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Trends and Implications
for Arms Control, Proliferation,
and International Security in
the Changing Global Environment

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Foreword

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THE 1993
CHEMICAL
WEAPONS
CONVENTION:
A SUMMARY

The Chemical Weapons Convention was signed by 125 states in Paris during 13 to 15 January 1993. Of unlimited duration, it will enter into force 180 days after 65 states have ratified their signatures, but no earlier than January 1995. A Preparatory Commission will have been operating in the meanwhile. The text of the treaty comprises a preamble, twenty-four articles, and three annexes, these running to just over fifty thousand words in the English version and occupying 170 pages. The main provisions are as follows.

THE PROHIBITIONS

Each state undertakes never, in any circumstances, to

- develop, produce, or otherwise acquire, stockpile or retain chemical weapon, or transfer, directly or indirectly, chemical weapons to anyone;
- use chemical weapons, or engage in any military preparations for doing so; or
- assist, encourage, or induce, in any way, anyone to engage in any activity prohibited by the treaty.

By "chemical weapons," the treaty means munitions or other devices specifically designed to cause death, temporary incapacitation, or permanent harm to humans or animals through the action of chemicals on life processes. Such toxic chemicals on their own, as well as any other chemicals from which they can be made, are also defined by the treaty as "chemical weapons" — unless they are

intended for purposes not prohibited by the treaty and as long as the types and quantities are consistent with such purposes. A "toxin" in the sense of the 1972 Biological Weapons Convention may also be a "chemical weapon" in the sense of this treaty. Toxicity to plants is not included in the treaty's definition of toxic chemicals, but the preamble expressly recognizes the prohibition in international law of the use of herbicides as a method of warfare.

The treaty lists the purposes it does not prohibit. They are

- industrial, agricultural, research, medical, pharmaceutical, or other peaceful purposes,
- purposes related to protection against chemical weapons,
- military purposes not connected with the use of chemical weapons, and
- law enforcement, including domestic riot control.

The treaty states explicitly that "riot control agents" (which it defines) shall not be used as "a method" of warfare.

THE DISARMAMENT STIPULATIONS

Each state party undertakes to destroy, within 10 years of the treaty entering into force,

- its chemical weapons;
- any production facilities it has designed, constructed or used at any time since 1 January 1946 to manufacture chemical weapons in quantities exceeding one tonne of chemical per year; and
- any chemical weapons it abandoned on the territory of another state party.

Each state party undertakes to accept international procedures, as detailed in the treaty, for verification of this disarmament. These procedures will also place access to the weapons and production facilities under international control from the initial months of the treaty entering into force.

Destruction of chemical weapons must take place in designated and appropriately designed facilities. How exactly this is to be done

is for each state party to decide, except that dumping in any body of water, land burial, or open-pit burning may not be used. The treaty discourages, but does not exclude, the possibility of a production facility being converted to peaceful use rather than being destroyed. An extension of the destruction period of up to five years may be allowed in exceptional cases.

RELATIONSHIP TO THE GENEVA PROTOCOL AND THE BIOLOGICAL WEAPONS CONVENTION

The treaty does not affect obligations assumed under either the 1925 Geneva Protocol (which prohibits use of chemical and biological weapons) or the 1972 Biological Weapons Convention. States parties that are also parties to the protocol would remain bound by it if they were to withdraw from the treaty. The treaty's prohibition of the use of chemical weapons under any circumstances render nugatory any right of retaliation in kind claimed by parties to the protocol.

THE SUPERVISORY BODIES

The treaty establishes a new international body to oversee its operation, the Organization for the Prohibition of Chemical Weapons (OPCW). The OPCW is to be headquartered in The Hague and financed by states parties in accordance with the U.N. scale of assessment, except for its destruction-related work, which, as a general rule, is to be paid for directly by states parties necessitating it. The highest organ of the OPCW will be the Conference of the States Parties, which will generally meet once a year. The executive organ of the OPCW will be the Executive Council, comprising 41 states parties selected from each of the five regional groups by the decision of each group. The day-to-day work of the OPCW will be done by the Technical Secretariat, which is to include an inspectorate and have a scientific advisory board composed of independent experts.

Each state party undertakes to institute national measures to enforce the treaty, including penal legislation extending to activities of its citizens abroad. To fulfill its obligations under the treaty, each state party must also create a national authority. These national bodies are to serve as focal points for liaison with the OPCW and other states parties.

RESTRAINTS ON SCIENCE, TECHNOLOGY, INDUSTRY, AND TRADE

The treaty extends to all toxic chemicals and their precursors, of which many millions are currently known. Fourteen chemical families and another twenty-nine individual chemicals are listed for international control by the OPCW.

Twelve chemicals are specified in Schedule-1, a status which effectively bans them from manufacturing, industry, and commerce. A state party may possess no more than a tonne of Schedule-1 chemicals at any given time, and any production exceeding ten kilograms per year must take place within the one specially designated single small-scale facility (SSSF) that the treaty allows. These SSSFs are to be kept under close surveillance by the OPCW Technical Secretariat. All the principal nerve and mustard gases and other chemical-warfare agents are listed in Schedule-1.

The other chemicals listed for international control by the OPCW are "dual use" in the sense that they have well-established peaceful applications as well as chemical-warfare ones. They are not made subject to production limits, but a quantitative threshold is set beyond which a facility producing one or another of them must be declared to the OPCW, and another threshold is set beyond which the facility becomes liable to routine on-site inspection by the OPCW. The aims, duration, and possibility of recurrence of such inspection are greater for Schedule-2 chemicals than for Schedule-3 ones, the latter being produced in industry on a larger scale than the former. For Schedule-2, the reporting threshold ranges from one kilogram to one tonne per year, depending on the chemical, with the inspection thresholds ten times greater. For Schedule-3, the thresholds are thirty tonnes and two hundred tonnes per year.

International transfers of Schedule-2 chemicals are to be prohibited except between states parties once the treaty has been in force for three years, until which time the chemicals may be exported to nonparties only under end use certification. Schedule-3 chemicals may be traded or transferred freely, except that end use certification must be obtained from nonparty importers and except that states parties are enjoined by the treaty to consider, after five years, whether further measures are needed. No role is specified for the OPCW in these transfer restraints.

All other plant sites where more than thirty tonnes of organic chemicals containing phosphorus, sulfur, or fluorine (PSF organic chemicals) are made per year, or ones making more than two hundred tonnes of non-PSF organic chemicals per year, are also to be declared to the OPCW, except where the products are solely hydrocarbons or explosives. Such declared sites will become liable to routine inspection by the OPCW once the treaty has been in force for three years, unless the Conference of the States Parties expressly agrees otherwise. Depending on how many of these facilities and Schedule-3 ones a state party declares, the OPCW may routinely inspect no more than three to twenty of them per year.

The treaty places no explicit restrictions on transfer of dual-use plants or equipment. It requires, moreover, that its provisions be implemented in a manner which avoids hampering the economic or technological development of states parties. A state party may nevertheless feel obliged to place national controls on the import or export of dual-use technology and chemicals as part of its general undertaking to implement the treaty's prohibitions.

Besides facility-specific data, the OPCW must also receive aggregate national data from states parties each year on their production, import, and export of scheduled chemicals. To this end, the national authorities will have to impose reporting obligations and associated validation procedures upon research, industrial, and trading concerns at quantitative thresholds substantially lower than those just noted.

Each state party expressly undertakes to adopt measures necessary to ensure that toxic chemicals and their precursors are used within its jurisdiction only for nonprohibited purposes. The national authorities may therefore be obliged to exercise general surveillance over unscheduled chemicals as well.

VERIFICATION OF COMPLIANCE

The treaty empowers the OPCW to operate two complementary systems for international verification of compliance. Under one system, routine verification, the Technical Secretariat receives data which states parties have declared to the OPCW on particular topics specified in the treaty. The Technical Secretariat then validates those data through on-site inspections. Such routines are laid down by the treaty for monitoring compliance with its bans on stockpiling, retention, and production, as in the civil industry controls just outlined.

PUBLIC INFORMATION

There is to be a stringent classification and security regime for OPCW data and documents. Information about implementation of the treaty, other than information of a general kind approved for release at the political level of the OPCW, is not to be disclosed to the general public except with the express consent of the state party to which it refers. In cases where the "needs of the convention" require it, classified information may be released according to procedures which the Preparatory Commission will be proposing.

But states parties — meaning the national authorities — are to be provided routinely by the OPCW with the data they require in order to be assured that other parties are in continued compliance. Such data are defined to include all the information which the treaty requires states parties to declare.

Susan Berger THE
CHALLENGES
OF CHEMICAL
AND
BIOLOGICAL
WEAPON ARMS
CONTROL
TREATY
VERIFICATION

In the past few years, the United States has undertaken a broad range of arms control initiatives, including multilateral treaties, export controls, and intrusive inspections of suspect facilities. A common theme emerging from many of these initiatives is the movement towards greater openness and the advocacy of more intrusive, comprehensive verification regimes. This trend is particularly evident in the areas of chemical weapons (CW) and biological weapons (BW) arms control. The unprecedented openness and intrusiveness, particularly in areas not amenable to traditional verification methodologies, demand the development of innovative approaches to address new verification challenges. This chapter addresses some of the unique challenges associated with the development and implementation of viable verification regimes for CW and BW arms control.

The views expressed in this paper are those of the author, and do not necessarily reflect the views of Meridian Corporation.

For the ban on development of chemical weapons, facilities that were once primarily used for such a purpose must be declared to the OPCW. States parties must also make annual returns of information to the OPCW about their national programs related to protective purposes. The Technical Secretariat may seek clarifications from states parties about any of their declarations, and it may receive communications from any state party about implementation matters. Although the Technical Secretariat may not itself initiate inspections, except at declared sites, it must report to the OPCW Executive Council any doubts it may have about compliance.

Under the other system, verification by challenge, states parties have undertaken to admit OPCW inspectors to any site at which another party has requested an inspection solely in order to resolve questions of possible noncompliance. The treaty places certain limitations upon this challenge process so as to reduce its potential for abuse or intrusion into domains of legitimate privacy. A period of up to 120 hours may elapse before a challenged state party has to grant access to a challenged site after being notified of the challenge, and it may "manage" the access, by shrouding site equipment, to protect secrets. The delay permitted for declared facilities is shorter. The treaty does not exclude the possibility of a state party initiating a challenge inspection against itself, should it wish to demonstrate its compliance.

Compliance with the prohibition of use of chemical weapons is to be verified by the OPCW through a modified form of challenge inspection. Should states not party to the treaty be involved in allegations of use, OPCW is to cooperate with the secretary general of the United Nations, which has its own investigatory procedures for alleged violations of the 1925 Geneva Protocol.

SANCTIONS AND ASSISTANCE AGAINST NONCOMPLIANCE

OPCW Technical Secretariat reports on challenge inspections, as well as reports on routine inspections that have raised doubts about compliance which the prescribed consultative clarification procedures do not resolve, are to be passed to the Executive Council, which must then consult with the states parties involved. If the Executive Council finds it appropriate to do so, it must then set a deadline within which an apparently noncompliant state party must take measures to redress the situation. Beyond that point, the

Executive Council may refer the matter to the Conference of the States Parties, with or without recommendations. The conference may then decide to recommend collective measures to states parties — in other words, to recommend that they impose sanctions.

In cases of particular gravity, both the conference and the Executive Council are empowered to bring the issue to the U.N. General Assembly and the U.N. Security Council.

The treaty creates an obligation upon states parties to provide assistance promptly to a state party that requests it. A state party may request assistance if it has been attacked with chemical weapons or if it believes itself threatened by activities of a kind that would violate one or another of the main prohibitions of the treaty. The treaty establishes a voluntary fund and specifies procedures for the rapid provision of protective equipment, antidotes, and other assistance to a requesting state party.

REVIEWING AND AMENDING THE TREATY

To review the operation of the treaty, taking into account scientific developments, the Conference of the State Parties is to convene in special session at five-yearly intervals.

Amendments to the treaty may be proposed by any state party at any time. Articles of the treaty can be changed only by majority vote of all states parties, or if there are no negative votes, at a specially convened amendment conference. A simpler procedure is available for changes to the annexes of the treaty that would modify technical or administrative provisions, including the schedules of controlled chemicals. For acceptance, each such proposed change requires a positive recommendation from the Executive Council acting on an evaluation by the Technical Secretariat; it will then be adopted automatically if no state party objects within 90 days. Should there be an objection, the proposed change would then go before the next regular session of the Conference of the States Parties, where adoption, as on any matter of substance, would require a two-thirds majority of members present and voting.

Reservations to the treaty may be entered only in regard to the annexes, not the articles. The reservations may not be incompatible with the object and purpose of the treaty.