable increase in resources available for verification as well as for other OPCW activities.<sup>119</sup> Moreover, intensive consultations have commenced on the optimization of verification, with progress anticipated on considerably reducing the size of inspection teams for verification of CW destruction.<sup>120</sup>

Acting upon a recommendation of the RevCon, the Executive Council adopted an Action Plan in October 2003 for the Universality of the CWC, which urges States Parties to undertake further efforts to promote the universality of the Convention. And, in the 12 months after the first RevCon, another 16 States had either ratified or acceded to the CWC, bringing the total number of States Parties to 167.<sup>121</sup> At the same time, following a recommendation of the RevCon, the Conference of the States Parties in November 2003 adopted another OPCW Action Plan aiming at the adoption by all States Parties by the end of 2005 of the required national implementation measures, including legislation, regulations and administrative measures, transfer controls for scheduled chemicals and certain measures required under Article X.

It would be difficult to make a completely objective assessment of the extent to which the useful activities outlined above can be directly credited to the successful outcomes of the RevCon. For example, efforts to increase universality and more effective implementation have been ongoing since the Convention's entry into force (and these efforts were given extra impetus following the increased concerns about CW terrorism in the wake of 11 September 2001).<sup>122</sup> In my view, the useful outcomes that have taken place since the first RevCon cannot be totally attributed to the RevCon per se but should be seen as actions taken by the OPCW in response to the changing security environment. Although these activities were commenced well before the RevCon, the RevCon gave the various activities and initiatives a useful "boost". What has been confirmed by the positive outcomes since the RevCon is that, 12 years after it was opened for signature and 8 years after its entry into force, the CWC is still justifiably regarded as setting the benchmark for verification in a multilateral arms control treaty.

Despite the problems experienced so far, the OPCW has performed remarkably well for a young international organization. However, the OPCW faces a number of serious challenges in the coming years, including: universality; full adherence by all States Parties to the CWC's legislative requirements; improved decision-making by the Executive Council; maintaining the competence of the Technical Secretariat (in particular,

the inspectorate) while implementing the tenure policy; balancing the competing priorities within the limited OPCW budget; making optimal use of new monitoring techniques so that verification of CW destruction is less resource intensive; maintaining a credible number of industry inspections with a broad geographical distribution; a better appreciation of export licensing issues; a better appreciation of the CWC obligations with respect to chemical incapacitants; further development of the OPCW response to chemical terrorism; and greater transparency in the operations of the OPCW. So the big question is: Will the Review Document assist the OPCW and States Parties in addressing these challenges over the next five years? In my view, the Review Document, although not particularly ambitious, does provide a useful “road-map” to assist the OPCW in meeting these challenges.

At the conclusion of the RevCon, there was a strong sense that the States Parties and OPCW had moved beyond the difficulties that they had faced during the PrepCom and the early years after entry into force, and that the first review had indeed been a useful process that would guide the OPCW towards maturity over the next several years. The sense of goodwill, cooperation and common purpose engendered during the RevCon has since been maintained. However, despite the promising outcomes from the first RevCon and the positive results since then, the OPCW will continue to mature as an organization and fulfil the objective of a world free of chemical weapons only if all States Parties demonstrate maturity and resolve to follow the “road-map” as we move towards the Second RevCon in 2008. Only time will tell.

## Notes

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The author is a Principal Research Scientist in Australia’s Defence Science and Technology Organisation, and a Principal Fellow/Associate Professor in the Faculty of Law, University of Melbourne. He was scientific adviser to the Australian delegation of the Conference on Disarmament in Geneva from 1984 until 1992, and since then has been scientific adviser to the Australian delegation of the OPCW in The Hague. The views expressed in this chapter are those of the author and do not necessarily reflect those of the Australian government.

1. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC), opened for signature 13 January 1993, entered into force 29 April 1997.

2. See, for example, M. Letts, R. J. Mathews, T. L. McCormack and C. Moraitis, "The Conclusion of the Chemical Weapons Convention: An Australian Perspective", *Arms Control* 14, 311 (1993).
3. The Conference of States Parties is the principal organ of the OPCW, which is composed of representatives of all States Parties. During the negotiation of the CWC, this principal organ was originally referred to as the "Consultative Committee" (see, for example, pp. 19–23 of *Report of the Ad Hoc Committee on Chemical Weapons to the Committee on Disarmament*, CD/539, 28 August 1984, which is generally regarded as the first "Rolling Text" of the CWC). During 1988, there was a preference among some delegations for the term "General Conference" (see, for example, *Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament*, CD/874, 12 September 1988, pp. 31–34), and from 1989 the principal organ was referred to as the Conference of States Parties.
4. For example, the 1986 CWC "Rolling Text" stated "The Consultative Committee shall . . . after the expiry of a period of . . . years from the date of entry into force of this Convention, undertake a review of the operation of this Convention in accordance with Article . . .", with the following footnote: "Some delegations were of the view that provisions on review should be more appropriately included in another part of the Convention." See *Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament*, CD/727, 21 August 1986, pp. 45–46.
5. Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC), opened for signature 10 April 1972, entered into force 26 March 1975.
6. Comprehensive Nuclear-Test-Ban Treaty (CTBT), opened for signature 24 September 1996, not yet in force.
7. Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Landmines and on Their Destruction, opened for signature 18 September 1997, entered into force on 1 March 1999 (the Ottawa Treaty).
8. In accordance with Article VIII, paras 9–22, the CSP convenes in both "regular sessions" and "special sessions". A regular session of the CSP is often referred to as an "Annual Conference of States Parties" (Annual CSP), and a special session to review the Convention is usually referred to as a "Review Conference" (RevCon). Other special sessions are convened as necessary to consider particular issues – as discussed in section 3, special sessions have so far been convened in April 2001 to consider the Director-General position and in May 2003 to take a decision on the implementation of OPCW staff tenure policy.
9. CWC, Article VIII, para. 22.
10. This applies, for example, to the reviewing of "scientific and technological developments", wording that appears in both para. 21(h) and para. 22. From informal discussions in the margins of the first RevCon, it became clear that the intent of paragraphs 20, 21 and 22 was causing confusion to some of the RevCon participants who were not familiar with the negotiation history of the CWC. Indeed, paragraphs 20 and 21 list a number of functions of the Conference, with some functions relating specifically to Annual CSPs and others also relating to the RevCon and other "special sessions". For example, compliance with the Convention (para. 20) may be reviewed at Annual CSPs as well as at the RevCons, and a particular compliance concern (e.g. as outlined in para. 21(k)) may well be considered at a special session, requested in accordance with para. 12, to consider this particular compliance concern. Confusion about the various types of session of the CSP may have been one reason why some delegates and observers questioned whether there was a substantial difference between the review process un-

- dertaken at the RevCon and the reviews undertaken at the Annual CSPs (see section 6). This distinction might have been clearer if there had been a separate Article covering the provisions of the Review Conference (as discussed above).
11. Treaty on the Non-Proliferation of Nuclear Weapons (NPT), opened for signature 1 July 1968, entered into force 5 March 1970.
  12. CWC, Article VIII, para. 22. Interestingly, during the negotiation, there was a view among some delegations that there might be a requirement for more frequent RevCons in the first 10 years after entry into force (see, for example, *Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament*, CD/874, 12 September 1988, p. 34, para. 4). However, by 1992, most negotiators recognized that this would not be necessary (although the wording finally agreed in CWC, Article VIII, para. 22, does not preclude RevCons being convened more frequently than five-yearly intervals).
  13. In accordance with CWC, Article VIII, para. 22, Review Conferences of the CWC beyond the second RevCon shall be convened “unless otherwise decided upon”, whereas Review Conferences of the NPT beyond the first RevCon shall be convened if proposed by a majority of States Parties (NPT, Art. VIII, para. 3). According to the text of the BWC, a RevCon shall be convened five years after entry into force if proposed by a majority of States Parties (BWC, Art. XII). The BWC is silent with respect to the convening of subsequent RevCons; however, the BWC States Parties have subsequently decided to convene RevCons at approximately five-yearly intervals.
  14. The RevCon provisions are contained in Art. 12.
  15. Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, opened for signature 10 October 1980, entered into force 2 December 1983. Also referred to as the 1980 Certain Conventional Weapons Convention (CCW). For a discussion of the CCW RevCons, see Robert J. Mathews, “The 1980 Convention on Certain Conventional Weapons: A Useful Framework despite Earlier Disappointments”, *International Review of the Red Cross* 83 (December 2001), pp. 991–1012.
  16. CTBT, Article VIII.
  17. Many experts regard OCPFs or “CW-capable” facilities as most applicable with respect to recent CW proliferation programmes. See R. J. Mathews, “Intention of Article VI: An Australian Drafter’s Perspective”, in *OPCW Synthesis* (November 2000), pp. 10–13.
  18. For a useful summary of the “end-game” issues, see Chairman of the Ad Hoc Committee on Chemical Weapons, *Explanatory Note on the Draft Chemical Weapons Convention*, in Document CD/CW/WP/Rev.1, CD/WP/WP.414, 26 June 1992 (Geneva).
  19. Although not explicitly stated, the understanding was that, if the Part IX provisions presented major problems with minimal verification benefits (as was being argued would happen by some of the negotiators opposed to provisions in Part IX), then the first RevCon would be followed by an Amendment Conference to adjust the provisions of Part IX to result in a more effective overall regime.
  20. CWC Verification Annex, Part IX, para. 26.
  21. In accordance with CWC, Article VIII, para. 32(c).
  22. The seventh regular session of the CSP in October 2002 approved the recommendation of the Executive Council that the first CWC RevCon commence on 28 April 2003, in accordance with CWC Article VIII, para. 22, and would have a duration of two weeks. (Note that the RevCon commenced one day short of six years after entry into force – just making the specified Convention timeline.)
  23. In late 2001, the United States accused the Director-General (Ambassador José Bustani of Brazil) of poor management, particularly of OPCW finances, and signalled its

- view that a new Director-General should be appointed. Eventually, the first special session of the CSP, which was convened on 21 April 2002, voted to end the tenure of Bustani. The first special session of the CSP was reconvened on 25 July to appoint Ambassador Rogelio Pfirter as the new Director-General. For more details, see Robert J. Mathews, "The OPCW at Five: Balancing Verification in Evolving Circumstances", in Trevor Findlay and Oliver Meier (eds), *Verification Yearbook 2002* (London: Verification Research, Training and Information Centre, 2002), pp. 53–73.
24. For a detailed discussion of the budget issues, see Mathews, "The OPCW at Five", pp. 55–56.
  25. In 2002, many governments were putting greater resources into other arms control issues. In particular, following the suspension of the fifth BWC RevCon in December 2001, considerable diplomatic efforts were undertaken by BWC States Parties to try to develop useful outcomes from the BWC RevCon, which was reconvened in November 2002.
  26. *Note by the Director-General to the First Review Conference*, OPCW document RC-1/DG.1, 17 April 2003.
  27. *Note by the Director-General. Report of the Scientific Advisory Board on Developments in Science and Technology*, OPCW document RC-1/DG.2, 23 April 2003.
  28. *Background Paper on the Conduct of Inspections Under the Chemical Weapons Convention and Related Issues*, OPCW document RC-1/S/1, 17 April 2003; *Background Paper on International Cooperation Programmes*, OPCW document RC-1/S/2, 22 April 2003; *Implementation Support*, OPCW document RC-1/S/3, 13 April 2003; *Background Paper on Assistance and Protection Programmes*, OPCW document RC-1/S/4, 24 April 2003; *Background Paper on Universal Adherence to the Chemical Weapons Convention*, OPCW document RC-1/S/5, 25 April 2003; *Background Paper. Consolidated Unclassified Verification Implementation Report (April 1997–31 December 2002)*, OPCW document RC-1/S/6, 25 April 2003; *Background Paper on the Implementation of the Confidentiality Regime*, OPCW document RC-1/S/7, 25 April 2003 (documents available at <http://www.opcw.org>).
  29. The national papers are available at <http://www.opcw.org>.
  30. IUPAC, "Impact of Scientific Developments on the Chemical Weapons Convention. Report by the International Union of Pure and Applied Chemistry to the Organisation for the Prohibition of Chemical Weapons", *Pure and Applied Chemistry* 74:12 (2002), pp. 2323–2352.
  31. For a summary of the conclusions from the workshop, see Graham S. Pearson, *Maximising the Security Benefits from the First Review Conference of the Chemical Weapons Convention*, First CWC Review Conference Paper No. 2 (Bradford: Department of Peace Studies, December 2002).
  32. Further development of such items may reduce the current levels of "inspector presence" deemed necessary at CW-related facilities, and allow development of rapid screening methodologies using portable analytical equipment to support verification.
  33. It was recognized that it would be necessary to review current verification procedures to ensure that the Convention remains effective. For example, many verification-related decisions were adopted on an interim basis on the understanding that the issues would be further considered and refined as the OPCW gains experience.
  34. Of the (then) 151 States Parties, 113 attended the RevCon. Also in attendance were two signatory States (Haiti and Israel) and two non-States Parties (Libya and Angola). In addition, 5 international organizations (the European Space Agency, the International Committee of the Red Cross [ICRC], the Permanent Court of Arbitration, the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty and the United Nations Institute for Disarmament Research), 22 non-governmental organizations and 6 industry associations were approved to attend the RevCon.



35. *Opening Statement by the Director-General to the First Review Conference*, OPCW document RC-1/DG.3, 28 April 2003.
36. *US Delegation to the OPCW: United States of America, National Statement to the First Review Conference of the Chemical Weapons Convention by Assistant Secretary of State for Arms Control, Stephen G. Rademacher*, The Hague, 28 April 2003.
37. The US statement also alleged that three states not party – Syria, Libya and North Korea – were developing chemical weapons. As discussed in note 121, Libya subsequently acceded to the CWC, and its CW stockpile has been declared and is currently being destroyed under OPCW verification.
38. *The Statement by the delegation of the Islamic Republic of Iran, exercising the right to reply in response to the US delegation statement*, The Hague, 28 April 2003.
39. The Political Declaration was a 23-paragraph document intended to be accessible to those without an in-depth understanding of the Convention or chemical weapons. See *Political Declaration of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention*, RC-1/3, 9 May 2003 (available on the OPCW website <<http://www.opcw.org>>).
40. The Review Document, item seven of the report of the RevCon, was a detailed 134-paragraph document containing the outcomes and recommendations following the substantive review of the operation of the Convention. See *Report of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention*, RC-1/5, 9 May 2003 (available on the OPCW website <<http://www.opcw.org>>).
41. Copies of presentations and a verbatim transcript of the discussions sessions are available at the Harvard Sussex website: <<http://www.sussex.ac.uk/spru/hsp/publications>>.
42. At the time of the RevCon, there were 151 States Parties, including the United States and Russia (the two largest possessors of chemical weapons); the major chemical producing and exporting states of Europe and Asia; and many of the major developing states with a chemical production capability. There were still 25 signatory states that had not ratified and 18 non-signatory states. Of particular concern is that a number of countries causing concerns about CW proliferation had not even signed the CWC, including Egypt, Iraq, Libya, Syria and North Korea. A significant number of developing countries had also yet to ratify the CWC.
43. This was based on the fallacy that was argued during the Preparatory Commission (PrepCom) that “developed” countries have more to gain than “developing” countries in terms of security benefits, and that “developing” countries would need a “carrot” in the form of increased funding for international cooperation activities to provide them with an incentive to join the CWC.
44. Review Document, para. 18.
45. Robert J. Mathews and Antony S. Taubman, “Preparing for Implementation of the Chemical Weapons Convention: Progress during 1993”, in *Verification 1994* (London: Verification Technology Centre, 1994), pp. 111–128.
46. The following outstanding issues are currently being considered in the “industry issues cluster”: low concentration limits for Schedule 2A and 2A\* chemicals; captive use; boundaries of production; transfers of Schedule 3 chemicals to non-States Parties; and development of proposals by States Parties for the selection of OCPF sites for inspection.
47. Review Document, para. 123.
48. There was agreement at the fourth regular session of the CSP in 1999 that the maximum tenure of Technical Secretariat staff should be seven years, based on the agreement among the States Parties that the OPCW should not offer “career positions”. The decision on the starting date for the introduction of the policy, 2 July 1999, was finally

- adopted by the second special session of the CSP on 30 April 2003. The agreement included the possibility that the Director-General could, as an exceptional measure, in order not to compromise the effectiveness of the OPCW, be permitted until 1 January 2009 to extend the contracts of individual staff members beyond seven years.
49. As stated in the report on national implementation measures dated 17 March 2003, only 82 states (representing 52 per cent of States Parties) had made submissions in compliance with Article VII paragraph 5 obligations. Only 42 states (28 per cent of States Parties) had reported having legislation covering all key areas. For 108 States Parties, there were either no legislation in place, gaps in the legislation or an unknown legislative situation. See *CBW Conventions Bulletin*, March 2003, p. 7.
  50. *Note by the Director-General*, OPCW document RC-1/DG.1, para. 4.9.
  51. Review Document, para. 83.
  52. Indeed, a more pragmatic view has been taken by many States Parties as a consequence of the greater recognition of the potential terrorist threat from toxic chemicals not on the CWC Schedules.
  53. However, the expression “comprehensive nature of the prohibition of chemical weapons” was used instead of the more familiar expression “general purpose definition”. See Review Document, paras 21–23.
  54. This issue has been recognized for some time. For example, in a PrepCom Working Paper issued in 1996, the Islamic Republic of Iran recognized the relevance of a number of non-Scheduled chemicals for export licensing purposes. (Islamic Republic of Iran, “Implementation of Article XI in the Field of Chemical Trade”, PC-XV/B/WP.6, 5 November 1996).
  55. By March 2003, OPCW inspectors had verified the destruction of approximately 7,305 tonnes of chemical agents and approximately 2 million munitions. India and the Republic of Korea are expected to meet the CWC 10-year CW destruction deadline. However, by that time, some semi-official US sources had suggested that the United States might have difficulty in meeting the 10-year timeline (see section 7).
  56. *Statement by the Russian Federation at the First Session of the Conference to Review the Functioning of the Chemical Weapons Convention*. The 1 per cent destruction represents the target for the first intermediate destruction deadline, which, according to Part IV(A) of the CWC’s Verification Annex, should have been met three years after entry into force. Russia was granted an extension to this deadline by the Executive Council in 2000.
  57. However, the approximately 15 tonnes of CW agents discovered in Albania are apparently no longer usable and the destruction should not pose major problems.
  58. For example, the United States stated that “[d]estruction of chemical weapons, on the whole, is not proceeding at the rate foreseen in the Convention, and this lack of progress must concern us all”. See *US Delegation to the OPCW: United States of America, National Statement to the First Review Conference of the Chemical Weapons Convention*, p. 5.
  59. The United Kingdom, referring to Russia’s destruction of 1 per cent of its stockpile, stated: “While this is to be welcomed, there has to be disappointment at the delays in meeting even this modest target some three years late.” See United Kingdom of Great Britain and Northern Ireland, *First Review Conference of the Chemical Weapons Convention. Statement by Dr Denis MacShane MP, Minister of State for Europe, Foreign and Commonwealth Office*, The Hague, 29 April 2003.
  60. Although, by the “end-game” of the negotiations in Geneva in 1992, Russia had clearly stated that it would be difficult for it to meet the 10-year destruction deadline without considerable assistance from other countries.
  61. Review Document, paras 10 and 42.

62. Approximately 85 per cent of the inspection resources have been used for Article IV and V verification since entry into force (RC-1/S/1, para. 12.1).
63. In accordance with CWC, Article IV, para. 13.
64. This “Convention requirement” is based on a particular interpretation of the words “verification through continuous monitoring with on-site instruments and physical presence of inspectors”, which appear in the CWC Verification Annex, Part IV(A), para. 59(b) (with respect to destruction of CW), Part V, para. 40 (with respect to destruction of former CW production facilities) and Part V, para. 83 (with respect to conversion of former CW production facilities). When the text was negotiated, it was my understanding that the word “continuous” referred to “monitoring with on-site instruments”, and that there was not a Convention requirement for continuous presence of inspectors. During the PrepCom, the more stringent interpretation was adopted.
65. John Gee, “The CWC and the Task of Eliminating Chemical Weapons: The First Five Years”, Opening Address to the International Chemical Demilitarisation Conference, The Hague, 21–23 May 2002. Available at: [http://www.opcw.org/html/global/speeches/dera\\_2k2.html](http://www.opcw.org/html/global/speeches/dera_2k2.html).
66. See *Note by the Director-General*, OPCW document RC-1/DG.1, p. 7.
67. Review Document, paras 45 and 46.
68. For example, only 36 per cent of initial declarations were submitted within the specified time frame, and, by the end of 1999, 26 per cent of the States Parties still had not submitted their initial declarations.
69. In addition, many States Parties have failed to notify points of entry for inspection teams and also failed to give notification of their National Authority, which complicates inspection planning by the Technical Secretariat.
70. See *Note by the Director-General*, OPCW document RC-1/DG.1, pp. 10–11. Unfortunately, there was no agreement by the RevCon on the Director-General’s “nil declaration” proposal.
71. Review Document, para. 39(b).
72. As has been discussed previously, it became apparent during the negotiation of the CWC that, because of uncertainty about the number of facilities that would be declared under Schedules 1, 2 and 3 and as DOC facilities, as well as their relative risk to the object and purpose of the CWC, it would be impractical to attempt to develop rigid solutions in the Convention text. The nature of the practical verification problems involved would become apparent only in the course of implementation of the CWC. See Mathews, “Intention of Article VI”.
73. For example, the seventh regular session of the CSP agreed on a programme of 132 Article VI inspections for 2003, with 16 Schedule 1, 38 Schedule 2, 18 Schedule 3 and 60 OCPF inspections, compared with the agreed distribution for 2002 of 18 Schedule 1, 40 Schedule 2, 42 Schedule 3, and 32 OCPF inspections.
74. For example, Iraq used a number of Schedule 3 and DOC-type facilities in its CW production programme in the 1980s. See Mathews, “Intention of Article VI”, pp. 10–13.
75. Although minor problems have occasionally arisen in the course of some inspections, for the most part they have been carried out smoothly and with the full cooperation of the inspected State Party.
76. *Note by the Director-General*, OPCW document RC-1/DG.1, p. 12.
77. Para. 4.4(a), *Note by the Director-General*, OPCW document RC-1/DG.2.
78. For example, Pakistan stated that “[i]ncrease in emphasis on verification and inspection of facilities producing relatively harmless discrete organic chemicals (DOCs) should not be at the expense of higher risk Schedule 1, 2 and 3 chemicals listed in the Annex to the CWC.” See *Statement to the First Special Session of the Conference of*

- States Parties to Review the Operation of the Chemical Weapons Convention by Mr. Mustafa Kamal Kazi, Ambassador and Permanent Representative of Pakistan to the OPCW, The Hague, 30 April 2003.*
79. Review Document, para. 69(a)–(d).
  80. *US Delegation to the OPCW: United States of America, National Statement to the First Review Conference of the Chemical Weapons Convention*, p. 4.
  81. United Kingdom of Great Britain and Northern Ireland, *First Review Conference of the Chemical Weapons Convention. Statement by Dr Denis MacShane MP*, p. 5.
  82. CWC, Article IX, paras 3–7.
  83. It is interesting to note that the United States has expressed concerns that some States Parties are not in full compliance with the CWC, but so far has chosen to seek clarification through bilateral consultations rather than request a challenge inspection.
  84. One of these exercises simulated the entire challenge inspection process from the submission of the request, the convening of a special session of the Executive Council to consider the request, through to the preparation of a final report. These practice inspections are seen as valuable experience for the Executive Council, the Technical Secretariat and States Parties in preparing for the possibility of a real challenge inspection.
  85. United Kingdom of Great Britain and Northern Ireland, *First Review Conference of the Chemical Weapons Convention. Statement by Dr Denis MacShane MP*.
  86. *Statement by Ambassador Noor Farida Ariffin, Permanent Representative of Malaysia to the Organisation for the Prohibition of Chemical Weapons on Behalf of the States Parties of the Non-Aligned Movement to the Chemical Weapons Convention and China, The Hague, 30 April 2003*, p. 5.
  87. Article IX, para. 2, states: “Without prejudice to the right of any State Party to request a challenge inspection, States Parties should, whenever possible, first make every effort to clarify and resolve, through exchange of information and consultations among themselves, any matter which may cause doubt about compliance with this Convention, or which gives rise to concerns about a related matter which may be considered ambiguous.”
  88. As discussed above, the major focus of Article VI inspections in the early years was conducting initial inspections of Schedule 1 and 2 facilities, which have not required sampling and analysis. The transportable gas chromatography–mass spectrometer systems present practical and logistic problems, being heavy and expensive to transport and having long set-up times at the inspection site. An additional technical issue is how the analysis equipment would be used to verify the “absence of any Schedule 1 chemical”.
  89. Review Document, para. 71(c).
  90. Blinded analytical equipment uses special “blinded software” and a restricted database to provide only “presence/absence” information on CWC-related chemicals.
  91. However, the SAB has recommended that the OPCW expand the database to cover other chemicals, including certain non-scheduled chemicals that have the potential to be used in chemical warfare. See *Note by the Director-General*, OPCW document RC-1/DG.2, para. 5.10.
  92. The report on the implementation of the confidentiality regime in 2002 noted that, in 2002, the Office of Confidentiality and Security had received only three reports of minor incidents involving breaches of confidentiality procedures, none of which resulted in disclosure of confidential information, either within or outside the Secretariat. See *CBW Conventions Bulletin*, No. 59 (March 2003), p. 4.
  93. Review Document, paras 111–119.
  94. There were a number of very interesting presentations during the lunch breaks at the Exhibition Area in the basement of the conference building, which unfortunately were

not particularly well attended. In my view, it would have been useful if one half-day of the RevCon had been allocated for presentations of the key issues by senior Technical Secretariat staff members.

95. As required by CWC Article X, para. 4.
96. By April 2003, only 65 States Parties had complied with this obligation under Article X, para. 7.
97. Review Document, paras 94–101.
98. In particular, the requirement under Article I to destroy all chemical weapons would make such weapons less accessible to terrorist groups. The requirements of Article VII to criminalize the prohibitions of the CWC and enact effective penal legislation would reduce the possibility that a CWC State Party could inadvertently become a safe haven for those who use chemical weapons as a tool of terror, and would hence help reduce the threat posed by chemical terrorism. Likewise, the transfer (export control and monitoring) obligations under Article VI would serve to reduce the risk of diversion of toxic chemicals (either weaponized chemical weapons, precursors of military chemical agents, including those listed in the CWC Schedules, or other toxic chemicals) for terrorist uses.
99. Review Document, para. 10.
100. India, which has been a major advocate of the abolition of the AG since the early 1990s, and a number of other States Parties that have been critical of the AG have recently adopted their own national export licensing systems, using lists similar to those developed by the AG. Since 11 September 2001, a number of States Parties have also placed domestic monitoring procedures in place, again based on the AG listed items. This has tended to take the sting out of the argumentation for the abolition of the AG, which, according to informal comments by a number of representatives from various regional groups, had become “ritualistic” during the RevCon.
101. Review Document, para. 107(a).
102. *Note by the Director-General*, OPCW document RC-1/DG.1, pp. 7–8.
103. See *CBW Conventions Bulletin, News Chronology*, 28 April 2003. Switzerland was apparently encouraged by a number of States Parties not to proceed with this proposal during the First RevCon, on the basis that it was considered “contentious” by some States Parties, which expressed the view that a detailed debate on this issue might have jeopardized the successful conclusion of the RevCon.
104. *Note by the Director-General*, OPCW document RC-1/DG.2, p. 15.
105. The Review Document simply stated: “The First Review Conference considered the impact of developments in science and technology on the Convention’s prohibitions. The definitions contained in Article II, in particular of the terms ‘chemical weapons’ and ‘chemical weapons production facility’, were found to adequately cover these developments and to provide for the application of the Convention’s prohibitions to any toxic chemical, except where such a chemical is intended for purposes not prohibited by the Convention, and as long as the types and quantities involved are consistent with such purposes” (Review Document, para. 23).
106. Alexander Kelle, “The CWC after Its First Review Conference: Is the Glass Half Full or Half Empty?”, *Disarmament Diplomacy*, No. 71 (June–July 2003).
107. “Where to from Here: The First Review Conference and the Next Five Years”, *CBW Conventions Bulletin*, No. 60 (June 2003), pp. 1–5.
108. In this context, particular disappointment was expressed by the representative of the ICRC, who claimed that the ICRC had been blocked from presenting its prepared statement (which contained several references to chemical incapacitants) to the General Debate of the RevCon. According to a US government official, the ICRC was blocked by the US Ambassador, who apparently felt that the ICRC statement on

- chemical incapacitants “would have distracted the Conference from more pressing matters” (see *CBW Conventions Bulletin, News Chronology*, 30 April 2003).
109. “Where to from Here”, p. 4.
  110. Indeed, the RevCon emphasized the divide between the 25 or so States Parties that are actively involved in the day-to-day activities of the OPCW, using a combination of Hague-based diplomats and experts from capitals, and the majority of States Parties, which do not have the resources closely to follow the more detailed aspects of the operation of the CWC. In my view, the RevCon did not cater particularly well for the latter group.
  111. It was inevitable that a considerable part of the formal two-week RevCon session was devoted to drafting a Political Statement and Review Document. But it is to be hoped that at the formal RevCon session to be convened in 2008 the Technical Secretariat and more active States Parties will make the review process more informative for the capital-based delegates who have limited capability to follow issues closely. This could occur, for example, by providing more briefing sessions by senior Technical Secretariat personnel, so that all delegates from capitals will be able to obtain a better sense of the overall review process and a better appreciation of the particular issues being reviewed than was possible during the First RevCon.
  112. See, for example, Chairman of the Ad Hoc Committee on Chemical Weapons, *Explanatory Note on the Draft Chemical Weapons Convention*, in Document CD/CW/WP/Rev.1, CD/WP/WP.414, 26 June 1992 (Geneva).
  113. As discussed in sections 2 and 3.
  114. By comparison, only 32 of the 132 Article VI inspections approved in the 2002 budget were allocated for DOC inspections.
  115. In 1992, there was an expectation in some quarters that there might have been at least three or four challenge inspection requests a year in the early years of the operational CWC. As discussed above, a number of States Parties have used the clarification procedures, as set out in Article IX, paras 3–7, to resolve their compliance concerns.
  116. Perhaps most notable in this respect was the key role taken by Canada, while an observer in the Executive Council in 1997–1998, in the consideration of transfers of small quantities of Saxitoxin (a Schedule 1 chemical used in many countries for medical and diagnostic purposes). The first use of the simplified amendment procedure for administrative or technical purposes (Article XV, paras 4 and 5) resulted in a new provision for transfers of very small quantities of Saxitoxin (para. 5*bis* in Part VI of the Verification Annex).
  117. Indeed, although such resource-intensive verification of CW destruction might have appeared necessary when the provisions were being developed in the later stages of the Cold War, it is difficult to see why such rigorous verification is warranted in the current international climate, in which the presidents of the United States and Russia have issued a joint statement that neither regards the other as an enemy or a threat. For example, the *Joint Statement by President George W. Bush and President Vladimir V. Putin on a New Relationship between the United States and Russia* (White House, 14 November 2001) included the following text: “Our countries are embarked on a new relationship for the 21st century, founded on a commitment to the values of democracy, the free market, and the rule of law. The United States and Russia have overcome the legacy of the Cold War. Neither country regards the other as an enemy or threat” (<<http://www.whitehouse.gov/news/releases/2001/11/20011114-3.html>>).
  118. CWC, Article V, para. 13.
  119. The total OPCW budget for 2004 was €73.153 million. The budget was further increased to €75.695 million for 2005.
  120. As discussed in section 5.4, the Director-General recommended a review of the verifi-

cation methodology of chemical weapons. See *Note by the Director-General*, OPCW document RC-1/DG.1, p. 7.

121. Perhaps most notable in this regard is Libya, which deposited its instrument of accession to the CWC in January 2004. Libya has declared a CW stockpile and related facilities. Libya's CW declaration includes 3,300 unfilled aerial CW bombs, 23 tonnes of sulphur mustard blister agent, an inactivated CW production facility and two CW storage facilities, which are currently being destroyed under verification by OPCW inspectors. Libyan officials have indicated that Libya had been planning to give up its CW capability well before the OPCW Action Plan was initiated.
122. For a discussion of this issue, see Mathews, "The OPCW at Five", pp. 57–58.

# The challenge inspection system of the Chemical Weapons Convention: Problems and prospects

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*Masahiko Asada*

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## 1. Introduction

The 11 September 2001 terrorist attacks on the World Trade Center and the Pentagon fundamentally changed the international political-security environment and way of thinking. The traditional theory of deterrence may no longer guarantee the security of even the sole superpower, the United States. As “The National Security Strategy of the United States of America” aptly points out, deterrence based only upon the threat of retaliation is less likely to work against terrorists and the leaders of states that sponsor terrorism.<sup>1</sup> What is more, they even might not hesitate to use weapons of mass destruction if they acquire them.<sup>2</sup>

In such circumstances, the importance of non-proliferation and disarmament treaties is not diminished. On the contrary, their effective implementation is all the more important precisely because of this new security environment. Thus, new light needs to be shed on these treaties and their implementation.

In this chapter, the Chemical Weapons Convention (CWC)<sup>3</sup> is the object of examination. The CWC was the first disarmament treaty that totally prohibited and completely eliminated one whole category of weapons of mass destruction with an extremely extensive and intrusive verification system. The Convention has also become a model for subsequent disarmament treaties. It was no surprise that, when the CWC was opened for signature on 13 January 1993, the international community enthusiastically welcomed it as a truly “epoch-making” treaty.



Now that 12 years have passed since then, and 8 since its entry into force, one might be tempted to ask whether or not the high assessment of 1993 is still valid today, even in the light of subsequent practices and the new security environment. If not, what is wrong with the Convention or its implementation?

This chapter tries to answer these questions with particular reference to the CWC “challenge inspection” system, because this is one of the most striking features of the Convention and, in fact, the Convention’s “epoch-making” character has often been attributed to the existence of that system. The challenge inspection system, whose effectiveness seems to govern the tolerance threshold of non-compliance concerns, is also important from the perspective of the current security environment, because the risk that the production of prohibited weapons might lead to their actual use is now greater than ever before.

Specifically, this chapter will first analyse the role that a challenge inspection system could play in verifying compliance with arms control and disarmament treaties; it will also touch on the requirements that should be met for the system to be really effective. After outlining the CWC’s challenge inspection scheme, I evaluate the scheme in the light of the requirements for an effective challenge inspection system. Then, I examine some unavoidable limitations to a challenge or any other on-site inspection system. Finally, I address one of the most immediate and serious problems facing the CWC challenge inspection system – the non-use of the system in practice – and make some suggestions to overcome this difficulty.

## 2. The significance of a challenge inspection system and the conditions for its effective functioning

The CWC provides for two sets of mechanisms to deal with possible concerns about non-compliance: the clarification procedure and the challenge inspection system. The clarification procedure clarifies questions concerning possible non-compliance, either bilaterally or through the Executive Council of the Organisation for the Prohibition of Chemical Weapons (CWC, Article IX, paras 1–7). The challenge inspection system allows for inspectors of the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons (OPCW) to conduct an on-site inspection 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 (Article IX, paras 8–25). It would not be going too far to say that this system has been regarded as the ultimate guardian of the effective implementation of, and strict compliance with, the Convention.

The central importance of the challenge inspection system seems to lie in its role as a deterrent. The very existence of the inspection system, applicable to any place at short notice, would certainly make it difficult to conceal non-compliant activities. Furthermore, considering the sanctions that may be imposed in case of breaches discovered, a potential violator might hesitate to proceed with such activities and could thus be deterred and discouraged from committing a breach in the first place.

A challenge inspection could also serve another, incidental function of generating confidence among States Parties. If a challenge inspection could establish that there had been no breach of the Convention in all dubious cases, that would help enhance confidence among States Parties that obligations under the Convention had *actually* been complied with by others. Even if that were not the case, a strong possibility of detecting breaches could still in itself assure States Parties that obligations under the Convention have *generally* been met.

Although these two functions of deterrence and confidence-building can be found to varying degrees in any type of verification system and are not necessarily unique to challenge inspections,<sup>4</sup> the challenge inspection type of verification system could be expected to function far more effectively than others in both respects. This is because most other types of verification system, including the routine-type industry inspection system of the CWC, are based on the *declarations* made by the States Parties to the relevant treaty implementation bodies, and consequently are not expected to function effectively with regard to *undeclared* facilities, where proliferating countries may conduct clandestine illegal activities.

This is not to say that an inspection system based on challenge for reasons of possible non-compliance would always function effectively in detecting and deterring breaches. It seems that, for the deterrent function to work effectively, certain conditions should be met: (a) there ought to be the possibility that inspections can in fact be conducted any time (conditions for effective decision-making), and (b) there ought to be the possibility of actually detecting non-compliance (conditions for effective detection).

In assessing whether and, if so, to what extent these requirements are fulfilled, the following elements seem relevant: the kind of information that would be required to be provided when requesting an inspection; how a decision on such a request would be made; whether there is a right of refusal on the part of the challenged state; whether there is any quota or limit to the request or receiving of inspections; whether there are any restrictions in terms of specifying inspection sites; the timeline between the decision to conduct an inspection and its actual implementation; and the intrusiveness of inspection activities.

### 3. The challenge inspection system under the CWC

The basic provision of the CWC concerning challenge inspections – Article IX, paragraph 8 – is as follows:

Each State Party has the right to request an on-site challenge inspection of any facility or location in the territory or in any other place under the jurisdiction or control of any other State Party for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the provisions of this Convention, and to have this inspection conducted anywhere without delay by an inspection team designated by the Director-General [of the Technical Secretariat] and in accordance with the Verification Annex.

At first glance, it appears that challenge inspections of the CWC would be conducted promptly, without right of refusal and without limitation in scope, thus being quite effective in terms of the two requirements mentioned in the preceding section. However, because the above-cited paragraph states that the inspections are to be conducted “in accordance with the Verification Annex” of the Convention, we should examine the provisions of the Annex in detail before reaching any definite conclusion in this regard.

#### *Decision-making on conducting an inspection*

According to the challenge inspection procedure in the CWC, the requesting State Party is first required to submit an “inspection request” to the Executive Council of the OPCW (where the decision on the challenge inspection would be made) as well as to the Director-General of the Technical Secretariat. The request must contain, at least, the following information: (a) the State Party to be inspected, (b) the point of entry into the inspected State Party, (c) the size and type of the inspection site, (d) the concern regarding possible non-compliance and (e) the name of the observer of the requesting State Party (Verification Annex, Part X, para. 4). Although the information required here does not seem excessive at first glimpse, the final conclusion in this respect depends on what is meant by the information required in point (d), i.e. the concern regarding possible non-compliance with the Convention. This information is elaborated in the relevant provision as including “a specification of the relevant provisions of this Convention about which the concern has arisen, and of the nature and circumstances of the possible non-compliance as well as all appropriate information on the basis of which the concern has arisen”.

Whatever is meant by this provision in concrete terms, how much and

what kind of information would be needed for the request to be accepted by the Executive Council would be significantly influenced by the decision-making procedure of the Council on this matter. According to Article IX, paragraph 17, the 41-member Executive Council is to “decide by a three-quarter majority of all its members against carrying out the challenge inspection, if it considers the inspection request to be frivolous, abusive or clearly beyond the scope of this Convention”. Here, attention should be paid to the fact that the Council could decide *against*, rather than *for*, conducting an inspection. This so-called “red light” formula in decision-making would surely have no small impact on the result, because it is envisaged that the discussions preceding the decision-making would focus on whether there are elements making the inspection request frivolous or abusive. Without persuasive argument indicating the existence of such elements, it would be difficult to sustain a decision against carrying out an inspection.

It should also be pointed out that the three-quarter blocking majority is quite difficult to obtain in the first place. In addition, it is three-quarters not of those present and voting but of all members of the Executive Council. That means that members that are absent for unknown or unrelated reasons as well as those that abstain from voting will in effect be treated as being in favour of carrying out the inspection.

From the foregoing, it would be safe to say that, once a challenge inspection has been requested, it would be conducted almost automatically. What is more, there is no specific (type of) object that would be exempt from a challenge inspection; there is no right of refusal on the part of the requested State Party and no quota or limit system applicable to the number of inspections that a State Party or a facility may receive.<sup>5</sup> Nor is there any quota or limit to the number of inspections that a State Party may request.

### *Inspection procedures*

Once a decision has been taken to proceed with a challenge inspection, its effectiveness in terms of detecting possible non-compliance evidence would then be contingent on how quickly the inspection team could reach the inspection site and how intrusively the team could conduct inspection activities there. The basic principle in this regard is again set forth in Article IX, paragraph 8, which provides that a challenge inspection is to be conducted “for the *sole* purpose of clarifying and resolving any questions concerning possible non-compliance with the provisions of this Convention” (emphasis added). Accordingly, the inspected State Party is allowed to take measures to protect sensitive installations, and to prevent disclosure of confidential information and data “not related

to this Convention” (Article IX, para. 11(c)). Such measures, in concrete terms, may concern the timeline and intrusiveness of inspection activities.

### *Timeline*

The inspection team, after arriving at the point of entry of the inspected State Party, would not move immediately to the inspection site. This is because, although the inspection of a particular site would already have been requested by the requesting State Party, the exact site for inspection would still need to be determined through negotiations between the inspection team and the inspected State Party.

The inspection site, indicated with “perimeter”, would first be proposed by the requesting State Party. If this “requested perimeter” is acceptable to the inspected State Party, it will become the “final perimeter”, and the inspection team will be transported to that final perimeter; if not, the inspected State Party must propose an “alternative perimeter”. If the alternative perimeter is acceptable to the inspection team, it will become the final perimeter; if not, the perimeter negotiations will continue at the alternative perimeter. If no agreement is reached on the perimeter of the inspection site, the alternative perimeter will be designated as the final perimeter.

In any event, the inspection team is allowed to have access, “within the requested perimeter”, not later than 108 hours after the arrival of the inspection team at the point of entry (Verification Annex, Part X, para. 39). It should be noted, however, that the inspected State Party must have been provided with information regarding the location of the requested inspection site at the latest 12 hours before the inspection team’s arrival at the point of entry (Verification Annex, Part X, para. 6).<sup>6</sup> Thus, the inspected State Party would have at maximum roughly 120 hours (five days) to prepare for the inspection.

Unless any further measures are taken, it might be feared that, during this 120-hour period, items that could serve as evidence of the inspected State Party’s non-compliance might be taken out of the perimeter. To counter such possibilities, the Convention requires first the inspected State Party and then the inspection team to monitor all exit points of the requested perimeter and those of the final/alternative perimeter, respectively, by collecting information about all vehicular exit activity in the form of traffic logs, photographs and video recording (“exit monitoring”: Verification Annex, Part X, paras 23–26). However, exit monitoring by the inspected State Party would be utterly meaningless if that State Party intended to conceal evidence of its own non-compliance.

The inspection team is also allowed to commence such activities as taking wipes, air, soil or effluent samples within a 50 metre band around the outside of the perimeter upon the team’s arrival at the final/alternative

perimeter (“perimeter activities”: Verification Annex, Part X, paras 35–37). This could be a particularly useful tool for the detection of diversion, because it is difficult to produce chemical weapons without emitting telltale products into the environment.<sup>7</sup> Both perimeter activities and exit monitoring may be continued until the completion of the inspection (Verification Annex, Part X, paras 31, 35).

#### *Intrusiveness*

As stated above, the inspected State Party is obliged to provide the inspection team with access “within the requested perimeter”. In other words, there is no restriction with regard to the *access within the requested perimeter as such*. This does not, however, mean that the *access to (or within) facilities and areas within the requested perimeter* is also unlimited.

Rather, the extent and nature of access to (or within) a particular facility or area are to be negotiated between the inspection team and the inspected State Party on a “managed access” basis (Verification Annex, Part X, para. 38). Under “managed access”, full access may not be provided and the inspected State Party may take measures to protect sensitive installations and prevent disclosure of confidential information and data not related to chemical weapons. Such measures may include: removal of sensitive papers from office spaces; shrouding of sensitive displays, stores and equipment; logging off of computer systems; using random selective access techniques (Verification Annex, Part X, para. 48).<sup>8</sup> However, if such protective measures are taken, the inspected State Party is still obliged to make “every reasonable effort” to demonstrate that any object, building, structure, container or vehicle that has been protected is not used for purposes related to the possible non-compliance concerns raised in the inspection request.<sup>9</sup>

Thus in a challenge inspection, although access within the requested perimeter itself is assured, the inspected State Party is allowed to take various measures to protect sensitive installations and confidential information in terms of both the timeline for giving access and the intrusiveness of such access.

#### *Assessment*

The challenge inspection system of the CWC may be assessed as follows. The decision-making procedure on an inspection request in the Executive Council might be characterized as allowing a semi-automatic decision *for* conducting an inspection. In terms of the objects for inspection, there is no restriction and no quota or limit is applicable to either the requesting or the receiving of inspections. Nor is there any right of refusal

on the part of the inspected State Party. Thus, many elements exist in favour of conducting challenge inspections.

On the other hand, the way in which the inspection is to be conducted is rather constrained. In terms of the timeline, the inspection team might have to wait up to five days before being permitted to enter the requested inspection site. Access itself could also be limited by the inspected State Party using the “managed access” technique.

It is rather difficult to state with confidence whether five days is long or not; but, as one arms control expert has said, “[w]hile the delay between the challenge and the team’s entry into the site – a total of some 120 hours – may seem long, chemical weapons production is very difficult to clean up. Modern chemical detection equipment would be able to detect traces of chemical agents in reaction vessels where they had been produced, for example, even after extensive cleaning.”<sup>10</sup> If this is the case – and the view has been shared by other experts<sup>11</sup> – the point would then be whether the inspection team could reach the reaction vessels in question. In other words, it would become important how intrusive the access could be.

Theoretically, unlimited access would be the best possible way to ensure the effective verification of an arms control agreement. However, the inspected state should be assured of the right to protect its confidential business and security information not related to the subject matter of the agreement. It should also be borne in mind that any verification system is a product of often lengthy negotiations reflecting divergent interests of the negotiating states. In the case of the CWC, the end result of balancing these conflicting requirements and interests is the five-day timeline and the “managed access” technique. One should remember here that there can never be 100 per cent verification in a real arms control and disarmament world.

How then could one realistically assess the above end result? The key criterion that is sometimes mentioned in this respect is the ability “to detect militarily significant violations in sufficient time to make an effective response”.<sup>12</sup> However, the concept of the timely detection of militarily significant violation would have different meanings for different arms control agreements.<sup>13</sup>

In the CWC context, “one ton of chemical” was once mentioned in the US Senate as a criterion for “militarily significant violation”. It is rather debatable, however, whether that could carry any significant weight in determining what would be a militarily significant violation of the CWC; indeed, not only was it one of the “killer conditions” designed to block approval of the CWC by the Senate but it was finally struck out.<sup>14</sup>

It is said that a similar criterion was in the minds of CWC negotiators in Geneva. A 1 tonne yardstick is indeed used in the CWC itself (Verifi-

cation Annex, Part VI, para. 2) as the only quantitative limitation imposed on States Parties regarding the possession and acquisition of Schedule 1 chemicals (i.e. toxic chemicals or their precursors having little or no use for purposes not prohibited under the CWC, such as sarin and mustards). But still, considering the fact that chemical terrorism, including state-sponsored terrorism, which needs a much smaller quantity of chemicals, now presents as serious a threat to international peace and security as traditional military threats, determining what would constitute a “militarily significant violation” and whether any particular verification system would be sufficiently effective is becoming a more and more difficult and complicated task.

So as not to invite misunderstanding, it should be pointed out here that the concept of “militarily significant violation” or the “1 tonne” threshold for effective verification has nothing to do with the definition of chemical weapons themselves in the CWC. According to Article II, paragraph 1, of the Convention, “chemical weapons” are defined, in part, as meaning toxic chemicals and their precursors, except where intended for purposes not prohibited under the Convention,<sup>15</sup> “as long as the types and quantities are consistent with such purposes”. There is no mention of military significance or 1 tonne there; instead, the definition is based on a “general purpose criterion”.<sup>16</sup> Therefore, if a State Party develops or produces a toxic chemical or its precursor beyond the quantity that could be justified in the light of a designated purpose not prohibited under the Convention, it is in breach of the Convention, even if it does not reach a quantity of military significance. Military significance is a concept that could be applied in the context of verification and not in the context of prohibition.

#### 4. General constraints on conducting challenge inspections

In addition to the above restraints that are particular to the CWC, there seem to be some *general* limitations that may apply to *any* on-site inspection system. They concern the external and internal functions of state sovereignty: one is related to the territorial jurisdiction or control of a state and the other to the human rights of individuals.

##### *Limitations related to the territorial jurisdiction or control of a state*

Article IX, paragraph 8, of the CWC stipulates that each State Party has the right to request a challenge inspection of any facility or location “in the territory or in any other place under the jurisdiction or control” of any other State Party. Since the phrase quoted refers to “any other



place” (besides the territory), it points to places under the jurisdiction or control of a State Party but beyond its “territory”, including places within the territory of a non-State Party.<sup>17</sup> However, it is not normally possible to conduct an on-site inspection on the territory of a non-State Party even if the place is under the jurisdiction or control of a State Party.

At the same time, if it is not possible, that might entail a risk of undermining the whole verification system of the CWC. Let us assume that State Party A maintains military bases on the territory of non-State Party B. If State Party A could, however illegally, stockpile chemical weapons in those bases without any possibility of being inspected, that would represent a large loophole in the CWC verification system. That is perhaps why the above-quoted provision refers to the possibility of requesting a challenge inspection even in such cases.<sup>18</sup>

Nevertheless, the hard fact still remains that non-State Party B is a state that has chosen not to join the CWC and, as such, seems to be not in favour in the provisions of the CWC. It is almost inconceivable that non-State Party B would voluntarily accept an on-site challenge inspection carried out on its territory, even if it were limited to the military bases of State Party A. And yet one cannot easily abandon the possibility of conducting inspections in non-State Party B without making any effort, recalling the possible loophole mentioned above. Thus, the CWC has introduced the following paragraph in its Verification Annex, Part II:

20. In cases where facilities or areas of an inspected State Party are located on the territory of a State not Party to this Convention, the inspected State Party shall take all necessary measures to ensure that inspections of those facilities or areas can be carried out in accordance with the provisions of this Annex. A State Party that has one or more facilities or areas on the territory of a State not Party to this Convention shall take all necessary measures to ensure acceptance by the Host State of inspectors and inspection assistants designated to that State Party. If an inspected State Party is unable to ensure access, it shall demonstrate that it took all necessary measures to ensure access.

The first provision obligates the State Party having facilities or areas on the territory of a non-State Party to take all necessary measures to ensure that inspections of those facilities or areas can be carried out when they are requested. On the other hand, the last provision obliges the State Party concerned to demonstrate that it took all necessary measures if it is unable to ensure access. This latter provision seems to imply that, if the State Party demonstrates that it took all necessary measures, it would not be held in breach of the Convention even if it cannot in fact ensure access for inspectors. In other words, the obligation of the State Party to ensure access in this case would not be absolute in nature.

Although this solution leaves some doubts from a verification perspective, it ought to be accepted as being a sort of legal impossibility that cannot be overcome. At the same time, this issue indicates how important it is to promote the universality of the Convention<sup>19</sup> so as to reduce and ultimately plug verification loopholes.

A similar question would arise in the obverse situation where State Party A hosts on its territory military bases of non-State Party B. In this case, it is perhaps more difficult than in the case mentioned earlier to imagine that non-State Party B would voluntarily accept an on-site challenge inspection of its military bases on the territory of State Party A, because the direct object of inspection is the bases of non-State Party B itself. Nonetheless, to address this problem, the CWC has introduced another paragraph that is analogous to paragraph 20 quoted above. Paragraph 21 of the Verification Annex, Part II, stipulates as follows:

21. In cases where the facilities or areas sought to be inspected are located on the territory of a State Party, but in a place under the jurisdiction or control of a State not Party to this Convention, the State Party shall take all necessary measures as would be required of an inspected State Party and a Host State Party to ensure that inspections of such facilities or areas can be carried out in accordance with the provisions of this Annex. If the State Party is unable to ensure access to those facilities or areas, it shall demonstrate that it took all necessary measures to ensure access. This paragraph shall not apply where the facilities or areas sought to be inspected are those of the State Party.

The last sentence of this paragraph does not appear in paragraph 20. This sentence in effect means that the possible exemption from ensuring access stipulated in the paragraph would not apply where the facilities or areas sought to be inspected belong to the hosting State Party. Plainly speaking, it signifies that, when hosting State Party A maintains a facility within the foreign base of non-State Party B, that facility is subject to inspection. This is perhaps because hosting State Party A should have access to its own facility even if it is located within foreign bases. There is no corresponding proviso in paragraph 20, because in the situations envisaged in that paragraph the facilities belonging to the hosting state within the foreign bases are those of a non-State Party and could not in principle be subject to inspection. In any case, in paragraph 21 situations too, access is not assured because of the legal impossibility that is reflected in the penultimate sentence of the paragraph.

Yet another situation in which more than one state is involved in the implementation of the CWC inspection system is one when a State Party hosts on its territory military bases of another State Party. No significant questions would usually be expected in this situation. Perhaps the only

concern for the States Parties involved would be how to coordinate between them the receiving of an OPCW inspection team. Thus, paragraph 19 of the Verification Annex, Part II, provides in part as follows:

19. In cases where facilities or areas of an inspected State Party are located on the territory of a Host State Party . . . , the inspected State Party shall exercise the rights and fulfil the obligations concerning such inspections in accordance with this Annex. The Host State Party shall facilitate the inspection of those facilities or areas and shall provide for the necessary support to enable the inspection team to carry out its tasks in a timely and effective manner.

As a special case of more than one State Party involved in receiving a challenge inspection, an interesting legal question might arise with regard to the peculiar situation in Cuba, where the United States has maintained a naval base at Guantánamo Bay. What is perhaps unique to the Guantánamo stations is the fact that the hosting and the stationing states are antagonistic to each other. Under the terms of the Agreement between the United States and Cuba, the United States exercises “complete jurisdiction and control” over the areas for an indefinite period, whereas Cuba maintains only “ultimate sovereignty”.<sup>20</sup> What would happen if a challenge inspection were requested regarding US facilities there?

Although it is reasonable to assume that paragraph 19 was drafted mainly to deal with situations where a State Party hosts facilities of another, friendly State Party, its scope of application is not limited to such situations and it also covers other situations such as that in Cuba.

There are two possible scenarios in which a challenge inspection at Guantánamo Bay could be requested under the CWC. The first is where a third State Party requests an inspection, and the second is where it is requested by Cuba. The second type of challenge is not unthinkable, nor is it prohibited by the CWC. In either case, however, the respective rights and obligations of the States Parties involved would be the same. As stated in paragraph 19, the Host State Party, Cuba, would be obliged to “facilitate” the inspection and provide for the “necessary support”, whereas the inspected State Party, the United States, would assume the obligations concerning the inspection. Since Cuba itself would be interested in what is happening in the Guantánamo naval stations, it would be more than happy to lend the necessary support to enable the inspection to be conducted effectively. The United States, for its part, would have no option, legally, but to receive the inspection in accordance with the Convention, whoever originally requested it. Thus, there does not seem to be any meaningful difference between inspections at Guantánamo, for example, and inspections at other overseas military bases where more than one State Party is involved.

*Limitations related to the human rights of private persons*

Just like in its external relations, a state could also face difficulties in its internal relations. The exercise of on-site inspections could be impeded by constitutional provisions on human rights regarding privacy.<sup>21</sup> For instance, the Fourth Amendment to the US Constitution provides as follows:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

The Amendment thus provides individuals and corporations with protection against unreasonable searches and seizures conducted without a warrant. Similar provisions are found in the constitutions of other states.<sup>22</sup> Herein lies a source of tension between States Parties' obligations under the CWC and those under their respective constitutions. Internationally, a State Party is obligated to ensure that inspectors have access to the facility or location requested for inspection anywhere in its territory or in any other place under its jurisdiction or control (Article IX, para. 10; Verification Annex, Part X, para. 38), whereas, at the same time, it is under an obligation, domestically, to guarantee the rights of its people against unreasonable searches and seizures that an inspection might potentially involve.

On the domestic front, despite the State Party's international obligation to implement treaty provisions, these can be implemented only to the extent that they meet the legal standards of the State Party's constitution. On the other hand, internationally, it is one of the fundamental principles of international law that, in the words of a Permanent Court of International Justice (PCIJ) judgment, "a State cannot adduce as against another State its own Constitution with a view to evading obligations incumbent upon it under international law or treaties in force".<sup>23</sup> Thus, a State Party would face the dilemma of whether to abide by domestic law or by international treaty law if an inspector is refused access to some particular facility or location by its owner for any reason.

To be sure, the problem would be resolved if a warrant were issued in time for the inspection. However, there is no guarantee that this could happen each time. Moreover, not all CWC national implementing legislation provides for the requirement for a warrant in the event of a refusal of inspection on the part of the facility owners or other private individuals.<sup>24</sup> Japan's Chemical Weapons Act,<sup>25</sup> for instance, has adopted the so-

called “indirect coercion” system for making CWC inspections accepted by private individuals, using the imposition of a fine as a penalty for refusal. In this system, there is more room for an inspection not to be carried out than in a system requiring a warrant.

Despite all the concerns noted above, the CWC has already enshrined a solution to escape from this potentially sticky dilemma. It stipulates in paragraph 41 of the Verification Annex, Part X, that “the inspected State Party shall be under the obligation to allow the greatest degree of access *taking into account any constitutional obligations* it may have with regard to proprietary rights or *searches and seizures*” (emphasis added).<sup>26</sup> This means that the inspected State Party is required to give the inspectors access only to the extent that this is in conformity with its constitution. Therefore, even if the inspected State Party cannot obtain a warrant and give full access (in time), it would not be held to be in breach of the Convention for failing to give such access.<sup>27</sup>

The dilemma for the inspected State Party may thus have been resolved.<sup>28</sup> However, the problem of the reduced effectiveness of the challenge inspection system has correspondingly risen; for the provision quoted above seems to authorize the inspected State Party to refuse inspectors at least some access on constitutional grounds. A provision that allows the inspected State Party to invoke its constitutional obligations in order to limit access may be seen as a window of opportunity.

It is true that the same paragraph of the Verification Annex (Part X, para. 41) states that “[t]he provisions in this paragraph may not be invoked by the inspected State Party to conceal evasion of its obligations not to engage in activities prohibited under this Convention”. How effective this provision could be in practice, however, is an open question.

## 5. The biggest practical problem of the challenge inspection system of the CWC

### *The non-use of the challenge inspection system and its background*

Arguably the most challenging problem of the CWC’s challenge inspection system has been that it has been neither used nor requested. As was highlighted in the “Review Document” of the First Review Conference of the CWC convened in The Hague from 28 April to 9 May 2003, there has never been a request for a challenge inspection in the eight years plus of CWC history.<sup>29</sup> Of course, if there had been no concern about non-compliance with the Convention, there would be no need to be concerned about the non-use and absence of request. Yet non-compliance concerns have in fact been raised openly.

For instance, during the first Review Conference, the United States mentioned in the general debate that: “We are most troubled by the activities of Iran, which we believe continues to seek chemicals, production technology, training, and expertise from abroad. The United States believes Iran already has stockpiled blister, blood, and choking agents. We also believe it has made some nerve agents.” The national statement by the United States also named Sudan as a State Party about whose activities it had concerns.<sup>30</sup>

If no State Party requests a challenge inspection when the possibility of non-compliance by States Parties is openly pointed out, that would have a detrimental effect on the credibility of the CWC’s challenge inspection system itself.<sup>31</sup> Nevertheless, the fact is that no request has been made for a challenge inspection.

There seem to be several reasons for this phenomenon. First, verifying arms control agreements and arrangements involving chemicals is far more difficult than for those involving nuclear materials, for example, as was exemplified by the UN Special Commission (UNSCOM) inspections in Iraq.<sup>32</sup> It is, therefore, possible that even the most advanced challenge inspection system under the CWC would not reveal evidence of the suspected non-compliance, particularly if the relevant site is unknown.

Although, logically, non-detection of a violation is not the same as the non-existence of a violation, the general public might well equate the two things. If so, a challenge inspection might serve as a means to declare the “innocence” of the suspected State Party even when it is still doubted by other States Parties. Thus the inspection may generate a false sense of security. For countries such as the United States, it would be more difficult to justify taking unilateral measures against a suspected State Party if an inspection team did not find any clear evidence of violation. Hence, it would be less harmful if the State Party remained suspected than if its innocence were “falsely” sensed by the public.

That the United States tends to think along these lines can be ascertained from the fact that, during the CWC negotiations at the Conference on Disarmament in Geneva, it strongly opposed the possibility that the Executive Council or the Conference of the States Parties could *determine* whether there had been a violation after the submission of the final report of the inspection team by the Director-General of the Technical Secretariat.<sup>33</sup> As a result, the CWC provides only that the Executive Council shall review the final report and “address” any concerns as to whether any non-compliance has occurred (Article IX, para. 22).

A second reason for the absence of a request for a challenge inspection might concern a possible retaliatory request for a challenge inspection. It is natural that the target State Party of a US inspection request would feel hostile to the United States, or would originally have been so. In ad-

dition, if the inspection actually turned out to be incapable of detecting any clear evidence of non-compliance, the target state might feel justified in likewise requesting a challenge inspection against the United States in retaliation. In fact, when the United States criticized Iran at the first Review Conference as mentioned above, the Iranian delegation exercised its right of reply in order not only to deny the charges but also to counter-charge the United States with its “violation” of the CWC, including regarding its national legislation implementing the CWC.<sup>34</sup>

Moreover, if a challenge inspection request against the United States successfully went through the Executive Council procedure, the United States might be placed in a quite uneasy position. The CWC implementing legislation of the United States enacted in 1998 contains a section that entitles the President to “deny a request to inspect any facility in the United States in cases where the President determines that the inspection may pose a threat to the national security interests of the United States”.<sup>35</sup> As noted earlier, States Parties have no right to refuse inspection under the CWC. If, therefore, the United States actually refused a retaliatory inspection as threatening its national security interests, it would be in breach of the Convention.<sup>36</sup>

It is worth mentioning in this connection that the US government under the Bush administration has increasingly moved to exempt itself from multilateral treaty regimes and, at the same time, tends to think that multilateral arms control treaties are useful policy tools only against others. If that is the case, it is natural that the United States has refrained from doing what could amount to inviting a retaliatory challenge inspection request.

A third possible concern would be the possibility of disclosing US intelligence sources as well as their capabilities. As discussed earlier, the requesting State Party is required to provide certain information regarding the suspected non-compliance when requesting a challenge inspection. That part of the challenge inspection procedure may reveal or hint to the challenged State Party, as well as to other potential violators, what the requesting State Party has as information sources relevant to the Convention.

Fourthly, overall political considerations concerning bilateral relations with the suspected State Party might possibly have been behind the United States’ determining not to request a challenge inspection.<sup>37</sup>

#### *Vitalization of the challenge inspection system*

That there has been no request for a challenge inspection so far is not merely an issue concerning the United States, or one between the United States and the accused. Rather, it concerns the CWC regime as a whole.

Efforts have naturally been made to vitalize the challenge inspection system within the framework of the OPCW. However, it appears that discussions are unlikely to converge on one opinion but will diverge into two contrasting views.<sup>38</sup>

Developed States Parties, including members of the European Union in particular, have argued that the central role of the challenge inspection is deterrence. However, to be credible, deterrence must be effective and, for deterrence to be effective in a chemical weapons context, there must be the possibility that challenge inspections can be requested and carried out at any time.<sup>39</sup> The United Kingdom, one of the most vocal advocates of the vitalization of the challenge inspection system, has stated that: “The basic objectives for [challenge inspections] in [weapons of mass destruction] regimes are to deter violations and/or to expose, disrupt, delay or stop illegal programmes, as well as increasing their costs because of the additional efforts required to conceal illegal activities... [D]eterrence would be more effective if challenge were used, and seen to be used, regularly where there were significant compliance concerns.” Pointing out that its long-term goal is to make challenge inspections more routine, the United Kingdom has further asserted that “[i]t is the prospect of such inspections taking place reasonably frequently that will enhance their deterrent power”.<sup>40</sup>

By contrast, developing States Parties, although supporting challenge inspections as a means to ensure compliance with the Convention, have questioned the idea of making it a routine exercise. India, for instance, has maintained that “[o]ne cannot seriously argue that entering another’s house should be a casual, routine, repetitive activity!” By using the analogy of entering another’s house it has tried to warn of the “implications of routinising [challenge inspections] without fully addressing the potential for abusing the [challenge inspection] provision” as “an exercise fraught with uncertainties”.<sup>41</sup> Moreover, India has pointed to the difference between challenge inspections and routine-type inspections.

Such conflicting views are also reflected in the differing interpretations of the provision concerning the relationship between the clarification procedure and the challenge inspection system, the two mechanisms to be followed in the case of non-compliance concerns. The relevant provision (Article IX, para. 2) stipulates as follows:

Without prejudice to the right of any State Party to request a challenge inspection, States Parties should, whenever possible, first make every effort to clarify and resolve, through exchange of information and consultations among themselves, any matter which may cause doubt about compliance with this Convention, or which gives rise to concerns about a related matter which may be considered ambiguous.



Developing States Parties see this provision as showing the sequence of events in the event of non-compliance concerns arising: the clarification procedure should be tried first and a challenge inspection should be the “last resort” to address non-compliance concerns.<sup>42</sup>

Developed States Parties, on the other hand, put emphasis on the difference between the clarification procedure and the challenge inspection system, and maintain that the clarification procedure is not something that is legally required to be followed as a precondition before a challenge inspection request is filed. They point out that the provision in Article IX, paragraph 2, itself makes that point clear by stating that “States Parties *should, whenever possible, first make every effort*” to clarify and resolve non-compliance concerns through consultations and that the clarification procedure is to be utilized “[w]ithout prejudice” to the right of any State Party to request a *challenge inspection*” (emphasis added).

Legally speaking, the point of view of developed States Parties reflects the correct interpretation of the relevant provision. Nonetheless, the argument of developing States Parties is not necessarily a complete reinterpretation of the above provision and seems to contain some legitimacy. At any rate, the difference of opinion between the two groups appears to be rather profound and it does not seem that it will be settled anytime soon. Perhaps there therefore needs to be a fresh approach to accomplishing the goal.

## 6. Towards resolving the problem

As we have seen, the single biggest practical problem that the CWC challenge inspection system has faced is the fact that the system has never been utilized and that there is no shared view about how to deal with the situation. To construct a remedial mechanism to overcome the difficulty on the basis of these facts might run the risk of a “self-fulfilling prophecy”, whereby the non-use of the system could firmly establish itself. Nevertheless, a new solution should be contemplated based on the above facts in order to get over the current impasse.

In this connection it should be recalled that South Africa, after pointing out the likelihood of the challenge inspection becoming a little used mechanism, proposed in 2000 that “there seems to be a need to create another level of mechanism which falls between the routine industry inspection and the politically loaded challenge inspection. A mechanism which is a purely technical exercise but which serves to clarify questions and uncertainties which delegations and the Organisation may have. Such a mechanism, denuded of a political character, could serve a useful

role as a confidence building measure that goes beyond the provisions of the regular inspection.”<sup>43</sup>

In fact, that the challenge inspection might not work as expected had in a way been anticipated even during the CWC negotiations. In 1989, to counter such an eventuality, the United Kingdom had proposed an “ad hoc inspection” system with rather limited purposes and scope. According to the proposal, the ad hoc inspection would have been formulated along the following lines:

- Each State Party would have the right to initiate inspections by the Technical Secretariat in civil and military facilities and elsewhere on the territory of any other State Party.
- These requests would not be linked to any allegation of breach of the Convention.
- ...
- The purpose of the inspection would be to check whether any activity in the facility concerned was subject to declaration or prohibition under the terms of the Convention.
- ... Procedures for the conduct of the inspection (i.e. its format) would differ from those for routine inspections ... and for challenge inspection .<sup>44</sup>

This proposal was not accepted during the CWC negotiations because developing countries saw it as being too similar to the challenge inspection and, in addition, they did not wish to receive further inspections at their industrial sites.<sup>45</sup>

However, a similar system was proposed and agreed upon in the nuclear field. In May 1997, the Board of Governors of the International Atomic Energy Agency (IAEA) adopted a model Additional Protocol (INFCIRC/540) to the model Comprehensive Safeguards Agreement (INFCIRC/153).<sup>46</sup> The latter Agreement has provided a basic mechanism for monitoring the nuclear activities of non-nuclear-weapon States Party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). It is called “routine inspection” and is based on the reports submitted by those states. The weakness of a mechanism based on States Parties’ declarations or reports was revealed in 1991 when the IAEA found a clandestine nuclear weapons programme pursued by Iraq at undeclared installations located in a complex that also contained facilities that had been declared to and inspected by the IAEA.<sup>47</sup> Faced with this reality, the IAEA decided to formulate a new set of rules to monitor nuclear activities.

The newly adopted Additional Protocol contains rules on “complementary access” that in principle allow IAEA inspectors to visit any place on the territory of the States Parties to the Protocol in order to resolve a question or inconsistency relating to the information provided to

the IAEA.<sup>48</sup> Unlike the “special inspection” system of the Comprehensive Safeguards Agreement, which is basically seen as a challenge-type system, “complementary access” under the Additional Protocol is not based on any specific concern about non-compliance with the Safeguards Agreement or its Protocol. However, it is not ruled out either that complementary access may lead to a special inspection request by the IAEA. Indeed, what is expected of the “complementary access” system seems to include bridging the gap between the not always effective “routine inspection” and the politically sensitive “special inspection” of the Comprehensive Safeguards Agreement.

It is worth noting that the aborted Verification Protocol to the Biological Weapons Convention (BWC), in its chairman’s draft of 2001, also contained an inspection system, called a “clarification visit”, which is comparable to the complementary access in the Additional Protocol of the IAEA.<sup>49</sup> This “clarification visit” system was also designed to fill the gap between the declaration-based “transparency visit” and the challenge-type “investigation”.

If the CWC had been able to adopt an “ad hoc inspection” system, the problem that the CWC is now facing with regard to its challenge inspection system might not have come about. Put differently, the problem might well be resolved, at least partially, if the OPCW could adopt, and States Parties could accept, a document comparable to the Additional Protocol of the IAEA. Thus, the idea contained in the Protocol’s “complementary access” system seems worth exploring in the CWC verification context.

The difficult part is how to achieve the goal. From a methodological perspective, there appear to be two ways to introduce such a system into the CWC. One is to utilize the existing framework; the other is to create a new framework.

The first option might draw on the precedent of confidence- and security-building measures (CSBMs) in Europe. The CSBMs in Europe, a mechanism designed mainly to promote transparency by providing information on military activities, are equipped with a challenge-type inspection, called “inspection”. According to the Stockholm CSBM Document of 1986, an “inspection” may be requested when compliance with CSBMs is in “doubt”; and an inspection request needs to be accompanied by a statement of “reasons” for the request.<sup>50</sup> However, these conditions and requirements were later dropped in the Vienna CSBM Document of 1994,<sup>51</sup> probably owing to the routinization of inspection requests in practice.<sup>52</sup> It would be tempting to follow this example of European CSBMs and drop the sensitive part of the information requirement in requesting a challenge inspection in the CWC context (i.e. concern regarding possible non-compliance).

Yet the reality would not be so simple. First, unlike the European CSBMs, which are based on a series of evolving political documents, the CWC is a legally binding treaty. As such, it is impossible to drop an important requirement for an inspection request without formally amending the Convention, which is far more difficult than modifying CSBM Documents. Secondly, the modification of the European CSBM Documents became possible because the participating states routinely made requests for inspection, which is something completely lacking in the OPCW.

A second method to achieve the goal would be to negotiate a new document on complementary access-type inspections in the mould of the Additional Protocol of the IAEA. However, it would be equally difficult to pursue this path. One needs to remember that States Parties to the CWC have already assumed a considerable burden in receiving industry inspections every year, depending on the scale of the respective States Parties' chemical industry. It is inconceivable that they would assume a new burden without being offered any new carrot. The same factor seems to have led to the dismissal of the "ad hoc inspection" proposal during the CWC negotiations. To agree on any new measures, the minimum requirement would be a general agreement among participants to promote the shared idea, which is again lacking in the OPCW at present.

This train of thought brings us back to the method of utilizing the existing framework. It is possible to envisage a State Party requesting a challenge inspection of the facilities of another State Party that has friendly relations with the requesting State Party, thus breaking the ice. Admittedly, this could be seen as an irregular request, if not abusive, but it might still be regarded as falling within the scope of the CWC challenge inspection scheme, as long as the request is for the purpose of "clarifying and resolving *any questions* concerning possible non-compliance with the provisions of this Convention" (Article IX, para. 8, emphasis added), no matter how technical the questions may be. In other words, the language of the CWC concerning challenge inspection seems broad enough to cover not only challenge inspections proper but also the "complementary access" type of inspections. It is to be hoped that such an "evolutive" interpretation would promote a practice that could be followed by other interested States Parties and gradually constitute a basis on which to build a system similar to the "complementary access" of the IAEA.

## Acknowledgements

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## Notes

1. White House, *The National Security Strategy of the United States of America* (Washington DC: White House, September 2002), p. 15.
2. The *National Security Strategy* expresses this fear as follows: "In the Cold War, weapons of mass destruction were considered weapons of last resort whose use risked the destruction of those who used them. Today, our enemies see weapons of mass destruction as weapons of choice" (ibid., p. 15).
3. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction.
4. See *Verification and the United Nations: The Role of the Organization in Multilateral Arms Limitations and Disarmament Agreements* (New York: United Nations, 1991), pp. 10–15; Michael J. Sheehan, *Arms Control: Theory and Practice* (Oxford: Blackwell, 1988), p. 124. See also *Special Report of the Disarmament Commission to the General Assembly at Its Third Special Session Devoted to Disarmament*, UN Doc. A/S-15/3, 1 January 1988, p. 50, para. 11.
5. Graham H. Cooper, "The Chemical Weapons Convention Verification Regime", *UNIDIR Newsletter*, No. 20 (December 1992), p. 11.
6. Paragraph 6 of the Verification Annex, Part X, provides that "[t]he requesting State Party shall notify the Director-General of the location of the inspection site in due time for the Director-General to be able to provide this information to the inspected State Party not less than 12 hours before the planned arrival of the inspection team at the point of entry".
7. Michael Krepon, "Verifying the Chemical Weapons Convention", *Arms Control Today* 22:8 (October 1992), p. 22.
8. With "random selective access techniques", the inspectors are requested to select a given percentage or number of buildings of their choice to inspect, the same principle applying to the interior and content of sensitive buildings (CWC, Verification Annex, Part X, para. 48 (f)).
9. Such demonstration may be accomplished by means of the partial removal of a shroud or a visual inspection of the interior of an enclosed space from its entrance, etc. (CWC, Verification Annex, Part X, para. 50).
10. Krepon, "Verifying the Chemical Weapons Convention", p. 22.
11. See, e.g., Charles C. Flowerree, "The Chemical Weapons Convention: A Milestone in International Security", *Arms Control Today* 22:8 (October 1992), p. 5. On the other hand, Guido den Dekker comments on the 108 hours that it "seems rather long", without elaborating any further. This does not seem more than an impressionistic comment. Dekker, *The Law of Arms Control: International Supervision and Enforcement* (The Hague: Nijhoff, 2001), p. 257.
12. Michael Krepon, "Verification of a Chemical Weapons Convention", in Brad Roberts, ed., *Chemical Disarmament and U.S. Security* (Boulder, CO: Westview, 1992), p. 73.
13. For instance, in the case of nuclear weapons, the "significant quantity", defined as the approximate quantity of nuclear material in respect of which the possibility of manufacturing a nuclear explosive device cannot be excluded, has been set at 8 kg for plutonium and 25 kg for high enriched uranium.
14. Erik J. Leklem, "Senate Gives Advice and Consent; U.S. Becomes Original CWC Party", *Arms Control Today* 27:2 (April 1997), p. 32.
15. According to Article II, para. 9, of the CWC, "purposes not prohibited under the Convention" are defined as follows: (a) industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes; (b) protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical

- weapons; (c) military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare; (d) law enforcement including domestic riot control purposes.
16. Walter Krutzsch and Ralf Trapp, *A Commentary on the Chemical Weapons Convention* (The Hague: Nijhoff, 1994), p. 26.
  17. According to the United States interpretation, places under the “jurisdiction” of a State Party include “the territory of the State Party, ships and aircraft registered under the flag of the State Party, and, in certain cases, the territory of another State”. Places under the “control” of a State Party include “military and government facilities and bases located outside the territory of a State Party, and occupied territory” (*Chemical Weapons Convention: Message from the President of the United States Transmitting the Convention on the Prohibition of Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Opened for Signature and Signed by the United States at Paris on January 13, 1993*, Washington DC: US Government Printing Office, 1993, p. 6).
  18. During the Cold War era, both the United States and the Soviet Union had deployed a large quantity of chemical weapons in their overseas bases. See Robert E. Harkavy, *Bases Abroad: The Global Foreign Military Presence* (Oxford: Oxford University Press, 1989), pp. 282–284.
  19. As of 1 June 2005, the CWC had 167 parties, including all nuclear-weapons states, members of the North Atlantic Treaty Organization and European Union countries, as well as such regional powers as Japan, India, Pakistan, Iran, Brazil, Argentina, South Africa and Nigeria, but excluding Egypt, Iraq, Syria, Israel and North Korea.
  20. The US–Cuban Agreement of 16 and 23 February 1903 for the lease to the United States of lands in Cuba for coaling and naval stations provides in Article 3 as follows: “While on the one hand the United States recognizes the continuance of the ultimate sovereignty of the Republic of Cuba over the above described (see Article 1) areas of land and water, on the other hand the Republic of Cuba consents that during the period of the occupation by the United States of said areas under the terms of this agreement the United States shall exercise complete jurisdiction and control over and within said areas.” The two states agreed in Article 3 of the US–Cuban Agreement of 29 May 1934 that the stipulations of the 1903 Agreement with regard to the naval stations should continue in effect until the two agree to the modification or abrogation of the stipulations.
  21. This possibility has been pointed out to some extent by Michael Bothe in “National Implementation of the CWC: Some Legal Considerations”, in M. Bothe, N. Ronzitti and A. Rosas, eds, *The New Chemical Weapons Convention: Implementation and Prospects* (The Hague: Kluwer, 1998), pp. 545–546.
  22. For instance, Article 35 of the Japanese Constitution provides that: “The right of all persons to be secure in their homes, papers and effects against entries, searches and seizures shall not be impaired except upon warrant issued for adequate cause and particularly describing the place to be searched and things to be seized, or except as provided by Article 33.” Article 33 requires an arrest warrant other than in instances of *flagrante delicto*.
  23. “Treatment of Polish Nationals in Danzig”, *PCIJ Series A/B*, No. 44 (1932), p. 24. See also the Vienna Convention on the Law of Treaties, which in Article 27 provides that: “A party may not invoke the provisions of its internal law as justification for its failure to perform a treaty.” It has been said that this principle is a “self-evident” one (Hersch Lauterpacht, *The Development of International Law by the International Court*, London: Stevens & Sons, 1958, p. 262). For a critical examination of the labelling of this principle as such, see Masahiko Asada, “International Regime-Making Treaties and Constitutional Constraints on Their National Implementation”, *Journal of International Law*

- and Diplomacy* 100:5 (December 2001), pp. 1–42 (in Japanese with a summary in English).
24. National implementation legislation of the United States, the United Kingdom, France, Canada, Australia and others contains provisions on the utilization of a warrant in cases of refusal of challenge inspection on the part of the facility owner.
  25. For Japan's Chemical Weapons Act, see Masahiko Asada, "National Implementation of the Chemical Weapons Convention in Japan", *Japanese Annual of International Law*, No. 39 (1996), pp. 19–54.
  26. During the CWC negotiations, the United States was one of the most vocal members of the Conference on Disarmament that advocated the kind of provisions that finally became paragraph 41, which is said to be the result of the US insistence. See Letter from Ivo Spalatin, Director of Congressional Affairs, US Arms Control and Disarmament Agency, to Lee H. Hamilton, Chairman of the Committee on Foreign Affairs, US House of Representatives, 29 November 1994, pp. 2–3.
  27. In such a case, the inspected State Party would not be freed from the obligation to receive an inspection and give inspectors access. Rather, it would still be obliged to give access, but the extent and nature of access to be given to the inspectors may be negotiated in the light of the State Party's inability to obtain a warrant. This is what is meant by paragraphs 38 and 41 of the Verification Annex, Part X (see Krutzsch and Trapp, *A Commentary on the Chemical Weapons Convention*, p. 488). Nevertheless, if a warrant is not issued (in time), the access to be given to the inspectors might well in fact become extremely limited.
  28. For States Parties such as Japan that have not adopted a system of using warrants even in the event of refusal of inspection, paragraph 41 would still be relevant to the extent that the non-use of warrants in their national legislation arguably reflects their constitutional system.
  29. *Report of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention [First Review Conference] 28 April–9 May 2003*, OPCW Doc. RC-1/5, 9 May 2003, p. 22, para. 7.88. For the Review Conference itself, see Alexander Kelle, "The CWC after Its First Review Conference: Is the Glass Half Full or Half Empty?", *Disarmament Diplomacy*, No. 71 (June/July 2003), pp. 31–40; Kerry Boyd, "CWC Members Meet to Review Progress, Goals", *Arms Control Today* 33:4 (May 2003), p. 38.
  30. "United States of America: National Statement to the First Review Conference of the Chemical Weapons Convention by Assistant Secretary of State for Arms Control Stephen G. Rademaker", 28 April 2003, p. 3 (available at <[http://www.opcw.org/cwcrevcon/doc/NAT/UnitedStates\\_s.pdf](http://www.opcw.org/cwcrevcon/doc/NAT/UnitedStates_s.pdf)>).
  31. See Jonathan B. Tucker, "The Chemical Weapons Convention: Has It Enhanced U.S. Security?", *Arms Control Today* 31:3 (April 2001), pp. 8, 11–12; Kerry Boyd, "Six-Year-Old CWC Passes Some Tests and Fails Others", *Arms Control Today* 33:3 (April 2003), p. 43.
  32. For chemical inspections in Iraq, see, e.g., *SIPRI Yearbook 2000* (Oxford: Oxford University Press, 2000), pp. 569–571; Kathleen Bailey, *The UN Inspection in Iraq: Lessons for On-Site Inspection* (Boulder, CO: Westview, 1995), pp. 5–35.
  33. See Krepon, "Verifying the Chemical Weapons Convention", p. 23.
  34. "The Statement by the Delegation of the Islamic Republic of Iran, Exercising the Right of Reply in Response to the US Delegation Statement", 28 April 2003 (available at <[http://www.opcw.org/cwcrevcon/doc/NAT/Iran\\_reply\\_2\\_US.pdf](http://www.opcw.org/cwcrevcon/doc/NAT/Iran_reply_2_US.pdf)>).
  35. "Chemical Weapons Convention Implementation Act of 1998", Sec. 307.
  36. In other words, the United States is not in breach of the Convention simply by enacting legislation containing the provision quoted in the text. This is because the precise obli-

gation of the United States under the CWC is to permit the OPCW to conduct an inspection on its territory or in any other place under its jurisdiction or control, not to refrain from enacting legislation such as to allow the President to refuse inspections. Thus, the United States would not be in breach of the Convention until it actually refused an inspection.

37. It may not be one of the reasons that the United States refrained from requesting a challenge inspection, but the following rule on the abuse of a challenge inspection request might generally influence a State Party's decision-making about whether to request a challenge inspection. Article IX, paragraph 23, of the CWC provides that, in the case of abuse, the Executive Council is to examine whether the requesting State Party should bear any of the financial implications of the challenge inspection.
38. Statement by Huang Yu, Director, External Relations, OPCW, answering my question at the United Nations Conference on Disarmament Issues in Osaka, 20 August 2003.
39. "Challenge Inspections: Views of the European Union", OPCW Doc. RC-1/NAT.21, 1 May 2003, p. 1.
40. "Challenge Inspection: The UK View", *OPCW Synthesis*, May 2000, pp. 26–27.
41. "Challenge Inspection: The Indian View", *ibid.*, p. 20.
42. "Challenge Inspection: The Chinese View", *ibid.*, p. 19.
43. "Challenge Inspection: The South African View", *ibid.*, p. 25. The South African delegate described the conceptual difference between challenge inspections and the inspections they were advocating as follows. Challenge inspections are a State Party's way of saying, "I am pretty sure you are cheating, and we are going to see if it is so", whereas the latter type of inspections would amount to a State Party (or the Organisation) saying, "I am not sure what is going on here, so let's see if we can set the record straight" (*ibid.*).
44. "United Kingdom of Great Britain and Northern Ireland: Chemical Weapons Convention, Ad Hoc Inspection", CD Doc. CD/909, 30 March 1989, pp. 3–4. See also the West German proposals on which the UK proposal was based ("Federal Republic of Germany: Working Paper, Verification of Non-production: The Case for Ad Hoc Checks", CD Doc. CD/791, 25 January 1988; "Federal Republic of Germany: Working Paper, Verification of Non-production of Chemical Weapons: Ad Hoc Checks", CD/869, 6 September 1988; "Federal Republic of Germany: Ad Hoc Verification: The Establishment of National Registers", CD/984, 10 April 1990). Note that the "ad hoc on-site inspection" proposed by the United States in its draft Convention on the Prohibition of Chemical Weapons in 1984 was different from that proposed by the United Kingdom in that the former would have been based on non-compliance concerns. For the US-proposed "ad hoc on-site inspection", see "United States of America: Draft Convention on the Prohibition of Chemical Weapons", CD Doc. CD/500, 18 April 1984, p. 11, Article XI.
45. Information provided by former negotiators of the CWC. According to them, part of the "ad hoc inspection" proposal has metamorphosed into the current inspection system for the "other chemical production facilities" in Part IX of the Verification Annex to the Convention.
46. More precisely, the model Additional Protocol is not for non-nuclear-weapon states party to the NPT only; it is also opened for nuclear-weapon states as well as non-NPT states. See IAEA, *Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards*, IAEA Doc. INFCIRC/540, September 1997, foreword.
47. See, e.g., David Albright and Mark Hibbs, "Iraq's Quest for the Nuclear Grail: What Can We Learn?" *Arms Control Today* 22:6 (July/August 1992), p. 9; Khidhir Hamza, "Inside Saddam's Secret Nuclear Program", *Bulletin of the Atomic Scientists* 54:5



- (September/October 1998), pp. 26–33. See also Hans Blix, *Disarming Iraq* (New York: Pantheon, 2004), p. 19.
48. IAEA Doc. INFCIRC/540, Articles 4.a.(ii) and 5.c. See also Laura Rockwood, “The IAEA’s Strengthened Safeguards System”, *Journal of Conflict and Security Law* 7:1 (April 2002), pp. 123–136.
  49. “Protocol to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction” (Chairman’s Text), FUTURE BWC/AD HOC GROUP/CRP.8, 30 March 2001, Art. 6 D, paras 66–72. For a summary of the Chairman’s Text, see Seth Brugger, “Executive Summary of the Chairman’s Text”, *Arms Control Today* 31:4 (May 2001), pp. 11–13.
  50. “Document of the Stockholm Conference”, paras 66, 70, in Arie Bloed, ed., *The Conference on Security and Co-operation in Europe: Analysis and Basic Documents, 1972–1993* (Dordrecht: Kluwer, 1993), p. 312.
  51. See “Vienna Document 1994”, para. 73, in Arie Bloed, ed., *The Conference on Security and Co-operation in Europe: Basic Documents, 1993–1995* (The Hague: Nijhoff, 1997), p. 537.
  52. For instance, 21 inspections were conducted in 1994 alone (Zdzislaw Lachowski, “Conventional Arms Control and Security Dialogue in Europe”, *SIPRI Yearbook 1995*, Oxford: Oxford University Press, 1995, p. 793). The Vienna CSBM Documents both of 1990 (paras 78, 82) and of 1992 (paras 78, 82) maintained the conditions and requirements of the Stockholm Document. Bloed, *The Conference on Security and Co-operation in Europe, 1972–1993*, pp. 511, 675, 676.

## Implementing the Chemical Weapons Convention: A comparative case study of the legislation of Australia and France

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*Faiza Patel King*

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The attacks of 11 September 2001 in the United States and the subsequently heightened fear of terrorist activities involving weapons of mass destruction have focused the attention of the international community on ensuring that states that are parties to non-proliferation treaties actually implement the obligations that they have undertaken. In April 2004, the Security Council of the United Nations, acting under Chapter VII of the United Nations Charter, decided that all states must “take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical or biological weapons and their means of delivery, including by establishing appropriate controls over related material”.<sup>1</sup> In addition, all states were required, in accordance with their national procedures, to “adopt and enforce appropriate effective laws which prohibit any non-state actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery”.<sup>2</sup>

The national implementation of international chemical disarmament and non-proliferation obligations has been a key focus of the States Parties to the Chemical Weapons Convention (CWC).<sup>3</sup> During the 2003 Review Conference for the CWC, a number of States Parties presented papers emphasizing the need for comprehensive national laws to control prohibited activities.<sup>4</sup> The need for national implementation was also a central tenet of the Political Declaration of the CWC Review Conference, and was further elaborated in its Report.<sup>5</sup>

As is evident from the text of Security Council Resolution 1540 and the CWC, the “implementation” of international obligations at the national level encompasses both the adoption of legislation and its enforcement. This chapter will focus on the former, in particular on the comprehensiveness of legislation required by the CWC.

The Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons (OPCW) has surveyed the States Parties to the CWC regarding their legislation. The most recent survey indicates that 96 states (58 per cent of the States Parties to the CWC) have legislation in place. With respect to the categories of provisions that the Secretariat considers necessary, however, the survey found that the legislation of only 53 states (32 per cent of the States Parties to the CWC) was sufficiently comprehensive.<sup>6</sup>

The OPCW has approached the issue of the comprehensiveness of legislation by asking States Parties whether their laws include certain provisions.<sup>7</sup> This chapter, on the other hand, takes a qualitative approach by analysing in detail the legislation of two States Parties: Australia and France. These particular States Parties were selected for a number of reasons. Their legislation is considered by the OPCW survey to be sufficiently comprehensive to meet the requirements of the CWC.<sup>8</sup> They represent the two major legal traditions, with Australia being a common law country and France following the civil law tradition. Finally, both have a significant chemical industry and their legislation thus requires considerable attention to the non-proliferation aspects of the Convention. All of these factors make these two States Parties particularly good candidates for an in-depth case study of CWC implementing legislation.

The chapter begins by setting out the explicit obligations undertaken by CWC States Parties with respect to national implementation. I then consider how the legislation of Australia and France has met these requirements by analysing four key areas: the incorporation of the CWC’s general prohibition on chemical weapons activities; the measures taken to prevent prohibited activities; the persons covered by the legislation; and the provisions relating to inspections. The final section of the chapter presents some conclusions relating to national implementing legislation that are suggested by the comparative analysis, and identifies issues that States Parties may wish to examine further.

## 1. National implementation obligations of CWC States Parties

The primary CWC provision relating to national implementation is its Article VII, which provides as follows:

Each State Party shall, in accordance with its constitutional processes, adopt the necessary measures to implement its obligations under the Convention. In particular, it shall:

- (a) Prohibit natural and legal persons anywhere on its territory or in any other place under its jurisdiction as recognized by international law from undertaking any activity prohibited to a State Party under this Convention, including enacting penal legislation with respect to such activity;
- (b) Not permit in any place under its control any activity prohibited to a State Party under this Convention;
- (c) Extend its penal legislation enacted under subparagraph (a) to any activity prohibited to a State Party under this Convention undertaken anywhere by natural persons, possessing its nationality, in conformity with international law.<sup>9</sup>

The responsibilities of a State Party under Article VII, paragraph 1, are manifold. First, each State Party must pass legislation that extends the prohibitions of the Convention (which bind the state) to cover legal and natural persons that are on its territory or under its jurisdiction. The reference to penal legislation suggests that it may be appropriate to punish such activity as criminal offences. Second, any such penal legislation must extend to natural persons possessing the state's nationality regardless of where the activity was committed. Third, each State Party is obliged to take the measures necessary to ensure that prohibited activities do not occur in any place under its control.

It should be noted that the obligation undertaken under sub-paragraph (b) in particular is very broad. The use of the term "measures" in the *chapeau* of the provision, combined with the breadth of the obligation to ensure that prohibited activities do not occur, indicates that a State Party may have to take a variety of actions. For example, it could be read to require a State Party to have in place a regulatory structure that ensures that the provisions of the CWC are not violated, as well as to require that a State Party enforce any legislation that it already has in place.

The State Party obligations enumerated above provide the framework for the analysis of the legislation of Australia and France, which begins below.

## 2. Prohibitions on chemical weapons

The CWC's general prohibitions on chemical weapons are set out in its Article I, paragraph 1, which provides as follows:

Each State Party to this Convention undertakes never under any circumstances:

- (a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;

- (b) To use chemical weapons;
- (c) To engage in any military preparations to use chemical weapons;
- (d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to State Party under this Convention.<sup>10</sup>

The reach of this provision is extensive and is made more so by the so-called “general purpose criterion” set out in Article II of the CWC. This defines chemical weapons to mean, *inter alia*, “[t]oxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention as long as the types and quantities are consistent with such purposes”.<sup>11</sup> In essence, this definition means that the Article I obligations undertaken by States Parties apply to all toxic chemicals and their precursors. These obligations are not limited to the chemicals that are subject to verification under the CWC.<sup>12</sup>

In accordance with Article VII, paragraph 1(a), each State Party is required to extend the Article I obligations that it has undertaken as a state to certain natural and legal persons. Both Australia and France have included this type of provision in the legislation implementing the CWC.

The Australian implementing legislation, which is known as the Chemical Weapons (Prohibition) Act,<sup>13</sup> provides that:

A person must not, intentionally:

- (a) develop, produce, otherwise acquire, stockpile or retain chemical weapons; or
- (b) transfer, directly or indirectly, chemical weapons to another person; or
- (c) use chemical weapons; or
- (d) engage in any military preparations to use chemical weapons; or
- (e) assist, encourage or induce, in any way, any person to engage in any activity prohibited to a State Party under the Convention; or
- (f) use riot control agents as a method of warfare.<sup>14</sup>

This provision incorporates almost verbatim the prohibitions contained in Article I, paragraph 1, of the CWC, as well as the prohibition on the use of riot control agents that is found in Article I, paragraph 5, of the CWC. The Australian legislation further provides that the term “chemical weapons” used in the legislation has the same meaning as in the Convention<sup>15</sup> so that the scope of the Australian provision is basically coterminous with the fundamental prohibitions contained in Article I of the CWC.<sup>16</sup>

France follows a similar approach. Its national implementing legislation, which is contained in the “Law no. 98-467 of 17 June 1998 concerning the implementation of the Convention of 13 January 1993 on the Prohibition of the Development, Production, Stockpiling and Use of

Chemical Weapons and on Their Destruction” (French CWC Act), provides as follows:

The use of chemical weapons, and the development, production, stockpiling, possession, retention, acquisition, assignment, import, export and transfer of such weapons, and selling or trading in them, are prohibited.

It is forbidden to undertake any preparations for the use of chemical weapons, or to assist, encourage or induce any person in any manner to undertake any activity which is prohibited under this law.<sup>17</sup>

The term “chemical weapons” has the same meaning in the French legislation as it does in the CWC,<sup>18</sup> so that the scope of the provision quoted encompasses the basic prohibitions of Article I of the CWC.

The common approach of Australia and France to the basic prohibitions of Article I, paragraph 1, is to incorporate them wholesale. This approach has the obvious advantage of ensuring that there is no discrepancy between the basic prohibitions of the CWC and those of national legislation. Indeed, a significant number of the States Parties that have reported to the Secretariat on their legislation have incorporated Article I, paragraph 1, into legislation.<sup>19</sup>

### 3. Measures to prevent prohibited activities

The broad restrictions of Article I with respect to toxic chemicals are elaborated in the Convention, particularly with respect to the chemicals listed on the attached Schedules and related facilities and the other chemical production facilities (OCPFs) described in Part IX of the Verification Annex to the CWC.<sup>20</sup> The basic implementation obligation in this regard is set out in Article VI, paragraph 2, of the Convention, which states that each State Party must

adopt the necessary measures to ensure that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred, or used within its territory or in any other place under its jurisdiction or control for purposes not prohibited under this Convention. To this end, and in order to verify that activities are in accordance with obligations under this Convention, each State Party shall subject toxic chemicals and their precursors listed in Schedules 1, 2 and 3 of the Annex on Chemicals, facilities related to such chemicals, and other facilities as specified in the Verification Annex, that are located on its territory or in any other place under its jurisdiction or control, to verification measures as provided in the Verification Annex.<sup>21</sup>

This provision enumerates two obligations: (1) that each State Party must take the measures necessary to ensure that activities relating to toxic chemicals and their precursors are conducted only for purposes not prohibited under the CWC; and (2) that, as part of fulfilling this obligation and “to verify that activities are in accordance with obligations under th[e] Convention”, Scheduled chemicals, related facilities and OCPFs shall be subject to verification.

Turning to the implementation of these obligations at the national level, both Australia and France have in place schemes for regulating activities involving the toxic chemicals listed on the CWC Schedules and related facilities, as well as for OCPFs.

### *Australia*

Australia controls activities involving Scheduled chemicals by requiring permits for facilities conducting certain types of activities with these chemicals above specific thresholds. Failure to have the requisite permit is considered a criminal offence.<sup>22</sup>

The provisions relating to Schedule 1 chemicals reflect the complexity of the CWC’s requirements in this regard. Basically, a permit is required by the operator of a facility “if Schedule 1 chemicals . . . are likely to be produced, acquired, retained or used at, or transferred from, the facility during the year”.<sup>23</sup> There is an exception for facilities that meet the following conditions: (a) the total amount of chemicals likely to be acquired, retained or used at, or transferred from, the facility during the year does not exceed 100 grams; (b) there is no production of Schedule 1 chemicals at the facility during the year; and (c) the Schedule 1 chemicals are intended to be put only to research, medical or pharmaceutical purposes.<sup>24</sup>

The Australian legislation incorporates the restrictions on the number of Schedule 1 facilities contained in the Convention via the permit scheme. The legislation restricts the issuance of permits to:

- one single small-scale facility (SSSF) for research, medical, pharmaceutical or protective purposes;
- one additional protective purposes facility; and
- any number of facilities producing less than 10 kg of Schedule 1 chemicals for research, medical or pharmaceutical purposes.<sup>25</sup>

In addition, the Australian legislation contains provisions that require the government not to grant permits such that the total amount of Schedule 1 chemicals produced, acquired, retained or used at, or transferred from, all Schedule 1 facilities could exceed the 1 tonne limit contained in the CWC.<sup>26</sup> Transfer restrictions relating to Schedule 1 chemicals are also handled via the Australian permit scheme. The permit to operate a Sched-

ule 1 facility may be expressly conditional on ensuring that there is no transfer of a Schedule 1 chemical to a non-State Party.<sup>27</sup>

The Australian regime for facilities conducting activities with Schedule 2 and Schedule 3 chemicals is simpler. Permits are required for such facilities if they exceed certain thresholds.<sup>28</sup> As with Schedule 1 facilities, the permit to operate a Schedule 2 facility may be expressly conditional on ensuring that there is no transfer of a Schedule 2 chemical to a non-State Party;<sup>29</sup> the permit for a Schedule 3 facility may be expressly conditional on “ensur[ing] that any limitations required by the Convention on the transfer of a Schedule 3 chemical to a non State Party are complied with”.<sup>30</sup>

The Australian Chemical Weapons (Prohibition) Act does not contain a permit scheme for OCPFs. It does, however, require notice to the government of any OCPF operating above the thresholds specified in the CWC.<sup>31</sup>

### *France*

The French CWC Act follows an authorization scheme that is similar to that used by Australia, particularly with regard to Schedule 1 facilities. The premise of the French regulation of Schedule 1 facilities is a general prohibition on activities involving Schedule 1 chemicals “except for medical, pharmaceutical, research or protective purposes and in quantities not exceeding those strictly justified on these grounds”.<sup>32</sup> Authorization is required for permitted Schedule 1 activities.<sup>33</sup> The French legislation requires that the SSSF be owned by the state, and specifies that authorization is required for the production of Schedule 1 chemicals at the single protective purposes facility and at any facilities operating under Verification Annex, Part VI, paragraph 11.<sup>34</sup> Finally, laboratories producing less than 100 grams of Schedule 1 chemicals are not subject to authorization. All Schedule 1 production facilities are subject to declaration to the French government,<sup>35</sup> as are facilities “for the processing, stockpiling or consumption of Schedule 1 chemicals”.<sup>36</sup>

The French legislation strictly regulates transfers of Schedule 1 chemicals: “The import, export and transit of Schedule 1 chemicals is prohibited if they are being brought from or sent to a state which is not a party to the Convention.”<sup>37</sup> Even where such transactions are permitted – i.e. with other States Parties – they are subject to prior declaration.<sup>38</sup> In addition, the French CWC Act prohibits selling and trading in Schedule 1 chemicals where such transactions involve a non-State Party, and requires authorization where the transactions involve a State Party to the Convention.<sup>39</sup>



Declarations are required for the production, processing and consumption of Schedule 2 chemicals and for the facilities engaged in such activities in excess of certain thresholds.<sup>40</sup> Declarations are also required with respect to the production of Schedule 3 chemicals and for facilities engaged in such production in excess of certain thresholds, as well as for OCPFs.<sup>41</sup>

The Schedule 2 and 3 transfer restrictions of the CWC are explicitly incorporated into the French CWC Act: “The import, export, sale of and trade in Schedule 2 chemicals brought from or sent to a state not party to the Convention are prohibited.”<sup>42</sup> The export of Schedule 3 chemicals to a state not Party to the CWC is subject to authorization, which will be refused if the receiving state fails to supply an end-use certificate and a certificate of non-re-export. In addition, as a catch-all, the sale and trade of Schedule 3 chemicals to states not Party to the CWC are subject to authorization.

### *Summary*

As the discussion above demonstrates, both France and Australia found it most feasible to incorporate the variety of CWC restrictions relating to Scheduled chemicals and to OCPFs in a licensing/authorization framework.

Both States Parties – quite properly – focused on the chemicals and facilities regulated by the Convention. This very focus, however, raises the issue of whether the first element of the States Parties’ Article VI, paragraph 2, obligation is met. This requires States Parties to adopt the necessary measures to ensure that *all* “toxic chemicals and their precursors” are involved only in activities for purposes not prohibited under the Convention.<sup>43</sup> Thus, Article VI requires a State Party to go further in its regulation of toxic chemicals than covering only the chemicals that come within the verification purview of the CWC.<sup>44</sup>

In the cases of Australia and France the issue is ameliorated somewhat by the fact that both have incorporated the general purpose criterion into their legislation. Thus, at least *post facto*, both states would have the ability to penalize activities involving toxic chemicals that are undertaken for prohibited purposes. In addition, these States Parties would have the required regulatory framework for facilities working with toxic chemicals as a result of their participation in the Australia Group.

A number of CWC States Parties, however, have not incorporated the general purpose criterion<sup>45</sup> in their legislation and also do not generally regulate the purposes of activities involving toxic chemicals. The lack of regulation of toxic chemicals that are outside the CWC’s verification

framework would certainly undercut the completeness of the controls over such chemicals.

One way to resolve this issue would be for all CWC States Parties to include a catch-all provision in their legislation stating the purposes for which activities involving toxic chemicals are permitted and providing for situations in which chemicals are not listed on the Schedules and not covered by the controls on OCPFs.<sup>46</sup> This type of a provision would contribute significantly to the CWC goal of covering all toxic chemicals.

#### 4. Natural and legal persons

Having dealt with the issue of “what” must be covered by legislation, let us turn to “who” must be covered by legislation. When it comes to ensuring that the appropriate categories of persons are covered, the Australian and French legislations broadly follow the strictures of the CWC.

Both natural and legal persons are covered by the legislation of Australia and France. The Australian Chemical Weapons (Prohibition) Act speaks in terms of prohibitions on “persons”. This term is not specifically defined in the Act. However, under general principles of Australian law, bodies corporate, as well as individuals, would be covered.<sup>47</sup> Similarly, the French legislation does not explicitly address the issue of the persons that it covers. However, it is apparent from general principles of French law,<sup>48</sup> and from the fact that the penalties section of the legislation identifies penalties for both corporate and natural persons, that both would indeed be covered.

An interesting issue relating to the coverage of implementing legislation relates to its binding force – at the national level – on employees of the State Party in question.<sup>49</sup> In this regard, the Australian and French legislations take different approaches to indicate that the prohibitions therein are binding on government employees. The Australian Chemical Weapons (Prohibition) Act specifies that it “binds the Crown in all its capacities”.<sup>50</sup> French law, on the other hand, appears to presume that the prohibitions of the legislation would extend to agents of the French state. The only exception to the general prohibition on chemical-weapons-related activity is authorization for state agencies to “hold, stockpile or retain chemical weapons for the purpose of destroying them”.<sup>51</sup>

The CWC requirement that national penal provisions be extended to the nationals of the State Party regardless of where the activity is undertaken is also approached differently in the two jurisdictions. The Australian legislation explicitly provides that it “extends to acts done or omitted to be done by an Australian citizen outside Australia and the external

Territories or to acts done on board Australian ships and aircraft”.<sup>52</sup> The French legislation does not contain this type of general provision. The matter is covered by Article 113-6 of the French Penal Code, which states that “French criminal law is applicable to any felony committed by a French national outside the territory of the French Republic”.<sup>53</sup> Thus, in principle, all felony violations of the French CWC Act by French citizens would be punishable, regardless of where the underlying acts occurred.<sup>54</sup>

As the discussion above shows, the legislations of Australia and France do cover all relevant persons. This is accomplished by combining the provisions of CWC implementing legislation with general principles of law and other national legislation.

## 5. Conduct of inspections

The CWC does not require States Parties to adopt legislation allowing inspections to take place. However, States Parties are obliged to allow inspections, and this would almost certainly require specific legislative or administrative measures authorizing access to private property required to conduct inspections at industrial sites. The CWC provides for the possibility of: (i) routine inspections, which are initiated and conducted by the OPCW Secretariat on a regular and systematic basis; and (ii) non-routine inspections, most notably challenge inspections, which are triggered by a CWC State Party that suspects another State Party of non-compliance.<sup>55</sup> Both the Australian and the French legislation include rules relating to access for both types of inspection, which are discussed below.

### *Routine inspections*

The Australian legislation sets up a system under which routine inspections (which are termed “compliance” inspections) may be carried out either by national inspectors or by OPCW inspectors. As the term suggests, inspections carried out by national inspectors provide the Australian government with a tool for monitoring facilities’ compliance with the Australian chemical weapons legislation<sup>56</sup> and therefore evaluating whether the State Party is itself meeting its obligations under the CWC.

Routine inspections by OPCW inspectors are authorized for “international compliance purposes”, which are defined as the compliance purposes identified for national compliance inspections,<sup>57</sup> as well as for the purpose of “facilitating an inspection of a declared facility by an Organization inspector in accordance with the Convention and any applicable

facility agreement”.<sup>58</sup> Like national compliance inspections,<sup>59</sup> OPCW inspections can be carried out either with the consent of the facility or under a warrant.

The Australian requirement of consent or a warrant to enter private property to conduct an inspection bears discussion. At the level of international law, Australia is unconditionally obliged to provide access for inspections under the CWC.<sup>60</sup> The warrant requirement could not therefore be used by Australia to avoid its international obligation. It is unclear from the Australian legislation whether a warrant would be issued as a matter of course based on an inspection notification from the OPCW or whether Australian courts would look more deeply into the matter. A warrant for a routine inspection by OPCW inspectors is issued upon application by a national inspector “if the magistrate is satisfied, by information on oath, that it is reasonably necessary to exercise international inspection powers for an international compliance purpose”<sup>61</sup> – “international compliance purpose” is defined in the legislation as “facilitating an inspection of a declared facility by an Organization inspector in accordance with the Convention and any applicable facility agreement”. It would presumably be impossible to meet the “international compliance purpose” of facilitating inspections without providing access to the facility in order to conduct such inspection. On the other hand, a court could potentially take it upon itself to examine whether the inspection is being conducted “in accordance with the Convention”. This gives rise to the possibility that a conflict could arise between Australia’s international obligations and its domestic legislation.

The French legislation is similar to the Australian legislation in providing for a scheme of national inspections to supplement OPCW inspections. The French CWC Act requires the appropriate officials of the government to “carry out the checks necessary in order to verify compliance with the obligations laid down in this law, and the texts adopted for its implementation, by a person subject to them”.<sup>62</sup>

However, the French legislation differs from the Australian legislation in one significant respect: it does not require the consent of the owner of a facility (or alternatively a warrant) in order to conduct an inspection. For routine inspections, the only requirement is notification to the owner.<sup>63</sup>

### *Challenge inspections*

The Australian legislation permits non-routine inspections to be conducted by national inspectors (termed “offence-related searches and seizures”)<sup>64</sup> as well as by OCPW inspectors (termed “challenge inspections”).

The Australian Chemical Weapons (Prohibition) Act allows for inspections to be carried out for a “challenge inspection purpose”, which is defined as “a reference to the purpose of facilitating a challenge inspection by an [OPCW] inspector” in accordance with Article IX of the Convention and, in the case of a declared facility, any applicable facility agreement.<sup>65</sup> There is a requirement for either the consent of the occupier of the site or a warrant. A magistrate may issue such a warrant, upon application by a national inspector, if the magistrate “is satisfied, by information on oath, that it is reasonably necessary to exercise challenge inspection powers for a challenge inspection purpose”.<sup>66</sup> As with routine inspections, it is unclear whether Australian courts would assume that access to the inspection site would certainly be necessary to conduct a challenge inspection and exercise the OPCW inspection team powers in this regard or whether they would look deeper into the matter and conduct a substantive evaluation of the challenge inspection request.

The French CWC Act also contains specific provisions relating to challenge inspections. Unlike routine inspections, challenge inspections in France may be conducted only following a warrant-type procedure. The legislation provides that:

If a challenge inspection is to take place at a site where access to all or part of the specified zone depends on a private individual, the inspection may begin only with the permission of the president of the *tribunal de grande instance* for the judicial district in which access is first to occur, or that of a substitute judge appointed by him. Application to the president of the *tribunal de grande instance* will be made by the administrative authority.<sup>67</sup>

In deciding whether to allow the challenge inspection, the following will be examined: the existence of the inspection mandate; whether the members of the inspection team and the escorts and any other person for whom access is requested have been duly appointed; the authorization granted to the observer, where applicable; and whether the inspection request complies with the provisions laid down in the Convention.<sup>68</sup> The decision must be made immediately in the form of a court order,<sup>69</sup> a copy of which is required to be given at the time of the inspection to the persons concerned.<sup>70</sup>

As with the Australian legislation, there is a possibility that a French court may prevent an inspection going forward. Although most of the matters to be considered by the court considering the request for a challenge inspection are procedural, the judge is also required to consider “whether the inspection request complies with the provisions laid down in the Convention”. Depending on how broadly or narrowly this mandate is construed, this may result in a national review of a challenge in-

spection request that could lead to its rejection. Obviously, as with routine inspections, the refusal at the national level would not absolve the State Party of its responsibilities under the Convention and therefore has the potential for creating a conflict of obligations for France.

## 6. Conclusion

One of the key conclusions emerging from the analysis in this chapter is that States Parties wishing to meet the full range of their national implementation obligations under the CWC must have in place provisions covering toxic chemicals generally, as well as regulating Scheduled chemicals and related facilities and OCPFs. This can be accomplished – as illustrated by the implementing legislation of Australia and France – by incorporating the basic prohibitions of Article I of the CWC into legislation.

The CWC furthermore requires States Parties to take measures to ensure that activities relating to toxic chemicals are conducted only for purposes not prohibited under the CWC. In part, this obligation is met by the regulation of Scheduled chemicals and related facilities and of OCPFs. With regard to other toxic chemicals, however, a State Party may find that this provision requires it to enact provisions indicating the purposes for which activities involving toxic chemicals are permitted and/or regulating toxic chemicals outside of those covered by the verification mechanisms of the CWC.

In addition to covering all toxic chemicals, the legislation must cover all relevant persons. As discussed above, there is room for uncertainty in both the Australian and the French legislation with regard to the persons covered, which is resolved by reference to other legislation. This type of uncertainty could easily be clarified by the addition of a definitional section in the CWC implementing legislation itself.

The final point that bears mention is the requirement for States Parties to provide access for OPCW inspections. National legislation must, of course, meet each state's constitutional requirements relating to access to private property. Nonetheless, in order to avoid a conflict between international and national obligations, CWC States Parties should be careful to ensure that the standard for the issuance of any required warrants is as low as possible. In addition, given the short timelines for OPCW inspections, and particularly for challenge inspections, States Parties should ensure that warrants can be issued on an expedited basis.

This chapter concludes that Australia and France have, by and large, fulfilled their implementation obligations under the CWC. There is, of course, always room for improvement. Indeed, at a time when states are

probably looking at their chemical-weapons-related legislation to determine whether it complies with Security Council Resolution 1540, it may also be useful to fine-tune States Parties' implementation of the CWC.

## Notes

The author is Senior Policy Officer of the Technical Secretariat, Organisation for the Prohibition of Chemical Weapons. The views expressed herein are those of the author in her personal capacity and do not necessarily represent those of the OPCW.

1. United Nations Security Council Resolution 1540 (2004); the text of the resolution can be found via <http://www.un.org/Docs/sc>.
2. Ibid.
3. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction. The text of the Convention can be found via <http://www.opcw.org>.
4. See, e.g., Republic of Bulgaria, *National Measures for Implementation of the Chemical Weapons Convention*, RC-1/NAT.11, 28 April 2003; The People's Republic of China, *Report on the Implementation of the Chemical Weapons Convention in China*, RC-1/NAT.2, 15 April 2003; The Republic of Cuba, *Methods Adopted by the Republic of Cuba to Ensure Compliance with the Provisions of the Chemical Weapons Convention*, RC-1/NAT.4, 5 May 2003; The Kingdom of Sweden, *National Implementation of the Chemical Weapons Convention*, RC-1/NAT.27, 8 May 2003; The United Kingdom of Great Britain and Northern Ireland, *National Implementation of the Chemical Weapons Convention*, RC-1/NAT.3, 15 April 2003; United States Delegation, *CWC Review Conference: National Implementation Measures*, 3 March 2003 (on file with the author).
5. *Political Declaration of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference)*, paras 16–17, RC-1/3, 9 May 2003; *Report of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference)*, paras 7.74–7.83, RC-1/5, 9 May 2003.
6. *Note by the Director-General, Report on the OPCW Plan of Action Regarding the Implementation of Article VII Obligations*, C-9/DG.7, 23 November 2004 (hereinafter OPCW National Legislation Report), Annex 1.
7. The categories surveyed by the OPCW are: Article I prohibitions; Article I penalties; Extra-territorial application; Article II(1) penalties; Schedule 1 penalties; Schedule 2 penalties; Schedule 3 penalties; Schedule 3 EUC; Penalty for failure to declare; and Obstacles to Article VII(2). See OPCW National Legislation Report, Annex 3.
8. Ibid.
9. CWC, Article VII, para. 1.
10. Ibid., Article I, para. 1.
11. Ibid., Article II, para. 1(a).
12. The need for this type of broad coverage was also emphasized by the CWC Review Conference. The Political Declaration resulting from the conference unequivocally states that “national implementation measures must reflect all relevant provisions of the Convention and the comprehensive nature of its prohibitions to ensure that they apply to all toxic chemicals and their precursors ” (Political Declaration, para. 17).
13. The full title of the legislation is “An Act relating to the prohibition of the development, production, stockpiling or use of chemical weapons and the control of certain

- chemicals capable of being used as chemical weapons, and related provisions”, assented to 25 February 1994 (Australian Chemical Weapons (Prohibition) Act 1994). The text of the legislation, as amended, can be found via <http://www.opcw.org>.
14. Australian Chemical Weapons (Prohibition) Act, Part 2, section 12.
  15. *Ibid.*, Part 1, section 7(2).
  16. It could be argued that, by including a *mens rea* requirement, the Australian legislation departs from the CWC’s requirement that the prohibitions of Article I apply at all times and in all circumstances. However, it should be noted that the Article I prohibition applies to States Parties. In extending this prohibition to persons under Article VII, the state must naturally comply with its domestic standards relating to *mens rea*. It is surprising, however, that the Australian legislation only penalizes the “intentional” undertaking of these activities. It might have been suitable to include also the reckless performance of prohibited activities.
  17. “Law no. 98-467 of 17 June 1998 concerning the implementation of the Convention of 13 January 1993 on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction” (French CWC Act), Article 2. The full French text of the legislation can be found via <http://www.opcw.org>. An English translation has been used for the purposes of this paper and is on file with the author. The French legislation also contains provisions relating particularly to chemical weapons production facilities, as well as to destruction facilities. See French CWC Act, Articles 3–6.
  18. *Ibid.*, Article 1.
  19. OPCW National Legislation Report, Annex 3.
  20. The other chemical production facilities regulated by the CWC are those that (a) “[p]roduced by synthesis during the previous calendar year more than 200 tonnes of unscheduled discrete organic chemicals” or (b) “[c]omprise one or more plants which produced by synthesis during the previous calendar year more than 30 tonnes of an unscheduled discrete organic chemical containing the elements phosphorus, sulphur or fluorine” (CWC, Verification Annex, Part IX, para. 1).
  21. CWC, Article VI, para. 2.
  22. Australian Chemical Weapons (Prohibition) Act, Part 6, section 77.
  23. *Ibid.*, Part 3, section 16(1).
  24. *Ibid.*, section 16(4).
  25. *Ibid.*, section 19(9), (10), (11).
  26. *Ibid.*, section 19(12), (13); CWC, Verification Annex, Part VI, para. 2(c), (d).
  27. Australian Chemical Weapons (Prohibition) Act, Part 3, section 22(b).
  28. *Ibid.*, section 16(2), (3).
  29. *Ibid.*, section 22(c).
  30. *Ibid.*, section 22(d).
  31. *Ibid.*, section 28(6).
  32. French CWC Act, Article 7(I).
  33. *Ibid.*, Article 7(II).
  34. *Ibid.*, Article 9. The legislation makes clear that production at these facilities must be “within the maximum overall annual quantities” (*ibid.*).
  35. *Ibid.*, Article 8.
  36. *Ibid.*, Article 10.
  37. *Ibid.*, Article 7(II)(b).
  38. *Ibid.*
  39. *Ibid.*, Article 7(II)(c).
  40. *Ibid.*, Articles 11, 13. The legislation provides that the thresholds applicable to declarations and activities will be specified in a separate decree (*ibid.*, Article 20).



41. Ibid., Articles 14, 16, 17.
42. Ibid., Article 12(I). The legislation contains an exception for the period up to 28 April 2000 (ibid., Article 12(II)).
43. See note 20 above.
44. It should be noted that some States Parties have argued that the specification in Article VI, paragraph 2, of the chemicals and facilities subject to verification means that a State Party may regulate only these and not go any further in its regulation of toxic chemicals. This view appears to be contradictory to the text of the provision, which states a broad rule and indicates that the verification of specific chemicals and facilities is a means to this end. The point is in any event made moot by the broader obligations introduced by Security Council Resolution 1540.
45. The OPCW's statistics indicate that 16 out of 96 States Parties that have reported their national legislation to the Organisation have not included penalties for violations of Article II, paragraph 1. In other words, these states have not adopted penalties for misuse of toxic chemicals generally. See OPCW National Legislation Report, Annex 3.
46. A model catch-all that could be used as a basis is contained in the Australia Group's "Guidelines for Transfers of Sensitive Chemical or Biological Items", which can be found at <http://www.australiagroup.net>.
47. See, e.g., Acts Interpretation Act 1901, Section 22(1); Federal Criminal Code, Section 12.1; *K & S Lake City Freighters Pty Ltd v. Gordon & Gotch Ltd* (1985) 60 Aust. Law Reports 509, 521 (High Ct. of Australia). The full texts of Australian legislation can be found at <http://www.scaleplus.law.gov.au>.
48. See French Penal Code, Article 121-2 (as amended 9 March 2004); full text available (in English) at <http://www.legifrance.gouv.fr>. The French Civil Code does not address the issue, but it is generally accepted by authorities that both natural and legal persons are covered.
49. Obviously, at the international level, the state is bound by its international treaty obligations.
50. Australian Chemical Weapons (Prohibition) Act, Part I, section 6(1).
51. French CWC Act, Article 1; see also Article 64.
52. Australian Chemical Weapons (Prohibition) Act, Part I, section 5(1).
53. French Penal Code, Article 113-6.
54. It should be noted, however, that Article 82 of the French CWC Act provides that, if certain offences "are committed in a state not party to the Convention by a French national, French law will apply, by a waiver of the provisions of the second paragraph of Article 113-6 of the Penal Code, and the provisions of the second sentence of Article 113-8 of the Code will not apply". This provision, in effect, waives certain provisions of the French Penal Code with respect to the prosecution of misdemeanours committed outside the territory of France. However, it waives these provisions only in the territory of non-States Parties to the CWC. With respect to States Parties, it can be assumed that normal French law (with its restrictions on the prosecution of misdemeanours abroad) would apply. It is unclear why France would choose this type of formulation.
55. In addition to challenge inspections, the CWC also allows for the possibility of investigations of alleged use that may be triggered by a State Party against which chemical weapons have been used or a threat of their use has been made (Article X). Since these types of investigation do not affect a state's non-proliferation obligations under the Convention, they are not addressed in this chapter.
56. The purposes specified for such inspections are: determining whether the provisions of the Act and the regulations have been or are being complied with at a declared facility; determining whether the conditions applicable to a permit in force in respect of a declared facility have been or are being complied with by the permit holder; in relation

to a declared facility – other than a Schedule 1 facility – confirming the absence of any Schedule 1 chemical; and ensuring the proper functioning at a declared facility of any monitoring equipment installed in the course of an international compliance inspection or under a facility agreement (Australian Chemical Weapons (Prohibition) Act, Part 5, section 33).

57. See note 56.
58. Australian Chemical Weapons (Prohibition) Act, Part 5, section 37.
59. *Ibid.*, sections 35(1), 50.
60. See Vienna Convention on the Law of Treaties, section 27.
61. Australian Chemical Weapons (Prohibition) Act, Part 5, section 51.
62. French CWC Act, Article 51; see also Articles 52, 53.
63. *Ibid.*, Article 31 (“When the verification is to take place at a site where access to all or part of the specified zone does not depend on the state, the administrative authority or the head of the escort team shall inform the person subject to verification as soon as possible, and shall supply him with a copy of the notification”).
64. Non-routine, offence-related searches and seizures by national inspectors are authorized where the inspector “has reasonable grounds for suspecting that there may be on any premises particular evidential material” (i.e. anything that may afford evidence of the commission of an offence against the legislation). The scope of such inspections is limited to searching the premises for evidential material and seizing such material if found (Australian Chemical Weapons (Prohibition) Act, Part 5, sections 56, 57). A warrant is required.
65. *Ibid.*, section 45.
66. *Ibid.*, section 52.
67. French CWC Act, Article 39. If the site subject to inspection belongs to a public body other than the state, permission for access will be given by an administrative authority of the state.
68. *Ibid.*, Article 40.
69. Such an order must contain, *inter alia*, a list of names of the inspection team, the escorts, and any other persons (including the observer) authorized by the judge; the location of the sites subject to verification; and the perimeter (*ibid.*, Article 41).
70. *Ibid.*, Article 42. In the absence of such persons, notification is made after the inspection in the form of a registered letter with certificate of receipt (*ibid.*).

## Chemical weapons destruction and public involvement

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*Margaret E. Kosal*

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### 1. Introduction

Proverbially standing on the shoulders of past diplomatic efforts and international treaties, the framers of the Chemical Weapons Convention (CWC) integrated “lessons learned” from preceding endeavours. Among the Convention’s distinguishing characteristics are the most intrusive verification regime agreed upon by the international community, complete disarmament (not just arms control or limiting proliferation), involvement of industrial representatives in the negotiations and development dialogues as stakeholders, explicit incorporation of trade issues and incentives (as inducements both to ratification and to the long-term execution of the treaty), and destruction of an entire class of weapons. This facet of the CWC has generated the most attention from citizens of the States Parties to the Convention.

The role that the public has assumed – neither enshrined in the treaty documentation nor anticipated by the States Parties – is another unique characteristic of the CWC. Here again, the Convention is evolutionary compared with earlier treaties and international agreements. Chemical weapons disposal has emerged as a vivid example of how local environmental justice concerns can intersect with global disarmament and non-proliferation efforts. With no formal inducement, the public has become a player in the execution of the CWC-mandated destruction of chemical weapons. What lessons can be learned from the public response and how

can the “lessons learned” be applied to efforts to destroy the remainder of the stockpile? Are there implications for other international treaties? This chapter will attempt to address those questions through a review and analysis of the role that the public has taken in the planning, implementation and execution of chemical weapons destruction programmes. The impact that citizen groups have had on chemical weapons destruction and the execution of the Chemical Weapons Convention vividly illustrates how small groups of highly motivated people can be instrumental in implementing non-proliferation measures.

## 2. The controversy

In 1994, even before the entry into force of the CWC, the burgeoning controversy over the US chemical weapons destruction programme was identified as “an impasse that may be in the making”.<sup>1</sup> In 2004, many of the issues still resonate between those charged with carrying out destruction of stockpiles and the public living in the surrounding areas. This controversy has been played out in front of juries, in newspaper articles, in Congressional hearings and literally in the streets and in homes across America. In the United States, the Army has ended up “uncomfortably in the middle” of the debate.<sup>2</sup> Although it has tested the nerves and frustration levels of many people (from all “sides”) and is expensive and time consuming, the chemical weapons destruction programme has not been static. It has moved forward. Rather than functioning as an insurmountable impasse, the controversy has made average citizens more substantial players in the *execution* of this international treaty than possibly in any other.

All of the parties considered here (the stakeholders<sup>3</sup>) support the safe destruction of chemical agents and munitions. Fundamentally, the contention is not over *what* is to be done but over *how* it is to be accomplished – *how* in the sense of the physical means of rendering the chemical weapons unusable, and *how* in terms of the nature of the interaction between the stakeholders. In the discord surrounding chemical weapons destruction, one group of stakeholders comprises the citizens of a country who are not involved directly in demilitarization and disposal programmes by government mandate or engaged in international diplomacy and security. This stakeholder group is generically referred to as the public. Other stakeholders, who are major players, are representatives of the military and contracting organizations, particularly those members who are responsible for operating the physical process of weapons demilitarization and disposal. Another stakeholder group is composed of the individuals

within each state who are responsible for the diplomatic aspects and the overall execution of the CWC, along with the international actors whose primary concern is disarmament or non-proliferation.

In this domain of non-proliferation and disarmament, as in many others, the majority of available information originates in the United States. Chemical weapons destruction programmes in other countries will be addressed but with less depth and fewer examples. Although much of the US controversy revolves around issues of the risk associated with incineration versus non-incineration disposal technologies, my intention in this chapter is not to make a new technical assessment of the two. I shall address how technical and scientific assessments regarding chemical weapons disposal have been communicated, viewed and utilized by the public.

### 3. Why public input matters

At the outset there is a need to establish an impetus, a “why”, for considering the public in relation to chemical weapons destruction. Pragmatically, it is because members of the public inserted themselves into the issue, a “move” that was unanticipated by other stakeholders. Furthermore, it is argued that effective public involvement leads to better-quality decision-making and aspires to reinvigorate civic culture by promoting active citizenship.<sup>4</sup> The use of participatory forms of decision-making as a whole has increased under the assumption that including all stakeholders in the decision-making process will ultimately lead to a more effective outcome because the outcome will have been reached by consensus.<sup>5</sup>

A second premise to be considered is the value of having a public supportive of chemical weapons destruction. The CWC obligates the possessor state to carry out destruction at its own expense and to pay for the verification costs incurred. The cooperation of the States Parties is a general principle of the Convention that “influences all parts of activities necessary for achieving object and purpose of the Convention”.<sup>6</sup> It is politically valuable to have the support and cooperation (or absence of opposition) of citizens of the States Parties, particularly in light of the effort to achieve universality. One individual, with over 25 years of experience working in the chemical demilitarization programme, expressed the importance of citizens succinctly: “the role of [the] public is crucial; without public involvement [the chemical weapons destruction programme] can’t really succeed.”<sup>7</sup>

In addition to the specific disposal issue, public involvement may affect the overall process for negotiation of contentious matters, including fu-

ture international agreements that have local impact. A high level of motivation exists to participate in decisions and processes that are seen as potentially detrimental to individuals, their families and the value of their property. In the United States, a leader of the anti-incineration movement commented on the effect of citizens' groups beyond weapons destruction: "regardless of how this thing [the controversy of destruction method] winds up, we feel that we have made this process many, many times safer than it would have been had we just said 'yes' when they first came in 1984."<sup>8</sup>

#### 4. The destruction mandate of the CWC

The destruction of chemical weapons is central to the spirit and the law of the CWC. Paragraph 1 of Article I – *the General Obligations* – prohibits the use, acquisition, development, stockpiling and retention of chemical weapons. Thus, destruction is implied within that opening statement. Paragraph 2 explicitly states that the States Parties will destroy stockpiled weapons that are located within its territorial boundaries. Paragraph 3 deals with the destruction of abandoned chemical weapons. Paragraph 4 covers the destruction of production facilities. Of the five opening paragraphs of the CWC text, three overtly address destruction and one strongly implies it.

The CWC does not include specifications on the methodology a State Party must employ to destroy stockpiled weapons or even offer specific recommendations. Much is left to the discretion of each State Party. Articles III and IV require States Parties to provide a "general plan" for destruction. The Verification Annex (Part IV(A), paragraph 6) requests that more specific information be provided by the States Parties regarding the general plan, including training, safety and emissions regulations, cost estimates and the development of new destruction techniques or improvements to the existing techniques. Detailed annual plans are to include more exact information on destruction facility infrastructure and methods (Verification Annex, Part IV(A), paragraphs 29–32). The States Parties are mandated to submit such information; the vetting process established by the CWC is concerned with fulfilling the requirement for chemical weapons destruction and for establishing verification procedures (Verification Annex, Part IV(A), paragraph 35). As regards prescribing a method, the CWC is concerned with the final product, that it be an irreversible destruction of the chemical agents and that the munitions no longer be usable for a chemical weapons purpose (Verification Annex, Part IV(A), paragraph 12). The only restriction is that destruction may not be accomplished through "dumping in any body of water,

land burial or open-pit burning” (Verification Annex, Part IV(A), paragraph 13). The CWC mandates that States Parties “assign the highest priority to ensuring the safety of people and to protecting the environment” during the destruction process in accordance with national laws (Article IV, paragraph 10).

## 5. History of the US chemical demilitarization programme

“The growing public concern about the environment and natural resources could not have been perceived some 20–30 years ago, and this trend has placed severe restrictions on the means available for destroying chemical weapons and CW agents.”<sup>9</sup>

The “means” mentioned in this passage (written some 25 years ago) did not involve any chemical technique being considered today. Instead, the “means” were ocean dumping or land burial. Dumping at sea was a standard operating procedure for the disposal of chemical weapons from the Second World War up to 1970.<sup>10</sup> Public protests led to the cessation of dumping agents at sea, specifically off the US eastern seaboard.<sup>11</sup> The 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention) prohibits the dumping of chemical agents and munitions at sea. Controversy and citizen involvement surrounding the disposal of chemical weapons pre-dates the entry into force of the CWC.

In the 1970s, the US Army evaluated other methods of destruction. After more than four years of research and development, the Army had initiated Project Eagle in October 1969 to destroy chemical munitions stored at the Rocky Mountain Arsenal.<sup>12</sup> Concluded in November 1976, Project Eagle disposed of more than 3,600 metric tons of sarin by chemical neutralization and 2,700 metric tons of sulphur mustard by incineration. Neutralization was found to be substantially deficient in comparison with incineration. Processing times were excessive (days rather than hours or minutes), the amount of waste generated was large (averaging six pounds of waste per pound of agent) and, most critically, sarin was either reforming or not neutralized completely owing to scale-up problems from bench-scale reactors. Neutralization was not an irreversible destruction technique – the nerve agent was remaining, albeit in a small amount. The Army hardly has ignored neutralization as a possible destruction method. Rather, at that time the preponderance of the data – efficiency, safety and monitoring – supported incineration. The “alternative technology”<sup>13</sup> of the time – incineration – was unquestionably a way to ensure

irreversible destruction of chemical agents and decontamination of the munitions that had held agents.

Following the experiences at the Rocky Mountain Arsenal during Project Eagle, an experimental facility to test multiple destruction technologies was constructed at Tooele Army Depot in Utah as the Army began to consider destruction of obsolete unitary munitions.<sup>14</sup> In 1982, after substantial internal and external review<sup>15</sup> of the test results from the Tooele facility, incineration was selected for future destruction of chemical weapons. Johnston Atoll, over 800 miles south-west of the Hawaiian islands, was chosen as the site for the first full-scale incinerator facility.

As of March 2004, an estimated 8,691 tons (27.6 per cent) of the original 31,500 tons of the US stockpile had been destroyed.<sup>16</sup> Largely because stockpile destruction at Johnston Atoll began in 1990, the United States has been able to meet the one- and five-year CWC deadlines. However, destruction rates have been much lower than was planned, creating a need for schedule extensions. The US General Accounting Office (GAO, renamed the Government Accountability Office in 2005), which audits governmental programmes, estimated that, “unless the Chem-Demil Program is able to resolve the problems that have caused schedule delays to destroy the stockpile, the United States also risks not meeting CWC’s deadline to destroy the entire stockpile, if extended to 2012”.<sup>17</sup> The GAO also projected that, “if these delays persist, we continue to believe that program costs will rise substantially higher than the October 2003 estimate of more than \$25 billion”.

## 6. History of US public involvement

The biggest delays in the destruction of the US stockpile have come from citizen opposition, primarily resistance to incineration,<sup>18</sup> which emerged from small town America. Distrust by large numbers of citizens in the area surrounding Kentucky’s Blue Grass Chemical Depot grew during what came to be called the “smoke pot incident”. Mistrust in the area surrounding the Depot dated back to the 1960s. Chemical weapons were stored there for 10 years before local residents became aware of this.<sup>19</sup>

The “smoke pot incident” emerged as a spectre of what citizens feared might happen during incineration of chemical weapons. In 1979, open-air incineration of obscurant materials – chemical compounds for generating smoke clouds to hide troops – resulted in blockage of the nearby interstate expressway (I-75) and in the hospitalization of over 40 people.<sup>20</sup> Out-of-control burning generated a massive smoke cloud. When contacted by civilian first responders and medical personal, the Army re-



jected any responsibility for the smoke and resulting injuries. Beyond just denying culpability, Depot representatives attempted to shift blame to local college students. While the smoke was still visible, one report alleges that a local television station contracted a plane to investigate. Video images were soon available that clearly showed the origin of the smoke to be the Army depot.<sup>21</sup> Trust between the community and the Army was undermined. Not only had the citizens not been warned (informed) of activities that had a potential for harm, but, when an emergency situation occurred, the Army representatives denied the Depot was the source of the smoke. The Richmond citizens were cognizant that unspecified chemical weapons were stored at the Depot. They did not know, however, what was in the big, black smoke cloud approaching their city. Because specific information regarding the stockpile size and composition remained classified until 1996,<sup>22</sup> much of people's knowledge regarding the chemical weapons stored near their homes prior to that date was based on supposition. At the time that chemical weapons destruction was first presented to the community, the citizens wondered how much information the Depot would share in the event of a chemical emergency.<sup>23</sup>

The main public coalition in the United States, the Chemical Weapons Working Group (CWWG), grew from a small group of Kentucky citizens concerned about the Army's plan to treat the chemical weapons stored at the Blue Grass Depot in the mid-1980s (well before the CWC was ratified).<sup>24</sup> The CWWG was founded in the early 1990s with an intentional inter-state and international posture. Many of its member organizations are site and issue specific, such as Citizens Against Incinerating at Newport (CAIN) and Families Concerned About Nerve Gas Incineration at Anniston, Alabama. Others have wider agendas, such as Russia's Union for Chemical Safety, Pacific Friends Service Committee (a Pacific Islander group affiliated with the International Friends Service Committee, the Quakers) and the Sierra Club.

Two other events contributed to public wariness about chemical weapons destruction in general and about incineration specifically. One was the killing of approximately 6,000 sheep in Skull Valley, Utah, near Tooele in 1968, which was detailed in widely available reports.<sup>25</sup> Official representatives maintain that the incident was not connected to open-air chemical weapons tests, and few sources challenge that association. With similarities to Kentucky's "smoke pot incident", another event in Colorado contributed substantially to distrust of the Army's sensitivity to environmental and health concerns.<sup>26</sup> The Pueblo Depot Activity was a stockpile site of Pershing missiles. The Intermediate-Range Nuclear Forces (INF) Treaty required demolition of these missiles in the late 1980s. Destruction of the rocket engines was accomplished by securing

them to the ground, firing the rockets (“static burning”) and subsequently crushing the munitions bodies. The emissions associated with this open-atmosphere burning of rocket motors “destroyed trust” and “generated a fear in Pueblo” with respect to the Army.<sup>27</sup> There is also a parallel in that both the destruction of the Pershing missiles and the destruction of the chemical weapons stockpile are viewed as resulting from an international treaty. Over the years that the scientific and policy advisory committees and panels have been reviewing and commenting on the various aspects of chemical weapons destruction, many reports included details of a “crisis” of trust between the Army and the citizens of communities living near the stockpiles.<sup>28</sup>

## 7. Turning toxic waste into risk

One begins to understand the core concerns and the opposition by many citizen activists to incineration if one starts to think of chemical weapons as toxic waste. In addition to the incidents detailed above, this discourse is historically bounded by prior incidents with toxic waste that were not of a chemical weapon nature, e.g. New York’s Love Canal and Washington’s Hanford Site. Paramount are reservations about long-term exposure to small amounts of material that might lead to cancer and other unspecified illness. The concerns of incineration opponents focus on the products of incomplete combustion (PICs).<sup>29</sup> Among the hundreds to thousands of discrete PICs that may be generated are innocuous, biodegradable organic compounds, as well as persistent carcinogenic dioxins, polychlorinated biphenyls (PCBs) and furans.

One of the highlighted findings in a 1994 National Research Council (NRC) study on *Recommendations for the Disposal of Chemical Agents and Munitions* concerns long-term, low-level exposure to PICs, the impact on human health and environmental consequences. The authors write that “existing risk analyses did not evaluate the latent health hazards associated with storage, handling and disposal activities. These latent risks represent one of the major concerns voiced by the public.”<sup>30</sup> The NRC report acknowledges that most risk assessments of chemical disposal concentrate on single high-level exposures, rather than chronic, low-level exposures. Incineration opponents also assert the need for a comprehensive risk assessment not only through direct exposure but also through indirect routes, such as consumption via the food chain.<sup>31</sup> There is uncertainty in the risk, which is considered too great by those opposed to incineration. The NRC also notes that this had not been anticipated by the Army’s stockpile destruction programme. One commentator has summed up the situation concisely: “what started out as a

relatively straightforward technological choice for the Army, made on rationalistic grounds, ended up mired in a political conflict.”<sup>32</sup> Citizen groups have their own rationale based on different priorities. They also have a frame of reference for establishing priorities on which decisions are to be made; this overlaps with the Army’s but also contains dissimilar factors.

One expert on toxic waste and public policy has commented that, “if dealing with toxic waste were ‘simply’ a matter of science and technology, it would be easier to confront, but toxic waste is also political”.<sup>33</sup> Within the context of chemical weapons disposal, whether or not the politicization of science occurred is *not* the most important issue. Rather, the politicization of science provides another controversial case that dramatically illustrates the erosion of public trust. “The trouble is we just don’t believe them or their scientists,” said Vicki Tolbert, an anti-incinerator activist from Anniston, Alabama. Science has often been a tool for one group to use against the other within the context of historical politics and inter-group relations. One of the most incendiary epithets applied to incineration by opponents is “devil’s technology”.<sup>34</sup> In the early US chemical weapons disposal programme, the needs and priorities of the public in the communities surrounding the stockpile sites were not viewed by those citizens as being given the consideration that they were due. In no small part, much of that initial scepticism was the result of the history between the stakeholders – for example, the Kentucky Blue Grass Chemical Depot and civilians living in the adjacent communities.

## 8. The strategy of citizen groups

To secure a voice in the execution of the destruction of chemical weapons in their communities, citizen groups have developed a multifaceted sequential plan. One of the primary efforts was to establish scientific credibility such that anti-incineration experts would become part of the technical dialogue. Second was the need to establish the idea that the incinerators posed a danger to the surrounding community. This involved documenting and publicizing any incidents at the functioning incinerators that might demonstrate unsafe conditions. A third component of the overall strategy was a shift from a purely anti-incineration stance to a pro-neutralization position, which would intrinsically influence the dialogue thereafter. When the citizen groups felt that the US Army was not listening to their concerns, an audience was sought in the courtrooms. Legal challenges based on environmental statutes have been a critical part of the strategy. Additionally, the citizen groups have pursued non-traditional and creative endeavours. All of the above efforts went toward

the goal of citizen groups to be brought into the decision-making dialogue concerning execution of the CWC. They were pushing for a seat at the table throughout the entire process. I shall discuss these attempts, and their success in making the public a more active player in planning, development and implementation, in the next section.

The citizen groups quickly realized the value of presenting their own experts. During public hearings in the mid-1980s, the early organizers recognized a need to counter the scientific arguments put forward by the Army and incineration proponents.<sup>35</sup> This points to the importance of gaining authority via controlling the technical knowledge as a first step. Those opposing the construction of incinerators for the disposal of chemical stockpiles dovetailed onto prior efforts to halt waste incinerators. Incineration opponents sought to generate a body of technically based literature highlighting the specific risks of chemical weapons incineration. For example, in 1998, the Chemical Weapons Working Group engaged six independent scientists (PhDs) to address the public health effects of chemical weapons incineration.<sup>36</sup> The aim was to establish the health and safety issues – matters with near-universal, apolitical appeal – surrounding incineration. There was a concerted effort to present the pollutants from incineration as being a more critical safety issue than long-term storage of weapons. The opposition has emerged as a keen observer and environmental watchdog of the functioning of any incinerator, as part of establishing an argument that incinerators are dangerous. These attempts to demonstrate the increased danger to human health from the Army's baseline incinerators, however, do not always stand up to rigorous scientific scrutiny.<sup>37</sup> Pro-incineration advocates frequently view this as the core of the issue, which became a "clash of scientific experts".<sup>38</sup>

During the Army's first "scoping" meetings, the opposition had initially been couched in a "not-in-my-backyard" (NIMBY) response to chemical weapons destruction. Within a few years, this changed. State and federal legislation was enacted that prohibited the movement of chemical weapons across domestic state boundaries. One long-time involved citizen commented that, "when looking at the issue of chemical weapons disposal, it was very clear what courses of action were not solutions: moving the weapons 'somewhere else'; leaving them alone; accepting incineration".<sup>39</sup> This conclusion led to the third and perhaps most important strategic consideration – a shift from "anti-incineration" to "pro-neutralization".<sup>40</sup> Citizen groups were no longer just oppositional but had a proactive agenda. "Citizens whose communities have fallen under the shadow of the chemical demilitarization program have gone beyond their initial reaction of 'not in my backyard' to a more unified and responsible position: 'Stop incineration and fund acceptable technologies for the disposal of these weapons.'" <sup>41</sup> Neutralization provided a

method to dispose of the chemicals, such that concerns regarding stockpile stability could be addressed and international treaty obligations could be fulfilled.

The anti-incineration strategy that has had the greatest impact on destruction in the United States has been to take the fight into the courts. A bevy of US legislation regulates various aspects of the chemical demilitarization programme. Challenges under these laws have been invoked by the incineration opposition and other citizen groups. An effective tactic of the incineration opposition has been to affect the time for permit issuance, delaying incineration construction and operation by over a decade.

The citizen groups were not all doom and gloom in their strategies and tactics. Creative new ways of thinking have been employed that also emphasized building personal relations and trust. For example, activists from Kentucky organized a volleyball game and picnic with the employees of the Blue Grass Chemical Depot in October 1997.<sup>42</sup> The idea was initiated by the Depot Commander and the CWWG spokesperson to show that there was “no antagonism at the local level”.<sup>43</sup>

## 9. Efforts to involve the public

A variety of methods have been utilized to communicate with the public and to solicit public input regarding chemical weapons destruction. Public information sessions have a very narrow dynamic. A few representatives from the Army, usually public affairs officers, are positioned at the front of the room and the citizens primarily serve an audience role. At some point in the hearing, the members of the public are invited to express their concerns or their support or to ask questions about a decision already made by the Army. This style of public interaction is often called “Decide, Announce, Defend”,<sup>44</sup> and it offers very little in the way of a constructive role for the public in actual decision-making.

In an effort to increase public involvement, community study groups composed of local citizens were established in Kentucky and at four other stockpile sites as part of regulatory environmental investigations.<sup>45</sup> Unlike most environmental study groups, the ones concerned with chemical weapons destruction were formed at the prompting of and were composed of local citizens (rather than governmental experts).<sup>46</sup> The purpose of the groups was to voice community interests and concerns during the development of an Environmental Impact Statement (EIS), which was required before the construction of any facility could begin. This represented an effort by citizens to work directly with the Army and its contractors and within the Army’s process; they were not an “outside”

group. It was observed that, in these early meetings, “team members struggled to be advocates without being adversaries [to the Army]”.<sup>47</sup>

These efforts were successful in raising issues and offering alternatives that the Army had not previously considered. A number of these suggestions were seriously considered by the Army and several of the public’s recommendations were incorporated in the destruction plans. However, by the time the citizen study teams were brought into the discussion, years had been spent on developing designs for the incinerators. Citizens were able to offer comments on how baseline incineration would be conducted but not to affect the core decision. In conjunction with the vocal public opposition at the scoping hearings, one study group characterized the Army as having “hardened” positions.<sup>48</sup> At the conclusion of the study group exercise, it was not viewed as successful from the perspective of the local opposition to incineration, which had spurred the formation of the citizen study groups – incineration remained.

Because of local pressure aimed at US legislators, a new forum, called Citizens’ Advisory Commissions (CACs), for interaction between the public and the Army was established in 1993. Initially only three stockpile sites were mandated to create CACs. Subsequently, CACs have been set up near all of the US continental stockpile sites. The CACs were established with the aim of serving as a formal mechanism, independent from the Army, to provide a conduit for citizens to interact both with Congress and with the Army. The effectiveness of the CACs has been noted to vary substantially from site to site, depending primarily on the constituency.<sup>49</sup>

Although the Army would bring issues to the CACs, the Commission members were often left to respond only in a reactive manner. The CACs could offer comments regarding a decision that had already been made by the Army. Some citizens felt that, although CACs represented a step in the right direction, they did not offer the substantive participation in the decision-making process that was needed to address their local health and safety concerns. A 1996 report reviewing and evaluating alternative chemical disposal technologies noted that, “no matter which technology is selected for potential use at either site, the affected communities insist that they be included in a meaningful way in the process leading up to key decisions, including the decision to proceed to pilot demonstration”.<sup>50</sup> The factors constituting “meaningful community involvement” included community-specific steps, such as working with local people in deciding and achieving the participatory involvement level, rather than unilaterally delineating the parameters under which the community could participate in the process.

In 1997, a new experiment in public–Army interaction was initiated under a programme specifically charged with exploring non-incineration

techniques for destroying munitions containing chemical weapons (as opposed to bulk agents). Seeking pre-emptively to involve the public, a series of third-party mediated dialogues were initiated that would substantially and substantively bring together US Army staff, citizens (opposed and not opposed to incineration), regulators and other stakeholders.<sup>51</sup> In addition to engaging the public at the start of the process, the dialogues sought direct public involvement and participation in the decision-making process from the outset. One leading citizen group welcomed the new approach to interaction: “one of the primary ingredients needed to fulfill that directive – agreed to by the Army and citizens opposed to incineration – is direct partnership by citizens in the decision making process leading up to the selection of the technologies to be demonstrated.”<sup>52</sup> In contrast to the perceived pejorative “Decide, Announce, Defend” strategy, citizens were in favour of this initiative as a genuine opportunity to play an active role in decisions affecting their home communities. At each step of the process, including planning, members of the public and other non-federal government stakeholders were involved.

The dialogues emerged as a novel way for the Army to interact both with the public and with other stakeholders. They are near-universally hailed as an example of how to involve the public efficiently in decisions and programmes. The Acting Director of the US Chemical Materials Agency emphasized this in concluding his testimony before the US Senate in 2001: “it has been my belief, now validated by experience, that establishing and promoting a cooperative working relationship and understanding between a broad spectrum of stakeholders can and will yield positive results. Rather than giving up authority, I have found that involving the public in the decision making process is a powerful tool for increasing the authority and legitimacy of the ultimate decisions.”<sup>53</sup> This represented a culture shift from “Decide, Announce, Defend” to active participation by civilians in the adjacent communities and consensus-building.

## 10. The role of international players and perception by the public

What role is the Chemical Weapons Convention portrayed as playing in the ongoing wrangling over chemical weapons destruction? Public policy experts seem to focus on the international treaty as a motivational force driving chemical weapons disposal.<sup>54</sup> In the media, there is an underlying effort to impute culpability for the need to destroy the US chemical weapons stockpile to international treaties,<sup>55</sup> often without recognizing that the weapons were declared obsolete by the US Department of Defense 10 years before the CWC was signed and 15 years before it came

into effect. The Assembled Chemical Weapons Assessment (ACWA) Program, which brought non-incineration options to Kentucky and Colorado, was discussed concurrently with ratification of the CWC in the US Senate. One leading commentator attributed the impetus for the ACWA Program to “increased pressure from the White House to hurry up because of the CWC”.<sup>56</sup> The CWC, however, *extended* the destruction deadline and included an additional five-year extension option. One finds a subtle underlying “blame the treaty” hypothesis in press accounts and academic analysis. This same sentiment appears in citizen groups as well.

A 1996 report on alternative technologies included substantial details of public concern. Among the issues raised by citizens was that “the schedule for destruction of the chemical agent stockpile should not be driven by external pressures such as treaty obligations or legislated deadlines”.<sup>57</sup> The worry expressed was that time pressures might pose risks to health, safety or the environment. Such harmful behaviour, however, would be contrary to the minimal requirements imposed by the CWC regarding disposal – that states “assign the highest priority to ensuring the safety of people and to protecting the environment” during the destruction process and do so “in accordance with national standards for safety and emissions” (CWC, Article IV, paragraph 10).

Leading proponents for community involvement view the Convention as an instrument used by the Army to advance its programme. From Colorado, Ross Vincent observed that the Army first used the US Congressional mandate and later used the treaty as a “club against the local community” to push for incineration.<sup>58</sup> On the other side of the country, John Nunn related his experience that the “Army stands up at meetings and says ‘we have a treaty obligation’; [they are] using it as a program driver”.<sup>59</sup> Craig Williams of the CWWG maintained that the 2007 treaty deadline had been repeatedly cited as a reason not to explore alternative methods (to incineration) by the US Army and the Pentagon. He observed that “they use the CWC when they want to use it”.<sup>60</sup> There is a shared sentiment that such experiences generated a fair amount of antipathy to international agreements because of the fear that deadlines would be used as a rationalization for incinerators. At the same time, there is recognition by the public that the Convention’s goals are separate from the Army’s chemical demilitarization programme and the Defense Department’s civilian leadership. During ratification discussions, the CWWG joined with disarmament organizations to issue a joint declaration “endorsing the Chemical Weapons Convention, pledging to work together for safe, non-incineration disposal technologies”.<sup>61</sup>

Nonetheless, there is tension between those concerned with the destruction of weapons at a comprehensive level and those concerned with destruction at a local, much more visceral, scale (they have different pri-



orities). Williams asserted that the international community lacks sensitivity to the issues that are important to local activists.<sup>62</sup> Academic writers often present analogous interpretations: “foreign policy actors such as the State Department, arms control officials, and the presidential administration in Washington are pushing to dispose quickly of weapons to meet international deadlines. They frequently run into conflict with other groups wanting to slow the process down.”<sup>63</sup>

Both conclusions overlook much of the historical background of the United States’ voluntarily choosing to eliminate chemical weapons as part of its strategic arsenal. This move began during the first 20 years that the Chemical Weapons Convention was being negotiated, long before the end of the Cold War. The hazard posed by ageing weapons was recognized 30 years ago by the US Army and the Department of Arms Control and Disarmament. The US State Department’s Foreign Affairs Officer at the Office of Chemical and Biological Weapons Conventions conceded that it is “incontrovertible that it [the chemical weapons destruction controversy in the United States] is delaying the process, but the environmental and safety gains may be worth it”.<sup>64</sup>

## 11. Anticipation of the public response

Was there any anticipation of the longevity, intensity and thrust of the public response? According to representatives of the Army’s chemical demilitarization programme<sup>65</sup> and representatives of the US delegations to CWC negotiations,<sup>66</sup> there was none. Marilyn Daughdrill, who has been with the US chemical demilitarization programme since the 1970s, related that “it was a shock to Chem-Demil and policy people [at the Army] that we weren’t seen as the folks wearing the white hat”.<sup>67</sup> They thought that they would be perceived as the good guys, coming to rid the communities of tons of lethal chemical weapons.

Over the years, the level of awareness of the public’s feelings about chemical weapons by the US delegation and within the State Department has increased.<sup>68</sup> During the original Conference on Disarmament negotiations, there was no anticipation of public objection to incineration. During the preparatory phase, the probability that other destruction methods beyond incineration would be investigated was acknowledged.

## 12. The contrast with industry’s relation to CWC execution

To step back from the chemical weapons destruction issue, it may be instructive to contrast the situation with another group of public citizens –

those in the chemical industry itself. The chemical industry was engaged in CWC negotiations from the start, whereas the local communities were not involved in chemical weapons destruction issues that would operate in their “backyards”. The success of the involvement of the chemical industry also offers parallels to the success of the third-party mediated dialogues.

The drafters of the CWC recognized the criticality of involving industrial representatives in the negotiation process. Regularly consulted on draft text, the chemical industry had a stake in its development and outcome.<sup>69</sup> In the years before the Convention’s entry into force, substantial effort was invested nationally and internationally to ensure that the industry was responsive to the treaty and the inspection process.<sup>70</sup> International industrial support was mobilized in Western Europe, Australia, Japan, Canada and the United States. The major concerns of the chemical industry were brought to the table and addressed: the cost of compliance, reporting, inspections, shut-downs and loss of confidential business information. The “Managed Access” provisions of CWC inspections were a product of the dialogue among the stakeholders.

Why was there cooperation by the chemical industry in the United States? Over the course of the negotiations, the leading US chemical industry group, the Chemical Manufacturers Association (CMA), and US delegates consulted regularly on the US draft text. The trade associations contributed specifically to the verification regime. Because of significant effort during the negotiations and because of economic consequences for export sales if the United States did not ratify, the CMA consistently supported ratification of the CWC. Fred Webber, CMA president and CEO, testified before the US Senate Foreign Relations Committee in an effort to support ratification, saying “the Chemical Weapons Convention makes good business sense and good public policy”.<sup>71</sup> Engagement throughout the process worked, and the chemical industry became a valuable partner in the implementation of the CWC.

The attention afforded to the chemical industry has not been lost on involved members of the public. One long-time anti-incineration activist noted that the “chemical industry was engaged from day one”, in contrast to feelings of disregard among some incineration opponents.<sup>72</sup> The involvement of industry continues; six industry associations were official participants at the CWC Review Conference in 2003.

### 13. The situation beyond the United States

A number of other countries also initiated destruction of their chemical weapons stocks before the entry into force of the CWC.<sup>73</sup> Following the

Second World War, large amounts of chemical weapons were regularly dumped into waters off the European coast. After giving up its offensive chemical weapons programme, the United Kingdom destroyed its chemical stockpile and old chemical weapons from before 1945, either by incineration (sulphur mustard) or by chemical neutralization (alkaline hydrolysis) followed by discharge of waste hydrolysate into the sea (nerve agents).<sup>74</sup> The longest-running, full-scale chemical weapons destruction facility is the incinerator operated by the German Armed Forces in Munster.<sup>75</sup> Starting in 1980, Germany has destroyed old chemical weapons and contaminated soil by incineration.<sup>76</sup> As of 2003, Belgium, Germany, the United Kingdom and Italy maintain operational chemical weapons disposal facilities to destroy old chemical weapons as they are recovered.<sup>77</sup> Specific cases in which the public has been involved in the chemical weapons destruction process will be discussed below.

### *Belgium*

The most noted public involvement in Belgium was in reaction to the long-term storage of collected chemical weapons stocks at the Army's Bomb Disposal Service (Ontmijningsdienst van de Landmacht) located in Poelkapelle, near Ypres.<sup>78</sup> In 1989, Flemish television broadcast images from the storage area. A public movement initiated by those living near the site demanded the dismantling and disposal of the ageing munitions. In this case, the Army and a local citizen group, "supported by the peace movement and local politicians, became allies in a common cause to lobby the government from both within and outside the establishment".<sup>79</sup>

### *Canada*

Canada disposed of its small stockpile of chemical weapons between 1989 and 1991 under Project Swiftsure. The Canadian government selected as its destruction techniques neutralization for nerve agents, incineration for munitions containing mustard agent and oxidation followed by immobilization in concrete for lewisite.<sup>80</sup> The Canadians employed a two-step chemical neutralization process to destroy some 0.3 tons of nerve agents.<sup>81</sup> The project involved both public consultation and industry participation. A concern of the public living near the chemical weapons storage facility at Suffield, Alberta, was the potential for re-use of an incinerator for burning additional military, municipal or commercial toxic waste.<sup>82</sup> This was dealt with largely by the use of mobile incineration facilities. Consensus-building was viewed as the best and easiest

way to accomplish destruction of the weapons, “with scarcely a ripple of objection”.<sup>83</sup>

### *India*

Information about the destruction of India’s declared chemical weapons stockpile is sparse. One may speculate that India, having been the site of the worst industrial chemical accident in history at the Union Carbide facility in Bhopal, is extremely sensitive to legitimate public opinion. India has consistently completed destruction ahead of the Convention’s deadlines at its one declared destruction facility.<sup>84</sup> Understandable pride has been expressed in the rate at which stockpile destruction has been accomplished,<sup>85</sup> with more than 40 per cent having been eliminated.<sup>86</sup>

### *South Korea*

Details on South Korea’s declared chemical stockpile are even sparser than those from India – it is estimated to possess less than 1,500 metric tons of unspecified agents.<sup>87</sup> Reportedly, 37 per cent of its declared stockpile had been destroyed as of December 2003.<sup>88</sup> Public responses are not readily apparent in open sources.

### *Russia*

Russia inherited the world’s largest declared stockpile of chemical weapons, over 40,000 metric tons, from the Soviet Union. The Russian government has identified chemical weapons destruction as one of its two priority areas of concern for the G-8 Global Partnership accord against the spread of weapons of mass destruction.<sup>89</sup> Although issues of economics have often dominated what has been said and written about the disposal programme,<sup>90</sup> lack of local community support is also cited as a major political obstacle.<sup>91</sup> Many of the same concerns detailed extensively by US citizens are also asserted by Russian citizens. Foremost is “concern about the detrimental effects of chemical weapons destruction on public health and the environment”.<sup>92</sup>

The issues of contention do not revolve around incineration versus non-incineration as in the United States; Russia intends to employ a two-step neutralization process.<sup>93</sup> Conversion to hydrolysate waste, to be done at each individual site, will be followed by a bituminization step, which incorporates the neutralized hydrolysate into an asphalt-like matrix. A plan announced in 2001 involves the transfer of all hydrolysate wastes from the individual stockpile sites to a facility near the town of

Shchuch'ye in the Kurgan region that is yet to be completed. Bituminization and indefinite storage in barrels are to occur at the one central location.<sup>94</sup> Two main issues surrounding the Russian process have encountered public criticism. First, there are questions about validation of the chosen neutralization process for large-scale destruction. The State Duma Committee on the Environment acknowledges that "there remain a number of unresolved technical issues concerning industrial scale-up and the long-term environmental consequences, such as those related to the leaching of toxic chemicals from the bituminous mass into the ground waters".<sup>95</sup> The second major point of contention is linked to the first. Because of the affiliation of those who designed the neutralization-bituminization process, there are concerns regarding how much consideration has been given to the ecological risks and the technical capability to reduce these risks. According to Vadim Petrov, of the Union of Chemical Safety, "the technologies for chemical weapons disposal in Russia are developed by the same Institute which created the weapons, GOSNIXOT. These specialists know how to work with chemical weapons but are not able to solve the problems of how to protect the environment from the harmful impact of the products of their decomposition."<sup>96</sup> There does seem to be a striking parallel with the public criticism in the United States: the citizens of both countries have difficulty entrusting destruction to the organizations that developed the chemical arsenals.

Public involvement in chemical weapons disposal issues dates back to the final years of the Soviet Union. A location near the town of Chapayevsk was designated for a secretly planned centralized destruction facility. In 1989, the local population became aware of the purpose of the facility under construction. A huge public outcry against the transport and disposal of the entire stockpile at the one site led to a re-evaluation of the programme.<sup>97</sup> Specific concerns were voiced about the public's "lack of interaction" with the Russian government during the process of stockpile destruction.<sup>98</sup> Following the demonstrations at Chapayevsk, civil commissions were established with the aim of preventing such problems from occurring again.<sup>99</sup>

Complexities have emerged in dealings between the national and the regional governments.<sup>100</sup> For example, the Tartarstan and Bashkortostan regions have enacted legislation prohibiting the shipment of chemical weapons through their territories. As the existing plan calls for a central facility near Shchuch'ye, this will necessitate transport of the hydrolysate waste and munitions. One leading American arms control expert commented in July 2001 that, even if the state government were able to resolve the conflicts with the regional government, "the chemical weapons transportation plan will have to be explained to the affected communities if it is not to provoke strong grass-roots opposition".<sup>101</sup>

More than 20 public organizations exist within the Kurgan region to address environmental concerns. Information centres are supplied with literature explaining the process of stockpile destruction from both domestic Russian and international sources.<sup>102</sup> A Kurgan region Green Cross chapter was established in March 1997. Members speak to students and workers to educate them about destruction concerns. Citizens believe that the destruction facility is detrimental to the interests of those in the surrounding region. General public opinion has been affected by the media and other civil organizations providing citizens with information concerning the destruction facilities.

Public concern over the proposed facility near Shchuch'ye in the Kurgan region was particularly severe leading up to the Third Public Hearings on Chemical Weapons Destruction in the Kurgan Region. The Hearings included numerous representatives from both Russia and the United States but few local citizens.<sup>103</sup> Although most speakers enumerated the challenges and problems facing the citizens of the Kurgan region, few spoke about any current involvement of Kurgan residents in the debate. Several speakers discussed the information centres that are open to Kurgan residents to increase involvement.<sup>104</sup> The lack of publicly available information was a recurring problem noted by most conference speakers. As the Third Hearings were organized in part by Green Cross International, the conference itself represents public involvement in the destruction discourse within Russia.

Another active citizen group attempting to increase public awareness of the Russian chemical weapons destruction programme and to promote involvement is the Union for Chemical Safety. Lev Federov, in his role as the organization's president, has stressed the importance of continued public involvement in the construction of any future destruction facilities. Collaborating closely with the media, the Union disseminates information obtained to the public, in addition to working with the Duma to "fix" laws relating to chemical weapons.<sup>105</sup> Federov emphasized that the public should be involved in the decision-making and implementation process from beginning to end. Another affiliate has advocated the creation of Russian versions of the Citizens' Advisory Commissions.<sup>106</sup>

### *China*

Citizens in China have already demonstrated awareness of issues surrounding the abandoned chemical weapons on their territory. The CWC assigns responsibility for the disposal of abandoned weapons to the state that produced and originally deployed them. In the 1940s, Japanese forces abandoned a large number of chemical munitions in the north-east of China, the majority having been found in the Jilin and Heilong-

jiang provinces. Many of the munitions and bulk containers were thrown into rivers or buried haphazardly, making recovery of the ageing chemical weapons more challenging.<sup>107</sup> Without any detailed record of their location, it is an ongoing discovery process. Abandoned weapons have been inadvertently unearthed by Chinese citizens and opened or have ruptured as a result of deterioration, exposing individuals to the chemical agent. Although estimates of the number of civilians injured and killed over the years vary, it is widely regarded that around 2,000 people have been the victim of the abandoned weapons.<sup>108</sup>

Incidents involving abandoned chemical weapons are widely reported in a variety of Chinese newspapers. "These chemical weapons abandoned by Japanese should have been destroyed a long time ago, and we do not want to sleep with this arsenal as a pillow", a Qiqihar citizen was quoted in a widely read Chinese news source.<sup>109</sup> As recently as August 2003, approximately 40 people were injured and at least one fatality resulted from an accident involving metal barrels containing sulphur mustard that were found at a construction site.<sup>110</sup> In addition to the workers who initially excavated the bulk containers, individuals outside the construction site were exposed, including nearby school students. There is a regular emphasis on the hazard of leaking munitions. "With the '4 August' incident fresh in people's minds, the depot in Hulan Ergi District (Heilongjiang province) for chemical weapons left over by the Japanese has become the object of people's attention."<sup>111</sup> The local people are all too aware of the risk associated with chemical weapons.

To date, the involvement of Chinese citizens in chemical weapons issues has principally taken the form of litigation aimed at the Japanese government for injuries sustained from exposure to abandoned weapons.<sup>112</sup> Chinese citizen groups have gathered to support the parties engaged in the lawsuits.<sup>113</sup> Japanese citizen groups have come together to offer monetary assistance to Chinese victims of abandoned chemical weapons.<sup>114</sup> "In Japan many people don't know what's really happening here. And that's why we are here. We want to see with our own eyes the real situation, and tell more Japanese people and politicians about the injuries," stated Nakata Yoshio, leader of one group of Japanese citizens that visited sites of abandoned chemical weapons in conjunction with local Chinese groups. A few voices in Japan are advocating that their government should be more proactive in disclosing whatever information may be available regarding the locations and types of abandoned weapons and in identifying knowledgeable former Japanese Army and governmental employees.<sup>115</sup> Calls have specifically been made to declassify documents from the Second World War era. Citizens are pushing for greater transparency.

Although the overwhelming focus has been on newly discovered aban-

doned weapons and on Japan's responsibility for their destruction under the CWC obligations, the Chinese press has made reference to the "environmental and civil rights groups" that have pursued legal challenges to the US incineration programme.<sup>116</sup> Civilian activist groups have joined together and, utilizing the burgeoning availability of the Internet, have reportedly collected over 1.1 million signatures on a petition pressing for Japan to accelerate the disposal of abandoned chemical weapons on Chinese territory, in order to ensure "public safety and to compensate victims".<sup>117</sup> The petition was reportedly delivered to the Japanese embassy in Beijing in September 2003. This illustrates the level of emotional involvement in the chemical weapons issue.

The Chinese government has indicated that it recognizes the importance of local support for chemical weapons destruction.<sup>118</sup> The issue's visibility in local and national newspapers is important and may join with the burgeoning Chinese environmental movement to shift discussion away from criticism of Japan to focus on the pragmatics of destruction.

#### 14. Recommendations and concluding thoughts

The Technical Secretariat of the OPCW has overseen the destruction of more than 16 per cent of the declared 71,000 metric ton global agent stockpile. The experience of chemical weapons disposal has vividly demonstrated the ability of groups of citizens *to interfere with* or *to affect* the execution of an international agreement. The issue of chemical weapons disposal overlaps with the public interest in both environmental protection and security. In the end, the preponderance of the evidence indicates that all of the options seriously considered for the United States chemical demilitarization programme minimize risk to workers and to the surrounding communities. This involves weighing subjective differences in risk assessment, priorities and the decision-making culture. More importantly, one must recognize the role that the public has come to play in the execution of chemical weapons destruction, even before the entry into force of the CWC.

Parts of the US chemical demilitarization programme have shared decision-making with the public. Although disagreeing with the arguments against incineration, one citizen who supported the Army's decisions commented that "public opinion sure does matter".<sup>119</sup> The anti-incineration lobby was "proportionally a small group", but it still managed to accomplish its agenda. Individual citizens and non-governmental organizations regard the model of third-party mediated dialogue as successful and largely positive because it "included outside facilitation, consensus-making and participation by affected community



members and high-level regulators and governmental officials”.<sup>120</sup> The dynamic relationship of the public community and the government agencies implementing chemical weapon destruction must shift and, in a few cases, *has* shifted from being adversarial to one of partnership. From the outset, the development and implementation of a systematic means for public involvement in decision-making, to communicate back to those who remain in the local community, should be undertaken. This was mentioned as being an important part of the process as early as the 1980s.<sup>121</sup> Transparency is still cited as a key issue by citizens.<sup>122</sup>

In reviewing the dialogue types that have been used, it is clear that their intent and effectiveness vary. Large public forums serve a need to communicate to large groups of people with diverse and sometimes overlapping agendas and priorities. They provide a community focal point to link real people with an abstract authority associated with a chemical stockpile disposal programme. Nonetheless, meetings have limited utility. Ongoing interactions must be incorporated into plans throughout the period of weapons disposal and beyond. Citizens should be involved in the monitoring of by-products and physical facilities, including land and the surrounding environment, before, during and after disposal.

An effort should be made to invite the most proactive citizens – the leaders of the movements – to be directly involved in the decision-making. These individuals are highly motivated and self-educated (within the limits of available materials). Such involvement would encourage the stake that the most influential members of the public – those who are most committed – have in the process of chemical weapons destruction and disposal. These individuals have influence over the opinion of larger groups. Paul Walker, who has been active internationally regarding chemical weapons destruction, asserts that the “‘outside the fence’ or ‘soft tools’ must be integral parts of all demilitarization projects. Programs which limit themselves to ‘inside the fence’ [of the destruction facility] or only ‘hard tools’ run a high risk of failure.”<sup>123</sup>

There is also a need for more international outreach activities (such as the October 2003 symposium *Towards the Elimination of Chemical Weapons – Roles of the OPCW and Japan* at the United Nations University in Tokyo) that bring together OPCW officials, state officials, academics and members of citizen-based non-governmental organizations. All of the representatives of citizen groups expressed genuine interest in the value of such interactions, and it is crucial that there is genuine follow-up and follow-through after such interactive events. This is one additional way to keep the treaty a living, evolving – not static – document. Furthermore, there are implications for other disarmament and non-proliferation efforts.

Although a heavy reliance on science in decision-making may appeal

to some (including myself), other aspects must be considered. There is a need to keep the dialogue centred on matters of fact – what is true and how that “truth” was obtained. Beyond the distilled facts, the methods and assumptions in determining facts need to be openly discussed. Facts alone do little; it is how they are used that becomes contentious. This reinforces the importance of merging good science with public policy. The science used in decision-making and others factors need to be made *accessible* and *transparent* to the public. Those who have technical knowledge and training have a responsibility and a need to communicate on a larger scale.

Can the model of the impact of citizens’ groups on the destruction of the US chemical stockpile be used for other international non-proliferation goals? A cynic might retort that the main lesson is that failure to include citizens in disarmament plans leads to difficulties. A more optimistic observer might look to the impact of the public via the International Campaign to Ban Landmines. In the case of the Mine Ban treaty, the public was crucial to its creation and implementation. With the CWC, the public has made a role for itself in the execution of the treaty. No other security treaty has had a similar level of public involvement. If not in a proactive role, the public’s effect on the execution of the treaty should serve as a lesson for future negotiations.

A novel perspective envisages a productive coupling of environmentalism and security issues, which is particularly appropriate in this era of heightened concern about terrorism. Environmentalism can be seen as a “cause that seeks to disarm fanatics”.<sup>124</sup> This idea speaks to the part of the environmental movement that has consistently opposed chlorine gas for bleaching paper, organophosphate-based pesticides, and other chemicals that have a potential to be used as improvised chemical terrorism weapons. With respect to a potential terrorist attack on industrial chemical infrastructure, one long-time environmentalist commented that “enviros have become arms controllers”.<sup>125</sup> From the perspective of international security, the issue of chemical weapons as toxic waste is concrete and local in comparison with esoteric arguments regarding fissile material and the control of emerging biotechnology or export controls. Poison “gas” is a universally understood and feared concept.

On a more cautionary note, opposition from citizens’ groups could embolden those who seek to limit the effectiveness of the CWC or other international agreements. If there is strong, vocal and well-established opposition at home that is already “blaming” the CWC, such sentiment could be co-opted as a tool to erode its effectiveness. One can imagine homeland opposition incorporated as part of the litany of motives for decreasing funding for cooperative threat reduction to aid Russia’s chemical weapons destruction efforts.

On the national level, once again the CWC is playing out as an evolutionary treaty. The unprecedented public involvement in the execution of a treaty's mandate offers invaluable lessons for future non-proliferation, interdiction and disarmament efforts: harness the power of the people to affect the execution of a treaty. In a globalized world, greater numbers of citizens from around the globe are watching, actively seeking information and communicating with each other.

## Notes

I have intentionally attempted to not imbue the analysis and the recommendations in this chapter with my own opinions based on my technical conclusions regarding the viability and relative merits of the different destruction methodologies. Many stringent technical analyses have been undertaken by official government offices and by third-party experts. I thank both colleagues and anonymous reviewers for insightful suggestions. None of the views expressed reflect official positions of the organizations with which I am or have been affiliated.

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13. Interview with Greg J. Mahall, US Army Chemical Materials Agency (9 April 2004).
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  18. In preparing this chapter, I sought voices and viewpoints from many different perspectives, because the public is rarely of one single mindset. Finding and contacting citizens who took an anti-incineration position took a simple process of Internet searching. I would like to have spoken with many more people, particularly from outside the United States, than was possible because of time considerations. Conversely, it was much more of a challenge to find individuals who represented a pro-incineration position or who were not specifically motivated to get involved, because of either confidence in the Army’s judgement or apathy.
  19. Mark A. Brown and Peter A. Johnson, “Public Distrust Slows Weapons Destruction”, *Forum for Applied Research and Public Policy* 9 (1994), pp. 126–129.
  20. Oris Blackwell (chair), “Kentucky Community Study Group, Draft Final Report” (July 1987); David Zurick, “Grassroots Environmental Opposition to Chemical Weapons Incineration in Central Kentucky: A Success Story” (Lexington, KY: International Conference on Grassroots Environmental Movements in Japan and the United States, 2003).
  21. Lambright, “Searching for a Safer Technology”.
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  23. Today, the Army funds and manages a substantial emergency response programme at each of the stockpile sites – the Chemical Stockpile Emergency Preparedness Program (CSEPP). Kentucky’s CSEPP involves the nine counties adjacent to the depot. “Kentucky’s CSEPP has received millions of dollars to enhance the emergency preparedness of the state, affected counties and cities. This funding has been used for equipment, personnel, training and public awareness” (<<http://kyem.dma.state.ky.us/csepp/whatiscepp.html>>).
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  26. Interview with Ross Vincent, Senior Policy Advisor to Sierra Club and member of the Pueblo CAC (15 April 2004).
  27. Ibid.

28. National Research Council, *Review and Evaluation of Alternative Chemical Disposal Technologies* (Washington, DC: National Academy Press, 1996); Tony Freemantle, "The Price of Peace: The World Struggles to Purge the Poison after a Cold War Chemical Weapons Binge", *Houston Chronicle* (23 November 1997).
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33. Dianne Rahm, "The Politics of Toxic Waste", *Policy Studies Journal* 26 (1998), pp. 679–681, at p. 679.
34. Tony Freemantle, "The Price of Peace: A Noble Cause with Serious Flaws", *Houston Chronicle* (23 November 1997).
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43. Interview with Craig Williams (25 March 2004).
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## Standing the test of time – efforts to achieve universality of the CWC

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*Keith Wilson*

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Is the CWC a success? With 170 States Parties by mid 2005, membership of the Chemical Weapons Convention (CWC), which entered into force in 1997, has seen remarkable growth in a relatively short span of time. This is not a treaty that states join lightly, without careful consideration of the costs and benefits of doing so. It includes a detailed and intrusive declaration and inspection regime. It is also a treaty with economic incentives, with obligations and, potentially (if implemented meaningfully), with teeth.

What is the significance of the universality of the only international agreement to provide for the elimination of an entire category of weapons of mass destruction? The members of the Organisation for the Prohibition of Chemical Weapons (OPCW) already represent nearly 95 per cent of the earth's population and landmass and 98 per cent of global chemical industry. These are, of course, only raw statistics. But the issue of universality of instruments such as the Chemical Weapons Convention unearths a number of other, sometimes contentious, issues.

In terms of universality, how do the CWC and the OPCW stand in relation to comparable regimes in related fields, as regards quantitative breadth and qualitative depth? What is the future for such multilateral efforts in the evolving framework of disarmament, non-proliferation, legal enforcement and international cooperation and assistance? What are the main challenges and obstacles to strengthening the CWC and ensuring that it remains effective as a multilateral instrument and attains

universality? The answers to such questions will determine whether the epithet “success story” can stand the test of time.

## 1. The Convention

The provisions of the CWC itself, as with other aspects of the OPCW’s work and mandate, provide the framework within which any elaboration of its universality must proceed. Although the word “universality” does not appear explicitly in the text, the first, sixth and final preambles to the CWC nevertheless make reference to “progress towards general and complete disarmament under strict and effective international control”, “to exclude completely the possibility of the use of chemical weapons”, and “the complete and effective prohibition of ... chemical weapons”. Clearly, none of these aims can be fully realized without adherence by all states and fulfilment of the requirements to implement the CWC in and across all jurisdictions. This has been consistently recognized in decisions of successive sessions of the Conference of the States Parties to the CWC and through the development of a plan of action, which is “inspired by the objective of achieving universal adherence to the Convention ten years after its entry into force” (i.e. by 2007).

In addition to the core prohibitions as they apply to the States Parties, set out in Article I of the CWC, other provisions and related decisions of the OPCW policy-making organs have a direct impact upon States not Party, and potentially also upon non-state actors in the context of global anti-terrorism efforts (provided States Parties enact and enforce national implementing legislation and administrative measures in accordance with Article VII), reinforce steps to ensure that the CWC achieves its aims, and thereby contribute to universality. For example, under Article I, sub-paragraphs 1(a) and (d), each State Party undertakes never, in any circumstances, “to transfer, directly or indirectly, chemical weapons to anyone” or “to assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention”.

Bans and restrictions on transfers by States Parties to States not Party of the toxic chemicals and precursors listed in Schedules 1, 2 and 3 of the CWC’s Annex on Chemicals are also set out in Parts VI, VII and VIII, respectively, of the Verification Annex.<sup>1</sup> Such measures can provide incentives for States not Party to join the CWC sooner rather than later, particularly as certain chemicals listed in the Schedules have many important commercial applications that are relevant to development needs. Finally, other potentially positive aspects of OPCW membership, in addition to the disarmament and non-proliferation elements of the CWC re-

gime, flow from the international cooperation and assistance programmes carried out pursuant to Articles X and XI of the Convention, including the encouragement of activities to promote the peaceful uses of chemistry in the interests of the economic and technological development of the States Parties.

## 2. Universality status

As of July 2005, the OPCW's membership includes all of the permanent members of the United Nations Security Council, and now covers;

- all of Western, Central and Eastern Europe, and the Commonwealth of Independent States (CIS);
- India and Pakistan (which have not signed the Nuclear Non-Proliferation Treaty (NPT)), Afghanistan, Iran, Jordan, Yemen and many countries within and neighbouring the Middle East region, including all six members of the Gulf Cooperation Council (GCC) and the majority of members of the League of Arab States;
- more than three-quarters of African states, including, in 2004 alone, Chad, Libya, Madagascar, Rwanda and Sierra Leone;
- all countries on the continents of North and South America, including four-fifths of the members of the Organization of American States (OAS);
- in the Asia-Pacific, China, Japan, the Republic of Korea, the Russian Federation and almost all members of the Association of Southeast Asian Nations (ASEAN) and the Pacific Islands Forum (PIF).<sup>2</sup>

There remain 24 UN members that are States not Party: 14 in Africa and the Middle East, 4 in Asia and the Pacific Islands, and 6 in Central America and the Caribbean. Of these, 15 are signatory States that, for various reasons, have not yet ratified the treaty; only 9 are non-signatories – most of these are in the Middle East and Africa (Angola, Egypt, Iraq, Lebanon, Syria and Somalia), plus North Korea and a very few island states in the Caribbean and the Pacific. The obstacles specifically applicable to ratification or accession by these States not Party are considered in later sections of this chapter.

## 3. Universality history and progress

The Convention was signed by 130 countries in Paris in January 1993. All States Parties are members of the OPCW (CWC, Article VIII, paragraph 2) either by signature and subsequent ratification or – if they had not signed before entry into force on 29 April 1997 – by acceding to the Con-

vention. The Secretary-General of the United Nations is designated as the Depositary.<sup>3</sup>

Fiji was the first country to deposit its instrument of ratification in 1993, and the only one to do so before the end of that year. The total number of states that had ratified or acceded to the Convention in each subsequent year was as follows:

31 December 1994 – 19;  
31 December 1995 – 47;  
31 December 1996 – 67;  
29 April 1997 – 87 original States Parties at entry into force;<sup>4</sup>  
31 December 1997 – 105 (including 3 accessions);  
31 December 1998 – 121 (including 4 accessions);  
31 December 1999 – 129 (including 5 accessions);  
31 December 2000 – 141 (including 9 accessions);  
31 December 2001 – 145 (including 9 accessions);  
31 December 2002 – 148 (including 9 accessions);  
31 December 2003 – 158 (including 15 accessions);  
31 December 2004 – 167 (including 18 accessions); and  
30 July 2005 – 170 (including 19 accessions).

In 2003, 10 states ratified or acceded to the Convention, which constituted a greater rate of increase than in the previous two years combined. This included four signatory states (Afghanistan, Cape Verde, Guatemala and Kyrgyzstan<sup>5</sup>) and six non-signatory states (Andorra, Belize, Palau, São Tomé and Príncipe, Timor-Leste and Tonga). This was the greatest number of non-signatory states to join the Convention in any year, and as many as in the previous five years combined. This trend continued in 2004 and into 2005, with ratifications by Chad, Grenada, Madagascar, Marshall Islands, Rwanda, Sierra Leone and Saint Kitts and Nevis, and accessions by the Libyan Arab Jamahiriya, Niue, Solomon Islands, Tuvalu and (in July 2005) Cambodia. Such developments are particularly encouraging.

From this summary it can be seen that progress towards universality has, for the most part, been rapid and steady. However, further efforts to encourage the remaining States not Party to ratify or accede to the Convention will be more time-consuming, because many of these states have been, by definition, the most reluctant to join. The lists of States Parties and signatory and non-signatory States not Party are set out in the appendix to this chapter.

#### 4. The Universality Action Plan

On 24 October 2003, acting upon a recommendation of the First CWC Review Conference held earlier in 2003, the OPCW's Executive Council

adopted the Action Plan for the Universality of the Chemical Weapons Convention.<sup>6</sup> This plan of action helped to focus the activities of the States Parties and of the Technical Secretariat, and is intended to provide additional political emphasis for the goal of attaining universality of the CWC.

The designation of the Director for External Relations as the focal point for universality within the Secretariat and an invitation to States Parties to designate voluntary and informal points of contact (POCs) in all regions and sub-regions relevant for the effective promotion of universality were of particular importance for the implementation of the Action Plan, which was well under way by early 2004. Several POCs have been nominated, by Bulgaria, Chile, China, Iran, Jamaica, Japan, Mexico, Oman, Palau, Poland, the Republic of Korea, the Russian Federation, the Slovak Republic, South Africa, Tajikistan, the United Kingdom, the United States of America and the State Party holding the presidency of the European Union. The Secretariat continues to work with these POCs and other interested States Parties to promote universality of the CWC.

There is a need now to focus on the implementation of all aspects of the Action Plan. Several States Parties – China, Japan, Kuwait, Norway and the Republic of Korea – made voluntary contributions in 2004 in support of universality-related activities. These and other States Parties, including Australia, Canada, France, the Netherlands, New Zealand, Oman, Sweden and the United Kingdom, have provided voluntary contributions and support in previous years for regional, sub-regional and bilateral universality activities. The European Union also announced a major contribution for 2005 under its Council Joint Action on support for OPCW activities in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction.<sup>7</sup>

The Action Plan recalls, *inter alia*, resolutions of the United Nations General Assembly that have stressed the importance of achieving the universality of the Convention, and that states that remain outside the Convention would not be able to take advantage of the benefits that the Convention offers the States Parties. In this context, it underlines the important political, economic and security benefits of joining the Convention and recognizes the positive effect of international cooperation (e.g. on CWC, Article XI) among the States Parties on universality. In its decision, the Executive Council is convinced that the desire for increased security and the determination to participate fully in the global community are incentives for States not Party to adhere to the Convention. Events in 2003/2004, with the adherence of countries such as Libya, are clear indicators of this trend.

Pursuant to the Action Plan, the Technical Secretariat, having con-

sulted with States Parties, prepares a comprehensive annual document on planned universality-related activities and provides information to the Council on proposed initiatives, including on potential synergies with States Parties willing and able to join in universality-related efforts. The annual document is an informal one, which is updated regularly. An information paper was provided to the Council at its 36th Session in March 2004.<sup>8</sup> A further paper was distributed in June 2004 and was considered by the Council at its 37th Session.<sup>9</sup> Similarly, the Council at its 40th Session had before it a Secretariat Note on the subject.<sup>10</sup>

In support of the document of planned activities, the Technical Secretariat is also requested to provide information containing up-to-date details regarding the status of States not Party vis-à-vis the Convention, their prospects for adherence, their participation in universality-related activities, any significant chemical industry and any other issues relevant to the provisions of the Convention. The Director-General will also submit to the Conference of the States Parties an annual report on the implementation of the Action Plan, and he keeps the Council regularly informed, so that the Conference and the Council may review progress and monitor its implementation effectively.<sup>11</sup>

The Action Plan strongly encourages States Parties to strengthen their efforts to pursue the objective of universality, actively and appropriately, in their contacts with States not Party and to seek the cooperation of relevant international and regional organizations. The multilateral perspective, together with the potential for cooperation with international organizations, is discussed below. The regional perspective is addressed in a later section of this chapter.

## 5. The CWC and other multilateral control regimes and organizations

The CWC is traditionally characterized within a category of treaties dealing with weapons of mass destruction (WMD). It deals more specifically with chemical weapons and associated facilities and equipment, their destruction/conversion, the non-proliferation of dual-use chemicals, assistance and protection against attack or threatened attack using chemical weapons, and international cooperation for economic and technological development in the peaceful uses of chemistry. With this range of responsibilities, there are considerable potential overlaps with other international organizations and regimes.

In the WMD field, the CWC shares the scene with a relatively small number of other multilateral agreements:



- the 1925 Geneva Protocol (Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or Other Gases, and of Bacteriological Methods of Warfare);
- the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (Partial Test-Ban Treaty – PTBT);
- the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Nuclear Non-Proliferation Treaty – NPT);
- The 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (Biological Weapons Convention – BWC);
- the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT) – not yet in force.

In terms of non-proliferation, the OPCW's major counterpart institutions are the International Atomic Energy Agency (IAEA) and the Preparatory Commission for the Comprehensive Nuclear Test-Ban-Treaty Organization (CTBTO PrepCom). There is no comparable organization dealing with biological weapons. Complementary or "foil" regimes (depending on relative memberships and viewpoints) are mainly the informal/plurilateral export control mechanisms such as the Nuclear Suppliers Group, the Australia Group, the Zangger Committee, the Wassenaar Arrangement and the Missile Technology Control Regime (MTCR).

In relation to other weapons, the CWC is comparable only to the 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (also known as the Mine Ban Treaty or the Ottawa Convention), and to some extent the 1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (Certain Conventional Weapons Convention – CCW) and its various Protocols. Multilateral efforts in other areas such as small arms and missile proliferation are currently being addressed through less formal, but nonetheless important, instruments and measures.

Other international organizations potentially affecting the work of the OPCW include the World Customs Organization (WCO), the World Trade Organization (WTO) and the International Narcotics Control Board (INCB). The World Health Organization (WHO) and the United Nations Office for Coordination of Humanitarian Assistance (UN-OCHA) are also involved in work relating to protection against chemical weapons and the coordination and delivery of assistance. Treaties dealing with international humanitarian law, including Additional Protocols I and II of 1977 to the 1949 Geneva Conventions, overseen by the International Committee of the Red Cross (ICRC), also have a bearing in this

area, as does the 1998 Rome Statute creating the International Criminal Court.

In relation to the peaceful uses of chemistry, a number of instruments related to Agenda 21 (adopted at the United Nations Conference on Environment and Development in 1992) are potentially implicated. Though the CWC is not an environmental treaty, its universality may be considered relative to other chemical-related control regimes, including the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the 1998 Rotterdam Convention on the Prior Informed Consent (“PIC”) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, and the 2001 Stockholm Convention on Persistent Organic Pollutants (POPs). These treaties are relevant to developments regarding international cooperation, capacity-building and the sound management of chemicals, including under the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), a cooperative agreement among the United Nations Environment Programme, the International Labour Organization, the Food and Agriculture Organization of the United Nations, WHO, the United Nations Industrial Development Organization, the United Nations Institute for Training and Research and the Organisation for Economic Co-operation and Development.

Finally, again with the caveat that the CWC is not classified as a counter-terrorism treaty either, like many of the other organizations and instruments mentioned above it contributes to the global fight against terrorism within the mandate of the Convention and in accordance with applicable Security Council resolutions. In addition to a number of earlier terrorism-related treaties, mainly in the aviation field, the universality of the CWC in this context can be measured against increasing membership of certain counter-terrorism treaties, including the 1998 International Convention for the Suppression of Terrorist Bombings, the 1999 International Convention for the Suppression of the Financing of Terrorism and the 2000 UN Convention against Transnational Organized Crime.

In a chapter that addresses the issue of universality in some detail, it is instructive to consider this group of about 25 multilateral instruments, which includes about a dozen international organizations with supervisory responsibilities. A sample of this size and diversity is sufficient to discuss the various dimensions of the CWC’s “universality matrix”. With the exception of the NPT and the narcotics-related conventions administered by the INCB, the membership of the CWC exceeds those of all of the other conventions, organizations and regimes discussed here.

## 6. The “WMD” treaties and other weapons-related conventions

The CWC is just over 10 years old. By comparison, the 1925 Geneva Protocol was concluded 80 years ago, the NPT and PTBT around 50 years ago, and the BWC over 30 years ago. The CTBT, concluded in 1996, is not yet in force.

Only the NPT, with 188 parties, has achieved near-universal status. However, as the Director-General of the International Atomic Energy Agency, Dr Mohamed ElBaradei, noted in a letter published in the *New York Times* in February 2004, the NPT “must be tailored to 21st century realities”.<sup>12</sup> In addition to tightening and universalizing the export control system and criminalizing the actions of proliferators and those who assist them, he supported the view that Additional Protocols, giving the IAEA broader rights of inspection, should be adopted by all countries. To date, just over 60 countries have done so.

The NPT includes all countries that have joined the CWC, with the exception of India and Pakistan, as well as Cook Islands and Niue (non-UN CWC members). The only UN members that have joined neither the NPT nor the CWC are North Korea (which sought to withdraw from the NPT in 2003) and Israel. North Korea has not signed the CWC, whereas Israel has signed but not ratified it.

Still in the nuclear field, the PTBT has 130 parties and the CTBT has been ratified by 122 of its 175 signatory states. Of the 44 “Annex 2” states that must ratify the CTBT before it enters into force, 33 have done so. Three Annex 2 states – India, Pakistan and North Korea – have not signed the CTBT.

By comparison, in the field of chemical and biological weapons, the 1925 Geneva Protocol has 133 parties and the BWC has 153 States Parties. However, there is no verification mechanism or international organization responsible for monitoring compliance with the ban on biological weapons. Only four members of the United Nations have not joined either of these treaties or the CWC – the Comoros, Djibouti, Myanmar and Somalia – although all have signed at least one treaty. Only Somalia and Vanuatu have not signed either the CWC or the 1925 Geneva Protocol, and thus have made no treaty-based commitment (in accordance with Article 18 of the Vienna Convention on the Law of Treaties) to refrain from acts that would defeat the object and purpose of either the broader or the narrower norm banning chemical weapons. Angola, although a party to the 1925 Geneva Protocol, is the only UN member that has not signed either the CWC or the BWC.

Several further comparisons are revealing. Of the 170 States Parties to the CWC, 140 are also parties to the BWC. Very few UN members have

not joined either treaty – with the exception of Haiti and Myanmar these are all in the Middle East and Africa (Angola, Central African Republic, the Comoros, Djibouti, Egypt, Israel, Liberia, Somalia and Syria). Only Israel has not joined any of the NPT, CWC or BWC.

Therefore, if the “universality matrix” is applied to the adoption of WMD treaties alone, as an indicator of proliferation risk zones, the critical geographical areas clearly remain the Middle East, the Korean Peninsula and South/South-East Asia, as well as Africa, which has experienced debilitating regional, sub-regional and national conflicts for decades. In several cases, as is discussed further below, it has been the continuation of such conflicts that has diverted human and financial resources, and attention, from addressing disarmament and non-proliferation issues. Where the problems of conflict are being overcome, to varying degrees, as in Angola, the Comoros, Democratic Republic of Congo, Madagascar and Rwanda, and also in West Africa, achievements and the prospects for universality of treaties such as the CWC have already become brighter. Conversely, in regions where tensions remain high, such as the Middle East and on the Korean Peninsula, considerable work is still to be done to convince several States not Party to the CWC of its benefits in terms of security, non-proliferation, assistance and protection, and international cooperation for economic and technological development.

There is also significant common membership between the OPCW and other international bodies, such as the IAEA (123 of the 138 members of the IAEA Statute are also CWC States Parties) and the CTBTO Prep-Com (119 of the 122 parties to the CTBT), but also with other treaties such as the Ottawa Convention (129 of the 145 parties). In the case of the Ottawa Convention, in the absence of a verification mechanism, the United Nations, through the Department of Disarmament Affairs (DDA), administers a compliance mechanism under Article 7 “Transparency Measures” by collating information transmitted to it and disseminating it to all States Parties. Under the BWC (140 of the 153 parties in common with the CWC), which also lacks a verification mechanism, a Meeting of Experts is in the process of addressing “the adoption of necessary, national measures to implement the prohibitions set forth in the Convention, including the enactment of penal legislation”.

It is also of some significance for universality purposes that nearly two-thirds of the States not Party to the CWC have already joined one or more of the IAEA Statute, the 1925 Geneva Protocol, the BWC and the Ottawa Convention.

The point is that, whether most of the States not Party to the CWC will join the Convention today, tomorrow or at some time in the not too distant future, there is a current preparedness, with few exceptions, to become actively involved with multilateral WMD and disarmament-related

treaties, including with international organizations working in this field. Many African and Caribbean countries, in particular, have adopted the Ottawa Convention in the past few years. A constraint in the short term, however, may be that the legal and administrative resources of some of these countries are fully occupied, on the disarmament front at least, in complying with obligations under other regimes. To this extent, joint initiatives with other agencies may prove useful to deal with overlapping and cross-cutting issues in a concurrent, and resource-effective, manner.

## 7. Other international organizations, control regimes and chemical treaties

Similar considerations apply to other international organizations and regimes with comparable levels of membership to the OPCW. There are more than 120 members in common with the WTO and more than 130 in common with the ICRC's Additional Protocols I and II to the 1949 Geneva Conventions on the laws of armed conflict; in the case of the WCO, the 1988 Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances and the 1989 Basel Convention, there are 140 members or more that are also States Parties to the CWC. Again, the majority of States not Party to the CWC have joined the treaties or constituent instruments administered by these other organizations.

Various levels of interaction and cooperation already exist between the OPCW and the WCO in relation to harmonization of customs codes and the INCB on enforcement issues, and are in the process of being developed more formally between the OPCW Technical Secretariat and the Basel Convention Secretariat.<sup>13</sup> The OPCW also cooperates with the United Nations under the relationship agreement between the two organizations that entered into force in 2001, including with the UN-DDA and its regional centres and with UN-OCHA. The ICRC has participated in OPCW activities, including regional events in Africa and in the Asia-Pacific, and at the annual Conference of States Parties, and it promotes adherence to the CWC on a bilateral basis with States not Party to the Convention. This is also facilitated by the fact that all but a handful of States not Party to the CWC have long been engaged with the ICRC as parties to the 1949 Geneva Conventions and/or their Additional Protocols of 1977.

In addition, in the field of the sound management of chemicals, two very recent treaties – the Rotterdam Convention on the prior informed consent procedure, which entered into force on 24 February 2004, and the Stockholm “POPs” Convention, which entered into force on 17 May 2004 – have attracted the interest of large numbers of States not Party to

the CWC. In this sense, the OPCW activities in the area of international cooperation will have increasing relevance for these states, and the benefits of these OPCW programmes could begin to flow to them as soon as they take the step of joining the CWC. The Stockholm Convention, in particular, has been signed or adopted by four-fifths of the States not Party to the CWC, and the Rotterdam Convention by two-fifths of States not Party.

## 8. Counter-terrorism treaties and universality

The three newest counter-terrorism treaties, on the Suppression of Terrorist Bombings (139 parties, plus 4 signatories yet to ratify), on the Suppression of the Financing of Terrorism (138 parties, 23 signatories) and against Transnational Organized Crime (106 parties, 59 signatories), have seen very rapid growth in membership in the past three years or so, and in particular since the terrorist attacks against the United States on 11 September 2001 and more recent attacks in a number of other countries. Although almost all parties to these treaties are also OPCW member states, nine States not Party to the CWC have joined at least two of these treaties (Antigua and Barbuda, Barbados, the Comoros, Djibouti, Egypt, Honduras, Israel, Liberia and Myanmar) and the Comoros, Honduras and Liberia have joined all three. Bhutan joined the Convention for the Suppression of the Financing of Terrorism in 2004 and Syria acceded in 2005; the Central African Republic joined the UN Convention against Transnational Organized Crime in 2004. Most other States not Party to the CWC have at least signed these two treaties.

The significance of these developments may be able to be exploited in the light of the recognized contribution of the CWC to the global anti-terrorist struggle. Parties and signatory states to the counter-terrorism treaties, including all but a handful of States not Party to the CWC, have demonstrated a willingness to address various aspects of this threat to global peace and security. Adherence to, and implementation of, the major WMD and counter-proliferation treaties are also explicitly recognized in United Nations Security Council resolutions as an important aspect of the struggle against terrorism. Although not a counter-terrorism treaty per se, the CWC is making its own particular contribution to these global efforts.<sup>14</sup> The OPCW is also participating in the work of the UN Security Council Counter-Terrorism Committee (CTC). In this way, States not Party may be encouraged to join the CWC as a part of the broader push to strengthen counter-terrorism efforts.

The role of international and regional organizations in the implementation of international counter-terrorism strategies is recognized and is

intensifying, and it has an important universality dimension. Regional and sub-regional organizations are better placed to speak with one voice on these issues when all of their members are also members of the treaties in question. In pursuit of these objectives, the OPCW has been represented, for example, at recent meetings of the Inter-American Committee Against Terrorism of the Organization of American States (OAS/CICTE) and of the OAS Committee on Hemispheric Security in order to raise awareness among Latin American and Caribbean nations of relevant conventions, including the CWC. There is also increasing cooperation in related areas with Europol.

Security Council Resolution 1540, adopted on 28 April 2004, confirms the connection with the OPCW's work. This has also been firmly established in the consultations of the States Parties, between the OPCW's Action Plan on Article VII of the Convention and Resolution 1540. Under the mandatory Security Council resolution, adopted under Chapter VII of the UN Charter, all UN members are required:

- to adopt laws criminalizing the proliferation of weapons of mass destruction, including chemical weapons;
- to adopt laws preventing non-state actors from manufacturing, acquiring or trafficking in such weapons, the materials to make them, and their delivery systems;
- to take measures to secure all banned weapons;
- to develop border controls and law enforcement to detect, deter, prevent and combat the illicit trafficking and brokering in such items; and
- to report to the United Nations within six months on compliance.

The terrorist threat differs fundamentally from the military threats of the past involving the use of chemical weapons. Essentially it is driven by the accessibility of the material – in still-existing stockpiles, or relevant precursor materials, or toxic industrial chemicals. Resolution 1540 explicitly calls upon all states to strengthen multilateral cooperation, including within the framework of OPCW, and to promote universal adoption of the CWC and its full implementation.

## 9. “Core” treaties, international cooperation and legislative measures

In setting the UN Millennium Development Goals, UN Secretary-General Kofi Annan identified the CWC as one of the 25 “core” treaties reflecting the fundamental purposes of the United Nations. In his address on 1 October 2001 to the General Assembly's special debate on measures to eliminate international terrorism, the Secretary-General also emphasized the need to redouble efforts to ensure universality, verification and

full implementation of key treaties, to promote cooperation among international organizations dealing with these weapons, and to tighten national legislation over exports of the technologies needed to manufacture WMD and their means of delivery.

The growth in membership of the OPCW has reached a critical phase. Progress may be more gradual and more subtle in future, and influenced by a range of factors. Results will be measured not only by the number of states that are members of the Organisation, but also by examining the various stages of engagement in the Convention shown by the remaining States not Party. Earlier stages would be indicated by requests for information and participation in relevant OPCW-related events. Later stages would be indicated by more specific requests for assistance in preparations for adhering to the Convention, or by evidence of active consideration of the issue of membership of the OPCW by national bodies in States not Party (for example, the establishment of government working groups or industry consultative bodies, preparation of cabinet submissions, parliamentary debates, or provision made in national budgets for payment of OPCW annual contributions in forward financial years).

International cooperation, between States Parties, the OPCW Technical Secretariat and other organizations and bodies active in relevant fields, to advance the issue of CWC adherence through these stages will be crucial. Without it, universality within foreseeable time frames will not be achievable, particularly in view of the fact that the Executive Council, in adopting its Action Plan, was “inspired by the objective of achieving universal adherence to the Convention ten years after its entry into force” (i.e. by April 2007).

Of the 24 UN members remaining outside the CWC regime in various regions, about three-quarters have reached “stage one”, in that they have requested information from the OPCW or have participated in at least one universality-related activity relatively recently, though the regional spread of such interest has been uneven. Many countries in Central America and the Caribbean, Africa and the Asia-Pacific are at this stage. Several States not Party in the Middle East have also shown increasing interest recently. However, North Korea and some countries in parts of Africa have shown little interest in or responsiveness to OPCW approaches and invitations to date.

Moreover, only about half of States not Party have reached “stage two” by making requests for assistance and/or giving active consideration to membership. In the past, some States not Party have also shown interest in legislative models to assist in preparations for implementing the Convention at the national level. Assistance with legislative and regulatory measures, including in relation to controls over certain dual-use chemicals and materials, may well prove to be of even greater utility and



effectiveness in future in supporting universality efforts. This will be more evident as increasing numbers of States Parties implement the major Convention obligations through national legislative measures and inform the OPCW. At this point, there will be greater interaction between the OPCW's two Action Plans adopted in 2003, on universality and on implementation measures under Article VII of the CWC.<sup>15</sup>

## 10. Overcoming obstacles to universality, including regional perspectives

The OPCW Technical Secretariat, often in conjunction with States Parties, has engaged in a range of initiatives designed to attract States not Party to join the CWC wherever possible. This work has been carried out particularly in those regions and sub-regions where substantial (and in most cases steadily decreasing) numbers of States not Party remain. As this regional focus has evolved in recent years, cooperation between the OPCW and regional and sub-regional organizations has also increased in importance.

### *Africa and the Middle East*

In Africa, which contains more than one-third of the States not Party, the African Union passed a resolution on the universality and implementation of the Convention at its summit in Durban in 2002. The OPCW has also conducted regional and sub-regional seminars in recent years in the Sudan and Senegal. In conjunction with the African Union's Peace and Security Commission, a regional workshop to promote the universality of the Convention was held in Addis Ababa, Ethiopia (the seat of the African Union Commission), in April 2004. At the creation of the OPCW in 1997, 18 African states were original members. A further 25 have joined since that time, making a total of 43 African member states. There remain seven signatory states and three non-signatories (Angola, Egypt and Somalia).

National and regional conflicts at various times, and tensions and political instability in many African States not Party (e.g. Angola, Central African Republic, the Comoros, Congo, Democratic Republic of the Congo, Liberia, Madagascar, Sierra Leone and Somalia), have been a major obstacle to achieving progress on adherence to the CWC. In many of these countries, however, recent periods of conflict are abating or are receding into the past. This has provided opportunities to re-establish contacts on issues of disarmament and non-proliferation. Although the issues of small arms and landmines are often higher priorities on national agendas, the

non-proliferation of weapons of mass destruction, including chemical weapons, increasingly features, together with security issues of wider global application such as participation in the fight against terrorism. Another high priority for African countries is the implementation of the New Partnership for African Development (NEPAD), adopted in 2001. Of great relevance to developing countries in Africa, therefore, are the OPCW's international cooperation programmes, including support for national authorities, capacity-building, scientific exchanges and sponsorships, and the OPCW Associate Programme for chemists and chemical engineers from developing countries and countries in transition.

Other African States not Party, including African members of the League of Arab States (the Comoros, Djibouti, Egypt, Somalia), and other Arab countries in the Middle East (Iraq, Lebanon, Syria), as well as Israel, have cited somewhat different obstacles to adherence to the Convention. Israel has indicated security considerations and ongoing tensions within the region as the reason for not ratifying the Convention, which it signed in 1993. On the other hand, the Arab League had earlier adopted a resolution linking adherence to the CWC to Israel's adoption of the NPT. This position has evolved to the point that the vast majority of the League's membership has now joined the OPCW. However, certain key states, such as Egypt and Syria, have more recently promoted the concept of a Middle East zone free of all weapons of mass destruction, including nuclear, biological and chemical weapons. It remains to be seen whether the motivations for Libya's recent accession to the CWC will have wider application to other countries in the region. In the short term, such developments are acting as a spur to States Parties to fine-tune their universality-related efforts. This in itself, as much as moves by States not Party themselves, will provide further opportunities to discover any concerns they may have, as well as increasing the prospects for wider adherence.

Workshops to promote universality and implementation of the Convention in the Mediterranean basin, the Middle East and neighbouring regions were held in Malta in May 2004 and in Cyprus in June 2005. Israel and the Comoros attended the Malta workshop, as did representatives of the Egyptian Council for Foreign Relations and the Arab League. The Cyprus workshop also attracted representatives from these and every other State not Party to the CWC in the region, including Djibouti, Iraq, Lebanon and Syria. As first steps, the workshops provided opportunities to learn more about the benefits of adherence.

Although many difficult issues remain to be resolved in the Middle East and in Africa, no disagreement has been expressed by any State not Party in these regions with the aims and objectives of the CWC itself. The prospects for early adoption of the Convention by Angola, the Co-

moros, Democratic Republic of Congo, Djibouti, Iraq and Lebanon are promising. There have also been recent contacts with both Guinea-Bissau and Liberia. The participation of regional organizations such as the African Union in OPCW activities in Africa, and of the League of Arab States in activities in both Africa and the Mediterranean, is a positive indicator of a supportive “umbrella” for such efforts. The issue of cooperation and association agreements between countries and regional organizations, including the European Union, will also be of relevance to trade and development issues for these countries. In 2003, the European Union adopted a resolution that requires the inclusion of non-proliferation clauses in all such agreements in order for states to derive the trade-related benefits that they offer.

### *Asia and the Pacific*

In Asia and the Pacific, regional and sub-regional approaches have been realizing considerable dividends in recent years. Events in a number of States Parties, including Australia, China, Fiji, Japan, Singapore and Thailand, have focused on issues of relevance to the region in relation to the adoption and implementation of the Convention. With Thailand becoming a State Party in early 2003, and Cambodia in 2005, the only ASEAN member now outside the CWC regime is Myanmar. Half of the new member states in 2003–2005 have come from Asia and the Pacific Islands, for example Afghanistan, Kyrgyzstan, Marshall Islands, Niue, Palau, Solomon Islands, Thailand, Timor-Leste, Tonga, Tuvalu and Cambodia, as a result of regional workshops held in Fiji and Thailand on universality and implementation of the Convention, as well as involvement by Central Asian states in OPCW activities on assistance and protection. The workshop in Thailand in 2003 was also the first occasion that the UN Regional Centre for Peace and Disarmament in Asia and the Pacific was involved in an OPCW event in this region. Cooperation with the UN Department of Disarmament Affairs, including through its Regional Centre, and with other disarmament and non-proliferation organizations (e.g. CTBTO PrepCom) has focused on a number of activities in the Asian region, for example a joint visit to Myanmar. Of the few other States not Party remaining in the Asia-Pacific region, Bhutan and Vanuatu have announced that adoption of the Convention had been approved during parliamentary sessions held in 2005.

In relation to North Korea – the last non-signatory state in Asia – and issues affecting the Korean Peninsula, there have been no specific signals indicating even a possibility of North Korea adhering to the CWC in the foreseeable future. North Korea has not responded to invitations from

the OPCW to participate in events to promote universality. More recently, three rounds of talks between the United States and North Korea were held, and subsequently several rounds of “six-party talks” – involving North and South Korea, China, Japan, the Russian Federation and the United States – took place (in August 2003 and in February and June 2004), and were due to resume in mid-2005. The general assumption, however, is that talks with North Korea should address the nuclear issue first and foremost. This begs the question of when the chemical weapons issue is going to be addressed, and raises concerns in light of allegations relating to the existence of substantial chemical weapons stockpiles and of chemical production and processing capacity in North Korea. In the meantime, the substantial gap between the sides on the nuclear question has scarcely narrowed, despite hints of a more flexible approach at times in the six-party talks, the resumption of dialogue between North Korea and Japan at the highest level in May 2004, including the commitment to work within the Beijing process to resolve the nuclear issue, and a number of other potentially useful developments by mid-2005. However, the longer such talks continue without progress, the greater the risk of further developments in North Korea’s nuclear programme, and the prospects for progress on chemical weapons correspondingly recede. In response to a démarche from Sweden on behalf of the European Union in late 2003 in relation to adherence to the CWC, North Korea indicated support for the aims of the Convention but made it plain that accession would not occur in the current circumstances.

#### *Central America and the Caribbean*

In Central America and the Caribbean, a regional and sub-regional focus is showing results, to the point that only one State not Party remains in Central America (Honduras) and a handful of island states in the Caribbean (Antigua and Barbuda, Bahamas, Barbados, Dominican Republic and Haiti). Recent universality-related activities in the region have been held with the involvement of representatives from the Caribbean Community (CARICOM), the Netherlands Antilles and the Secretariat of the Organisation of Eastern Caribbean States (OECS), as well as the UN Regional Centre for Peace, Disarmament and Development, based in Lima, Peru.

States Parties have also provided direct assistance, including legislative assistance, which has helped states in the region in their preparations to adhere to the Convention and subsequently to implement it. In November 2004, a sub-regional universality-related workshop was held in St Kitts and Nevis (an OECS member). St Kitts and Nevis and Grenada

(also an OECS member) are the two most recent states from the region to ratify the Convention in 2004/2005. Ratification of the Convention has received parliamentary approval in Haiti and Honduras, early accession is also expected by Barbados, and bilateral assistance has been or will shortly be provided by the OPCW to the other States not Party.

Such developments have been assisted by other relevant regional initiatives, including the adoption in June 2004 by the General Assembly of the OAS of a resolution on the establishment of the Americas as a Biological- and Chemical-Weapons-Free Region, which underscores the importance of universal participation by all member states in, *inter alia*, the Chemical Weapons Convention.<sup>16</sup> A total of 29 of the 35 members of the OAS are currently States Parties to the Convention.

## 11. Intensification of bilateral universality efforts

In addition to joint activities with regional organizations, and with the number of States not Party steadily decreasing, there is now a marked trend towards more targeted bilateral assistance from the States Parties and the Technical Secretariat to ensure that the remaining countries adhere to the Convention as soon as possible. This trend is likely to continue. As a result of 17 bilateral visits carried out during 2003–2005, 9 states have already joined the Convention and the other 8 are preparing to do so. Bilateral efforts are directed initially to providing assistance to those States not Party showing most signs of being receptive to joining the Convention. This does not mean that the more difficult cases are being overlooked. However, the provision of in-country assistance will only ever be appropriate and effective with the consent and cooperation of the countries concerned.

Future bilateral assistance is planned for a number of States not Party in Africa (identified from among the States not Party attending the regional workshop held in Addis Ababa in 2004), in Asia and in the Caribbean islands. All of the Pacific Island countries have also been requested to indicate their assistance needs, as part of a broader sub-regional approach to achieving universality as well as full and effective implementation of the CWC.

## 12. The uncomfortable questions

Is CWC universality really achievable? And what happens if the CWC reaches an NPT-like stage, with countries such as North Korea and a

few in the Middle East as the only States not Party? More disconcertingly, is universality of multilateral treaties such as the CWC (and all others discussed in this chapter) really as important as everybody, including myself, seems to have been assuming up until this point?

In relation to achievability, the answer must be yes – anything is possible. Most, and perhaps all, of the remaining States not Party will eventually join the CWC – because they will get around to it, because they don't have anything against it, because they stand to gain on a simple cost-benefit analysis, or ultimately because it becomes too politically unacceptable or embarrassing not to do so, even in those regions where such thresholds can seem to be set rather high. For a very small number of states, for which the CWC represents a perceived risk, an intrusion into sovereignty or a potential bargaining tool, any number of considerations could be introduced at various times to make it “worthwhile”, even irresistible, for these states to join. As with many developments in international affairs, including unexpected developments (of which there are recent examples), much is achieved when the political will exists.

When, under an optimistic scenario, the CWC attains NPT-like status, say by 2007, could we accept a two-tier system, with less than a handful of UN members remaining outside? Of course, the world lives with many contradictory situations, exceptions, “understandings”, regional solutions, etc. However, in the case of the CWC, this presents a problem. The CWC is an essentially non-discriminatory treaty providing for the total elimination of a category of weapons. It relies on a system that does not permit *any* possessors of chemical weapons. It is not a case of having (even temporarily, beyond the time frames established in the Convention) a small number of possessors within the system and a smaller number outside it. In normative terms, too, there is little room for manoeuvre. Use of chemical weapons is illegal under customary international law – the ban on use would appear to have reached the status of non-derogable *jus cogens*<sup>17</sup> – and the customary norm would extend not only to other prohibitions in Article I, paragraph 1, of the CWC but arguably also to other provisions of that and certain other Articles, including export-related provisions.<sup>18</sup> The stakes are considerably higher when it is considered that even the potential for possession or production of such weapons may be asserted as constituting a justification for waging war.

In the Middle East region, at least, there are powerful reasons to find a solution that includes international verification of the chemical weapons ban. We may consider that the reasons for not joining the CWC are not, for the most part, because any of these countries would want to engage in chemical warfare. In spite of all the linkages, ambiguities and obfuscations concerning other weapons of mass destruction, the reticence is al-

most entirely political and can be overcome only politically. Chemical weapons would be not only very destructive but also extremely counter-productive in that geo-political setting. They are also no longer a weapon of choice, or even a very effective weapon, for use in armed conflict. The opprobrium that would result from their use and the potential for overwhelming response, even using modern conventional weaponry, render chemical weapons a non-starter (and certainly a non-finisher) in that context. As naïve as it may first appear, in a region where unilateral concessions are so often resisted or viewed with great scepticism, or where every issue relating to security is subsumed, without differentiation, into a notional final settlement, the question may be asked: why not a move to take chemical weapons out of the equation entirely? The absolute ban on chemical weapons already exists. The supposed “concession” would be far from breaking new ground. And, however it is presented, such a move would still be motivated by self-interest. A move by any state to renounce chemical weapons would undermine the credibility of others purporting to retain the right to possess or use such weapons or, alternatively, other weapons of mass destruction. In a positive sense, the benefits that would flow to the announcer, initially political in nature but ultimately more tangible, might be substantial.

The situation on the Korean Peninsula is somewhat different. As mentioned, the conventional wisdom appears to be to deal with the nuclear issue first. The risk is that, if this occurs, the chemical side could be allowed to slide (in the reverse scenario – chemicals first – no one would suggest that the nuclear threat should stop being addressed). In relation to the CWC, there also appears to be a concern on the part of North Korea that the treaty, and the challenge inspection mechanism in particular, could be “misused”. From the perspective of the 1990s, this mechanism was new and ripe for development. However, the States Parties to the CWC have not invoked it and, as time goes on, the likelihood of “misuse” would seem to decrease further. By the time the CWC reaches an NPT-like scenario, incentives to keep the members together may become overriding considerations. In spite of, or perhaps owing to, the difficulty in stopping a challenge inspection once it is requested, requiring a three-quarters majority of the OPCW Executive Council, the mechanism takes on an increasingly self-regulatory appearance. A more productive medium-term goal for a country such as North Korea might be to familiarize itself with the mechanics of the routine inspection system, even if this was initially observed or simulated “off-site” or extraterritorially. At this time, there need be less reticence about canvassing creative solutions.

Which leads to the ultimate question of whether there is really any

point in achieving universality. The no-sayers are cynical about multilateralism. For the most part they are content to criticize such efforts as providing cover for cheaters. However, this cannot become a pretext for a failure to use available mechanisms. Nor is summary dismissal of one approach sufficient justification for another. At the same time, proponents of multilateralism can never assume its virtues. The hypothesis is strengthened only by being tested. In the case of the CWC, the answer may eventually come not from universality itself but from what universality is leading to within the current international setting and within the OPCW.

One premise is the following: the enforceability of disarmament and non-proliferation norms, against state and non-state actors alike, has become urgent. Lack of enforceability has been perceived broadly as the weakness of the international system. In the case of the CWC and the OPCW, the effective implementation of the Article VII obligations creates an environment for enforceability. However, there can be no assurances of enforceability, and increased security, unless all states implement. All states will not implement unless and until all states have joined the CWC. It is the age-old argument of the "level playing field", or a reasonable approximation of it. Ultimately, this is what will bring together the two Action Plans recently adopted by the OPCW's Executive Council and the Conference of the States Parties on universality and on implementation through adoption of legislative and administrative measures.

There is one final point to note. Although a State not Party can, of course, enact relevant laws without joining the treaty to which those laws pertain, the CWC has evolved since its entry into force through other actions undertaken, gradually but systematically, by the States Parties. When the CWC was negotiated, Article VII appeared, for the most part, to leave legislative implementation of the treaty to each individual State Party, with copies of relevant laws being sent to the Technical Secretariat at some later point in time. Increasingly, however, States Parties have seen the need to ensure more complete legislative coverage and a degree of consistency, if not yet harmonization, of the means of legal enforcement.

One concern is that delays in this process will fail to keep pace with broader global threats. Many States Parties, including those with monist legal systems for which adherence to a treaty would traditionally be sufficient to incorporate its operative provisions into national law, have come to realize that further laws, regulations (e.g. of chemical imports and exports) or at least administrative arrangements (e.g. for international legal assistance) may be required. Various model laws and provisions, check-



lists and other legislative tools and kits have been developed. States Parties often submit drafts of legislation to the Technical Secretariat for comment before they are passed by national legislatures. And the OPCW policy-making organs continue to monitor progress on implementation.

The mandatory requirement for all states to implement Security Council Resolution 1540 is more than merely complementary to these efforts. It has added new depth and urgency to the task, and set short time frames for states to report “on steps they have taken or intend to take to implement this resolution”. The OPCW’s Article VII Action Plan also seeks to have States Parties enact legislation, including penal legislation, and adopt the administrative measures necessary to implement the CWC no later than the Tenth Session of the Conference of States Parties held in November 2005. These are ambitious targets, but the message to all states could hardly be clearer.

### 13. Conclusion

It is hoped that, with eventually only a small number of the “hard cases” holding out against the overwhelming body of international opinion, the full weight of the OPCW membership will be applied to achieving the ultimate goal of a truly universal treaty. This is an optimistic scenario, admittedly, but still achievable, because the pendulum will continue to shift in various national agendas, regional dialogues and conflict-prone states.

In this context, multilateral efforts must continue to evolve. In the end, universality will be achieved only through increased cooperation with a range of international, regional and national actors. In part, this may help to dispel some of the inherent limitations of the individual approaches. Multilateralism can never be a panacea, but it is an indispensable part (arguably the indispensable part) of the overall disarmament and non-proliferation infrastructure. Such efforts have experienced ups and downs in the past, and undoubtedly the differences in emphasis will influence the precise nature of universality-related endeavours. Moreover, the legal enforceability of international treaties through national implementation and inter-state cooperation within a framework that values the multilateral dimension will only increase in importance as this process unfolds and as the end-game of universality nears. Substantial progress will demand a preparedness to consider new approaches. The States Parties to the CWC are beginning to act on the basis that universality of the treaty may bear directly upon whether its provisions will continue to make a meaningful contribution to international peace and security. If carried forward, a “treaty success story” of the late twentieth century carries the potential to stand the test of time.

## Appendix

Table 7.1 States that had ratified or acceded to the Chemical Weapons Convention as of July 2005

Afghanistan	Fiji	Mexico
Albania	Finland	Micronesia (Federated States of)
Algeria	France	Monaco
Andorra	Gabon	Mongolia
Argentina	Gambia	Morocco
Armenia	Georgia	Mozambique
Australia	Germany	Namibia
Austria	Ghana	Nauru
Azerbaijan	Greece	Nepal
Bahrain	Grenada	Netherlands
Bangladesh	Guatemala	New Zealand
Belarus	Guinea	Nicaragua
Belgium	Guyana	Niger
Belize	Holy See	Nigeria
Benin	Hungary	Niue
Bolivia	Iceland	Norway
Bosnia and Herzegovina	India	Oman
Botswana	Indonesia	Pakistan
Brazil	Iran (Islamic Republic of)	Palau
Brunei Darussalam	Ireland	Panama
Bulgaria	Italy	Papua New Guinea
Burkina Faso	Jamaica	Paraguay
Burundi	Japan	Peru
Cambodia	Jordan	Philippines
Cameroon	Kazakhstan	Poland
Canada	Kenya	Portugal
Cape Verde	Kiribati	Qatar
Chad	Kuwait	Republic of Korea
Chile	Kyrgyzstan	Republic of Moldova
China	Lao People's Democratic Republic	Romania
Colombia	Latvia	Russian Federation
Cook Islands	Lesotho	Rwanda
Costa Rica	Libyan Arab Jamahiriya	Saint Kitts and Nevis
Côte d'Ivoire	Liechtenstein	Saint Lucia
Croatia	Lithuania	Saint Vincent and the Grenadines
Cuba	Luxembourg	Samoa
Cyprus	Madagascar	San Marino
Czech Republic	Malawi	São Tomé and Príncipe
Denmark	Malaysia	Saudi Arabia
Dominica	Maldives	Senegal
Ecuador	Mali	Serbia and Montenegro
El Salvador	Malta	Seychelles
Equatorial Guinea	Marshall Islands	
Eritrea	Mauritania	
Estonia	Mauritius	
Ethiopia		

Table 7.1 (cont.)

Sierra Leone	Tajikistan	Ukraine
Singapore	Thailand	United Arab Emirates
Slovakia	The former Yugoslav	United Kingdom
Slovenia	Republic of Macedonia	United Republic of
Solomon Islands	Timor-Leste	Tanzania
South Africa	Togo	United States
Spain	Tonga	Uruguay
Sri Lanka	Trinidad and Tobago	Uzbekistan
Sudan	Tunisia	Venezuela
Suriname	Turkey	Viet Nam
Swaziland	Turkmenistan	Yemen
Sweden	Tuvalu	Zambia
Switzerland	Uganda	Zimbabwe

Table 7.2 Signatory states that had not ratified the Chemical Weapons Convention as of July 2005

No.	State	Date of signature
1	Bahamas	2 March 1994
2	Bhutan	24 April 1997
3	Central African Republic	14 January 1993
4	Comoros	13 January 1993
5	Congo	15 January 1993
6	Democratic Republic of the Congo	14 January 1993
7	Djibouti	28 September 1993
8	Dominican Republic	13 January 1993
9	Guinea-Bissau	14 January 1993
10	Haiti	14 January 1993
11	Honduras	13 January 1993
12	Israel	13 January 1993
13	Liberia	15 January 1993
14	Myanmar	14 January 1993

Table 7.3 States that had neither signed nor acceded to the Chemical Weapons Convention as of July 2005

No.	State
1	Angola
2	Antigua and Barbuda
3	Barbados
4	Democratic People's Republic of Korea
5	Egypt
6	Iraq
7	Lebanon
8	Somalia
9	Syrian Arab Republic
10	Vanuatu

## Notes

The views expressed in this chapter are exclusively those of the author; they in no way reflect or constitute official positions of the OPCW or its Technical Secretariat.

1. "A State Party shall not produce, acquire, retain or use Schedule 1 chemicals outside the territories of States Parties and shall not transfer such chemicals outside its territory except to another State Party" (Verification Annex, Part VI, Part A, para. 1); "Schedule 2 chemicals shall only be transferred to or received from States Parties. This obligation shall take effect three years after entry into force of the Convention", i.e. from 29 April 2000 (Verification Annex, Part VII, Part C, para. 31); and "When transferring Schedule 3 chemicals to States not Party to this Convention, each State Party shall adopt the necessary measures to ensure that the transferred chemicals shall only be used for purposes not prohibited under this Convention", including the requirement for end-use certificates to be issued in relation to the transferred chemicals (Verification Annex, Part VIII, para. 26); see also the following paragraph 27, "Five years after entry into force of this Convention, the Conference shall consider the need to establish other measures regarding transfers of Schedule 3 chemicals to States not Party to this Convention" and OPCW Docs C-III/DEC.6 (17 November 1998), C-III/DEC.7 (24 November 1998) and C-VI/DEC.10 (17 May 2001).
2. Two members of the PIF, the Cook Islands and Niue, although not UN members or observers, are recognized by the United Nations as capable of taking treaty actions and have joined the CWC (Niue in 2005).
3. CWC, Article XXIII. Articles XVIII to XXI, as well as Article VIII, para. 2, address various aspects relating to adherence to the CWC, entry into force for States Parties and membership of the OPCW. Article XVI, para. 1, also provides for the Convention to be of unlimited duration.
4. 180 days after the deposit of the 65th instrument of ratification (CWC, Article XXI, para. 1), by which time 165 States had signed the Convention, of which 87 had ratified it.
5. Thailand also ratified the Convention in December 2002 and became a State Party in January 2003.
6. "Action Plan for the Universality of the Chemical Weapons Convention", OPCW Doc. EC-M-23/DEC.3 (24 October 2003), the substance of which is reproduced at <http://www.opcw.org>.
7. Council Joint Action 2004/797/CFSP (22 November 2004).
8. OPCW Doc. EC-36/S/9 (9 March 2004).
9. OPCW Doc. S/431/2004 (24 June 2004).
10. OPCW Doc. EC-40/S/5 (22 February 2005).
11. Most recently, OPCW Docs C-9/DG.4 and EC-38/DG.21 (4 October 2004).
12. M. ElBaradei, "Saving Ourselves from Self-destruction", letter to *New York Times* (16 February 2004).
13. The OPCW Technical Secretariat signed a Memorandum of Understanding with the Secretariat of the Basel Convention on 26 May 2004.
14. See the decision of the OPCW Executive Council on "The OPCW's Contribution to Global Anti-Terrorist Efforts", OPCW Doc. EC-XXVII/DEC.5 (7 December 2001).
15. See the decision adopted by the Eighth Session of the Conference of the States Parties to the CWC, "Plan of Action Regarding the Implementation of Article VII Obligations", OPCW Doc. C-8/DEC.16 (24 October 2003).
16. AG/RES.2000 (XXXIV-0/04), adopted at the fourth plenary session of the OAS General Assembly, 8 June 2004.
17. See L. Tabassi, "Impact of the CWC: Progressive Development of Customary International Law and Evolution of the Customary Norm against Chemical Weapons", *CBW*

*Bulletins*, No. 63 (March 2004), pp. 1–7, citing M. C. Bassiouni, *The Sources and Theory of International Criminal Law: A Theoretical Framework* (New York: Transatlantic Publishers, 1999), p. 42.

18. Leading to the potential for state responsibility for failure to control WMD exports; P. Rubenstein, “State Responsibility for Failure to Control the Export of Weapons of Mass Destruction”, *California Western International Law Journal* 23 (1993), pp. 319–372, cited in Tabassi, “Impact of the CWC”, p. 6.

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## 8

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# Conclusion: Seize the moment

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*Ere Haru*

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In 1992, shortly after the end of the Cold War and the Gulf War, Richard Nixon, one of the most astute politicians of his time, wrote a book entitled *Seize the Moment*. In its opening passages, he quoted Mao Zedong: “So many deeds cry out to be done always urgently. The world rolls on. Time passes. Seize the day. Seize the hour.” Making reference to the defeat of “Communism” and of “aggression in the Persian Gulf”, he urged America to seize the moment to win victory for peace and freedom in the world.<sup>1</sup>

The political beliefs of Nixon aside, players in politics and government (international and domestic alike) must grab opportunities to make a gain. Disarmament is a raw political endeavour and, as such, has also been dealt with in a larger political context by politicians, bureaucrats and experts who have successfully timed the opportunities, and maturing momentum, and subsequently advanced their political agenda.

In hindsight, it was the previously unimaginable chemical tragedy during the First World War that ignited world opinion against the use of chemical weapons, and concerned states and statesmen took advantage of the heightened anxiety to move towards prohibition. However, the momentum was soon lost and international enthusiasm for the chemical ban faded. As asserted by Ralf Trapp in Chapter 2, under the shadow of the nuclear threat during the Cold War era chemical weapons were seen by policy makers as only a part of the overall deterrence against a bigger, and potentially fatal, conflict.

Another opportunity emerged decades later. The Gulf War in 1991, as well as events surrounding the end of the Cold War itself, inspired the international community to move forward once again, this time without delay, to ban these frightful weapons completely. Although the proceedings and even the final negotiation process were intense and slow, the international community knew that chemical weapons must be outlawed once and for all and, hence, was united in the determination not to miss the opportunity. The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC) was signed in 1993 and the Organisation for the Prohibition of Chemical Weapons (OPCW) was born in 1997 as the Convention's implementing body.

### Preparing for and conducting inspections

Disarmament, chemical or otherwise, is an ongoing political process. Since the inception of the CWC, the world community has taken many positive steps in order to achieve the goals set out in its detailed provisions. Indeed, there have been "enduring and positive highlights" in the implementation of the CWC.<sup>2</sup>

As for the inspection activities under Articles IV and V of the Convention, the OPCW conducted over 2,000 inspections during its first eight years.<sup>3</sup> During these years, the OPCW activities have expanded from verification of chemical weapons destruction to include a wide range of industry verification.

Regarding the destruction of chemical weapons, the Director-General reported that, as of May 2005, possessor States Parties had destroyed approximately 11,700 tonnes of chemical warfare agents – representing about 17 per cent of the total declared stockpiles.<sup>4</sup>

The pace of destruction varies, of course, from one possessor State Party to another; India is ahead of the schedule whereas, in 2003, the United States and the Russian Federation requested extensions of the deadlines for Category 1 chemical weapons stockpile destruction. It is noteworthy, however, that all such destruction efforts and inspection activities have been conducted safely and steadily without major accidents, let alone casualties.

As destruction activities have increased, the Technical Secretariat is becoming even more active. In 2004, the OPCW hired 19 inspectors (Group D) in four chemical-weapons-related occupational groups, and in 2005 another 9 (Group E) came on board. And, in August 2005, re-

cruitment processes commenced for 10 more inspectors (Group F), who were expected to join the OPCW by February 2006.

In Chapter 4, Masahiko Asada discussed the meaning of challenge inspections. The challenge inspection is itself a fascinating subject for disarmament experts. To date, however, no challenge inspections have been requested under Article IX of the Convention, and some experts understandably claim that the provisions for challenge inspection will become redundant through disuse. Some scholars, including Asada, suggest formulating an additional protocol to the Convention to make challenge inspections more realizable.

Notwithstanding the concerns about the non-use of the challenge inspection clause, the Technical Secretariat must be ready for the call, in case a request for a challenge inspection is made to the Executive Council and the Director-General. For this purpose, the Technical Secretariat has in the recent past conducted a number of practice challenge inspection exercises. Some member states expressed interest in assisting with the exercises. In 2004, the Technical Secretariat carried out two such exercises, one in the United Kingdom and the other in Switzerland. The Swiss exercise included chemical sampling and analysis in third countries. For these, the OPCW received financial or logistical assistance from the United Kingdom, The Netherlands, Switzerland, France, Spain and Japan.

It is true that, no matter how realistic the scenario, the exercise is not a real inspection. It is indeed difficult, and almost impossible, to simulate the level of intensity and rigour that would occur in a real challenge inspection situation, against a likely attitude of hostility, or unfriendliness, from the member state claimed to be using banned chemical weapons. Nonetheless, such exercises are necessary in order to collect data on all aspects of the challenge inspection mechanism: from investigation and negotiation skills to psychological preparedness, expeditious logistics, adequate equipment, and so on. Lessons learned from these exercises will prepare the Technical Secretariat for a real challenge inspection, if and when one is called for.

### Treaty universality

The universality of the Convention, about which Keith Wilson writes extensively and passionately in Chapter 7, is another pinnacle that the OPCW is mandated to achieve. In 2004–2005 we witnessed a rapid increase in participation by new States Parties to the Convention. In 2005 alone, five more states joined the Convention. As of August 2005, the



number of member states acceding to the Convention was 172. It is also interesting and encouraging that many new members in recent years have come from Africa. Currently, 43 out of 53 African nations are members of the Convention.

This is interesting and encouraging because, as one scholar puts it, whereas the combination of terrorism and weapons of mass destruction is the primary fear of many Western countries, economic concerns dominate in the developing world.<sup>5</sup> The accession of the African nations to the Convention can therefore be appreciated in the context of the UN Millennium Development Goals, whose chief target is poverty reduction by 2015. The international assistance programme of the OPCW, a means to help States Parties develop a sound chemical industry, serves, at the same time, the global goals of poverty reduction and sustainable development.

States not Party to the Convention are an important subject for the OPCW in the context of universality. The Organisation has been reaching out to them since its genesis. The regional seminars held in Malta and Cyprus in 2004 and 2005, respectively, were cases in point. Both seminars were an attempt, among other things, to attract participation by nations in the Middle East, where only a handful of countries have so far become full-fledged members of the Convention. The others, including Egypt, Israel, Iraq, Lebanon and Syria are still, to date, outside the CWC regime. Interestingly and encouragingly, again, all of these nations participated in the regional seminars, either in Malta or in Cyprus, or both.

Moreover, the accession to the Convention by Libya at the beginning of 2004 was particularly noteworthy. Libya announced the renunciation of all weapons of mass destruction on 18 December 2003 and its government deposited its instrument of accession to the Convention with the United Nations on 6 January 2004; 30 days later, on 5 February 2004, the Convention entered into force for Libya. Wasting no time, the OPCW dispatched a team of inspectors to Tripoli during February to render technical support. A comprehensive implementation of the chemical weapons ban in Libya, the first of such efforts in that region, has thus begun.

We should not forget, however, that universality underpins the strength of the Organisation but is not its ultimate goal. Universality provides an environment for achieving the goals of the Convention. With its membership becoming more universal and extensive, the Organisation can pursue its goals as its members cooperate with each other for common purposes.

The First Review Conference, held in November/December 2003, declared that Article VII of the Convention should be completely imple-

mented by States Parties within two years. Therefore, by November 2005, all States Parties should have established their national authorities and enacted and implemented the measures required under Article VII. The practice so far has been variable. Some 30 member states are so far behind that they have not yet established their national authorities and almost 70 member states have yet to enact legislation and/or adopt administrative measures to implement the Convention. Others that have already completed the basic requirements need to continue to improve and polish the quality of their legislation and enhance their national implementation.

As described by Faiza Patel King in Chapter 5 on national legislation, these measures form the legal basis to enable States Parties to be in compliance with the provisions of the Convention. Implementation assistance by the Technical Secretariat includes legal assistance, training for the national authorities, technical assistance visits, and facilitation of networking between and among the national authorities. More than two dozen States Parties have indicated their willingness to assist other States Parties in their efforts to improve national implementation, and the Technical Secretariat will also continue to facilitate both bilateral and/or multilateral assistance and cooperation.

### The OPCW as an international organization

This book has not, and could not have, covered all issues pertinent to the Convention. One important area that is not discussed is Article VIII of the Convention; that is, the organization of the OPCW and, in particular, the functioning and management of the Technical Secretariat. The management of international secretariats is traditionally not a disarmament subject. Nevertheless, the subject deserves some attention here because the First Review Conference on the CWC stressed the responsibility of the Director-General, as the head and chief administrative officer of the Secretariat, for the appointment of staff and for the organization and functioning of the Secretariat.<sup>6</sup>

At the end of the twentieth century, eminent critics of international affairs, in search of the new world order for the coming century, claimed that the Westphalian framework would be superseded by an international community of various actors,<sup>7</sup> which undoubtedly include the citizens who are loosely referred to by Margaret Kosal in Chapter 6 as “the public”. They are people not directly involved in international affairs or, in this particular case, in chemical disarmament activity. However, because of the actions by these “loose actors”, the accountability of governance, as asserted by another scholar, would rest more with the bureau-

cracy that is responsible for governing. In this respect, the importance of the bureaucrats, national and international, has ironically been increased.<sup>8</sup>

The new type of bureaucracy, which is responsible and loyal only to the international community it serves, was first created in Europe nearly 150 years ago<sup>9</sup> and, ever since, the international civil service system has experienced Darwinian evolution. It was Dag Hammarskjöld, the second Secretary-General of the United Nations, who, in his lecture at Oxford University in 1961, defined the qualities required in these unique servants: loyal only to the organization they work for, independent from external influence and neutral.<sup>10</sup> The independent and neutral status of the OPCW staff is directly related to Hammarskjöld's definition, which has become the epitome of the integrity of international civil servants. Kofi Annan, the current Secretary-General of the United Nations, rephrased the character of today's UN bureaucracy as "somewhat smaller, better trained, more versatile, more mobile, better managed and better integrated as a global team".<sup>11</sup> That is, a small but able team. The OPCW Technical Secretariat was modelled on the UN-type bureaucracy and, as such, reflects the mixed natures of the Hammarskjöldian concept and Annan's contemporary definition.<sup>12</sup>

The question of how to retain and manage such independent, neutral and able experts in the Technical Secretariat, within such constraints, is itself a challenging subject. Today, almost all international organizations are experiencing a similar paradox and are endlessly searching for new ideas and solutions for better managing limited resources for the required results.

In addition to these common constraints, the OPCW is a non-career organization and has a unique provision that is called the "tenure rule", under which no internationally recruited staff members, except for linguists, can be retained for more than seven years (Staff Regulation 4.4). The impact of the tenure rule on the functions of the Organisation, implemented through its internal human resources management policy as from 2003, has not yet been assessed.

The OPCW's time-bound tenure is a revolutionary experiment in the history of international organizations. Revolutionary as it is, however, it seems to mirror the new reality that the opportunities to work in public administration are becoming global. It is an experiment in the international civil service system, which is changing from a closed scheme of career staff to become part of the fluid job environment in which competent people come and go.

Robert Mathews, in his reflection on the First Review Conference in Chapter 3, spelled out that a mass exodus of staff created by the implementation of the tenure rule would cause loss of institutional memory.

He poses a question to the Technical Secretariat as to how to maintain its heritage and transfer it from the current generation to the next. Like many initiatives for the betterment of the international bureaucracy, the value of the tenure rule will be tested by time.

### New challenges

At the Millennium Summit of the United Nations in September 2000, disarmament and peacekeeping were the most frequently addressed subjects. Ever since, following the drastic change in the global political landscape, the need for chemical disarmament has been shifting its underpinnings from a philosophical ideology of humanity and morality to the notion that there is a real risk of chemical agents being used by non-state actors. The looming fear of international terrorism is accelerating discussions and actions in the context of international security. Security Council Resolution 1540, adopted on 28 April 2004, is an expression of this concern, urging all states to promote the universal adoption, full implementation and strengthening of multinational treaties that ban weapons of mass destruction, including chemical weapons, and to ensure their non-proliferation. The resolution calls for the enactment and effective implementation of the necessary national legislation to prohibit, detect and prosecute breaches of the global chemical weapons ban, in particular to prevent these weapons from falling into the hands of non-state actors. This call was reiterated by the Secretary-General of the United Nations in his message to the Ninth Session of the Conference of States Parties to the CWC, in which he stressed the necessity of implementing effective national legislation to give substance to the commitments of the States Parties under the Convention.

In July 2005, Secretary-General Annan chaired the Sixth High-Level Meeting between the United Nations and Regional and Other Intergovernmental Organizations to discuss, among other issues, cooperation among the various organizations to tackle the new threats of weapons of mass destruction.<sup>13</sup> At that meeting, Rogelio Pfirter, Director-General of the OPCW, described the challenges arising from increasing global threats, including the terrorist threat, as well as the need for organizations to face the challenges relating to the fulfilment of their specific mandates in an efficient manner, not only to achieve the broad objectives of global security but also in the specific interests of improved multilateralism.

For the OPCW, this is yet another moment to seize. It seems that the Organisation has entered a race with a rising breeze buffeting its sails. There is now an opportunity to catch the full strength of the prevailing

winds. As time passes, the challenges and opportunities facing the CWC will also change. This is another reason we are grateful for the opportunity to publish this book and to record the various views and experiences of experts on chemical disarmament for future reference.

## Notes

1. Richard Nixon, *Seize the Moment* (New York: Simon & Schuster, 1992), pp. 13–14.
2. *Opening Statement by the Director-General to the Conference of the States Parties at Its Ninth Session*, C-9/DG.8 (29 November 2004).
3. As of 22 July 2005, the OPCW had completed 2,167 inspections.
4. *Opening Statement by the Director-General to the Executive Council at Its Forty-First Session*, EC-41/DG.18 (28 June 2005).
5. Simon Chesterman, “A Battered UN Needs to Go Back to Its Roots”, *International Herald Tribune*, 14 September 2004.
6. *Report of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference) 28 April–9 May 2003*, RC-1/5, para. 7.126.
7. See, for instance, Richard Falk, *Law in an Emerging Global Village – A Post-Westphalian Perspective* (New York: Transnational Publishers, 1998).
8. See Anne-Marie Slaughter, *New World Order* (Princeton, NJ: Princeton University Press, 2004).
9. For instance, the Union Télégraphique Internationale in 1865, the Union Générale des Postes in 1874 and various international river commissions in Europe.
10. Dag Hammarskjöld, “International Civil Service: Law and Fact”, lecture delivered at Oxford University, 1961, in Robert Jordan, ed., *International Administration: Its Evolution and Contemporary Applications* (Oxford: Oxford University Press, 1971), pp. 245–271.
11. Kofi A. Annan, *Renewing the United Nations: A Programme for Reform*, UN Doc. A/51/950 (14 July 1997), para. 229.
12. Article VIII of the Convention provides that, “in the performance of their duties, the Director-General, the inspectors and the other members of the staff shall not seek or receive instructions from any Government or from any other source external to the Organization. They shall refrain from any action that might reflect on their positions as international officers responsible only to the Conference and the Executive Council” (para. 46) and “recruitment shall be guided by the principle that the staff shall be kept to a minimum necessary for the proper discharge of the responsibilities of the Technical Secretariat” (para. 44). Under this provision of Article VIII, paragraph 44, although tasks to assist member states in implementing the Convention are increasingly intensifying, the OPCW’s staff have de facto been kept far below 507, the number that has been approved by the Conference of States Parties as the absolute maximum.
13. The purpose of the meeting was to discuss the findings of the reports of the High-level Panel on Threats, Challenges and Change, *A More Secure World: Our Shared Responsibility* (New York: United Nations, 2004), and of the UN Secretary-General, Kofi A. Annan, *In Larger Freedom: Towards Development, Security and Human Rights for All* (New York: United Nations, 2005).

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