determined for the sake of all mankind, to exclude completely the possibility of the use of chemical weapons

Never to develop, produce, otherwise acquire, stockpile or retain chemical weapons

Never to assist, encourage or induce, in any way, anyone to engage

To destroy chemical weapons

Not to use riot control agents as a method of warfare

long as the types and quantities are consistent with

Take into account any relevant scientific and technological developments

Avoids hampering the economic or technological development of States Parties
Resource Guide
for the
CWC Second Review Conference 2008

Prepared by the Harvard Sussex Program
Acknowledgements

The authors would firstly like to express their gratitude to the UK Foreign and Commonwealth Office, the Ministry of Foreign Affairs of the Netherlands, the Ministry of Foreign Affairs of Portugal and SPRU at the University of Sussex for providing funding for the production, printing and distribution of this Resource Guide. We would like to thank in particular, Sarah Broughton, Lyn Parker, Jacqueline Daley, Hasita Patel, Tsui-Ling Yu, Wouter Wormgoor, Henkcor van der Kwast, Maarten Lak and Filipe Ramalheira. A number of people have offered comments and provided suggestions on various draft versions of the Resource Guide for which we are all very grateful; they include Julian Perry Robinson, Graham Pearson, Jonathan Tucker and Ralf Trapp. We would also like to thank members of the OPCW Technical Secretariat who have offered us support and assistance. Last but by no means least we would like to thank Richard Guthrie whose help in the production of this Resource Guide was invaluable.

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<td>Australia Group</td>
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<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>BW</td>
<td>Biological Weapons</td>
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<tr>
<td>BWC</td>
<td>Biological Weapons Convention</td>
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<tr>
<td>CBW</td>
<td>Chemical and biological warfare/ weapons</td>
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<td>CD</td>
<td>Conference on Disarmament</td>
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<td>Chemical Weapons</td>
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<td>Chemical Weapons Convention</td>
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<td>EU</td>
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<td>G8</td>
<td>Group of Eight Nations</td>
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<td>IMO</td>
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<td>IO</td>
<td>International Organization</td>
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<td>NAM</td>
<td>Non-Aligned Movement</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>OAS</td>
<td>Organization of American States</td>
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<td>OPCW</td>
<td>Organisation for the Prohibition of Chemical Weapons</td>
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<td>PrepCom</td>
<td>Preparatory Commission</td>
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<td>Proliferation Security Initiative</td>
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<td>SAICM</td>
<td>Strategic Approach to International Chemicals Management</td>
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<tr>
<td>SUA</td>
<td>Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation</td>
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<td>UN</td>
<td>United Nations</td>
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<td>United Nations General Assembly</td>
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<td>United Nations Office for Disarmament Affairs</td>
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<td>United Nations Security Council</td>
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<td>United Nations Secretary-General</td>
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<td>Weapons of Mass Destruction</td>
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Introduction

States Parties to the 1993 Chemical Weapons Convention (CWC) will reconvene in The Hague for the treaty’s Second Review Conference during 7-18 April 2008. In an effort to facilitate and stimulate active participation by government delegations, the Harvard Sussex Program on Chemical and Biological Weapons (HSP) has developed this comprehensive CWC Resource Guide. It contains documents relating to the CW regime, including: official documents and other texts; documents from the United Nations and other regional organisations; documents from informal arrangements; and supporting material from various non-governmental organisations (NGOs). Although designed primarily for Review Conference delegates, HSP hopes this Resource Guide will also be a useful resource for researchers, NGOs, journalists and other in civil society with an interest in the CW regime embodied in the CWC.

The Harvard Sussex Program has been a longstanding supporter of the CWC. The Convention is a pioneering treaty in that it not only comprehensively bans an entire category of weapons of mass destruction which had been widely used and stockpiled during the 20th century, but that it also contains the most sophisticated verification system of any modern arms control and disarmament treaty. In its short lifespan, the CWC has attracted 183 States Parties (as of 1 March 2008) and has become an integral part of efforts to maintain international peace and security, reflecting as it does a longstanding norm against the use of poison in warfare. The Second Review Conference is an opportunity to build on the results of the First Review Conference in 2003 and the achievements of the intervening years. The CWC is approaching a period of transition as declared stockpiles are gradually destroyed, so the Review Conference is also an opportunity to look to the future and to set the Convention on a course for the Third Review Conference and beyond.

Background to the Resource Guide

The concept behind this Resource Guide was initially discussed at a workshop of the Pugwash Study Group on the Implementation of the CBW Conventions in April 2005 in the Netherlands. The immediate priority then was the Sixth Review Conference of the Biological Weapons Convention (BWC) to be held in Geneva in 2006 and thanks to the support of the Ministry of Foreign Affairs of the Netherlands, HSP together with two other non-governmental organizations, the British-American Security Information Council (BASIC) and the Verification Research, Training and Information Centre (VERTIC), produced a Briefing Book for the Sixth BWC Review Conference. Such was its success that HSP decided to produce a similar Resource Guide for the CWC’s Second Review Conference. Through the generous granting of funds by the UK’s Foreign and Commonwealth Office, the Ministry of Foreign Affairs of the Netherlands and the Ministry of Foreign Affairs of Portugal this idea was realised.

The primary idea behind the Resource Guide is to assist delegates to the Second Review Conference in their work and thus to contribute to a successful and constructive outcome to the Conference. By collecting together as many of the key relevant documents as possible, the authors hope to provide a convenient reference source for use during the Review Conference, and beyond. Having attended many previous CWC meetings, as well as other international diplomatic meetings, we felt it would be advantageous to have as many of the relevant documents as possible collected into one publication. We also hope that this Resource Guide will raise awareness of the CWC both with states that have not yet joined the Convention, and with researchers, academics, journalists and the general public who have an interest in issues relating to it. In producing this Resource Guide we also hoped to demonstrate the constructive input which civil society can make to international meetings such as the Second Review Conference. HSP is a longstanding supporter of the CWC and sees this Resource Guide as one of its contributions to nurturing and strengthening the Convention.

The concept of a reference compilation of documents for a Review Conference did not originate with this publication, or the earlier BWC Briefing Book. The authors wish to acknowledge the University of Southampton Mountbatten Centre for International Studies’ (MCIS) NPT Briefing Book, first published
in 1990, which served as a model for this Resource Guide (see www.mcis.soton.ac.uk/publications/towards2005npt.html). There seemed to be no obvious reason why something which was clearly useful and well-received by delegates to NPT Review Conferences would not also be seen in the same way by delegates to BWC and CWC Review Conferences. The authors would like to express their thanks to the MCIS staff for their encouragement and support.

**Selection of Documents**

In preparing a compilation of reference documents, we necessarily had to make decisions about which documents, or portions of them, to include or exclude. We realise that questions may be asked about our selection criteria, such as why we included one particular document and not another, and why we did not include many documents authored by the OPCW.

One easy answer to these questions relates to space; this Resource Guide is already quite a bulky volume and including more documents or duplicating those issued by the OPCW would have meant an even heavier book, and one that our target audience would be less likely to use. This factor militated against including lengthy documents in their entirety, except where they were essential or where extracting sections would have lessened their usefulness. Where we have included extracts from long documents we provide a reference to the original text (most are accessible in full on the internet).

In order to include those documents of most relevance to the Second Review Conference, we have mostly restricted our source materials to those published since the First Review Conference in 2003. For practical reasons the selection of documents is also limited to English language documents. However, many are available in all six official UN languages, so Arabic, Chinese, French, Russian and Spanish versions should be available from the websites referenced throughout the Resource Guide.

We have included relatively few OPCW documents as we know that most, if not all, are available on the OPCW website and will be available during the Review Conference. Those OPCW documents that we have included are those which we felt were of such relevance to the Second Review Conference, that their omission would have lessened the completeness of this Resource Guide. At the time of writing, no Second Review Conference documents themselves have been publicly released, so we have been unable to include them. In any case, they will be made available in the coming weeks.

We will post the Resource Guide on www.cwc2008.org as well as on HSP’s website, www.sussex.ac.uk/Units/spru/hsp, so that people can download it if they wish. We will also distribute electronic copies on CD during the Review Conference.

While we have tried to be as comprehensive as possible, it is likely that we have missed some useful documents or that people will take issue with our selection policy. We therefore welcome comments on this Resource Guide, including suggestions of additional documents that may be included in a future edition. A feedback form is included at the end of the Resource Guide for this purpose.

**Outcomes**

A successful outcome to the Second Review Conference will ensure the continued relevance of the CWC in a period when challenges such as advances in science and technology and the changing nature of armed conflict could undermine its role. The Harvard Sussex Program has made a number of recommendations for the Second Review Conference. In order for the Conference to adopt a long-term perspective, States Parties should avoid a “business-as-usual” approach and leave routine implementation issues to the regular sessions of the Executive Council and Conference of the States Parties. The Review Conference should spend more time considering the “general purpose criterion” than did the First Review Conference, including issues such as the convergence of chemistry and biology, and it should consider a mechanism to further explore the issue of “non-lethal” weapons. The First Review Conference addressed national implementation and proposed an action plan which has
proved successful. However, the Second Review Conference could usefully shift the emphasis to a qualitative approach concentrating on the comprehensiveness and effectiveness of national legislation. The Review Conference is an opportunity to review the CWC in its entirety and it could consider ways in which to ensure that broader issues relevant to the Convention can be given attention between review conferences. As with similar treaties such as the BWC, there is much to be said for increasing synergies among international security organizations and the Review Conference should encourage the OPCW to maintain and expand its relationships. Finally, the CWC relies on a network of stakeholders from governments, industry and civil society for its success. All these actors should have the opportunity to actively participate in the Review Conference and in the implementation of its decisions and recommendations.

In this regard, this Resource Guide will help to demonstrate the range of organizations, initiatives and arrangements that are already engaged in this process and contributes positively to promoting interactions and constructive collaborations.

Daniel Feakes and Caitríona McLeish
Harvard Sussex Program on Chemical and Biological Weapons
March 2008
1. The Treaties

The existing CBW governance regime is made up of many elements but three multilateral treaties – the 1925 Geneva Protocol, the 1972 Biological Weapons Convention and the 1993 Chemical Weapons Convention – act as the bedrock and the normative heart around which all other elements are built. One other multilateral treaty is important, the 1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (the ENMOD Convention), because of its particular provisions prohibiting warfare with herbicides.

This section includes the text of the Geneva Protocol, the BWC and the ENMOD Convention and lists the States Parties, the Signatory States that have not yet ratified and the non-Signatory States to each. The CWC is too long to be included here in full, but it is available in hard copy from the OPCW Technical Secretariat or electronically at http://www.opcw.org/html/db/cwc/eng/cwc_menu.html.

1.1 The 1925 Geneva Protocol

| **Full name:** | Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare |
| **Date of opening for signature:** | 17 June 1925 |
| **Date of entry into force:** | 8 February 1928 |
| **Depositary:** | Government of France |
| **States Parties:** | 134 |
| **Other Signatory States:** | 1 |

The 1925 Geneva Protocol prohibits “the use in war of asphyxiating, poisonous, or other gases and of all analogous liquids, materials or devices”, and it also bans “bacteriological methods of warfare.” It was adopted by the Conference for the Supervision of the International Trade in Arms and Ammunition and in Implements of War convened in Geneva by the League of Nations and builds on earlier international agreements on the laws of war, such as those from the 1899 and 1907 peace conferences in The Hague. The Geneva Protocol prohibitions are now widely considered to have entered customary international law, making them binding on all states, whether or not they have formally joined the treaty.

On joining the Geneva Protocol, over 40 states entered reservations. These reservations upheld the right of the reserving states to use the prohibited weapons against non-parties or in response to the use of these weapons by a violating party, or against the allies of the violating party even if they themselves have not committed a violation. These reservations, which were not strictly necessary as the Protocol was expressly drafted as a contract between its parties, reinforced the fact that the Protocol was essentially a no-first-use agreement. As a result of diplomatic pressure and the entry into force of the treaties banning production and possession of these weapons (the BWC and CWC), at least 17 states withdrew their reservations to the Protocol. However, according to a non-paper distributed by France during the 2006 session of the UN General Assembly’s First Committee, around 22 states parties retain reservations that are “often incompatible with the commitments made within the framework of the BTWC and CWC”.

Since the 1980s, resolutions have been passed by both the United Nations Security Council and General Assembly encouraging the UN Secretary-General to investigate reports of possible violations of the Geneva Protocol (see Section 3). In January 1989 States Parties to the Geneva Protocol and other interested states met in Paris to respond to the confirmed use of CW in the Iran-Iraq war, to reaffirm the Geneva Protocol and to support the negotiation of a chemical weapons convention. In the Final Declaration of the conference, they also reaffirmed their “full support for the Secretary-General in carrying out his responsibilities for investigations in the event of alleged violations of the Geneva Protocol”. More detail of the Secretary-General’s investigatory mechanism, and some of the relevant documents, is provided in section 3 of the Resource Guide.
The Geneva Protocol currently has 134 States Parties and one Signatory State. States wishing to ratify or accede to the Geneva Protocol should deposit their instrument of ratification/accession with the French Government, which is the Depositary of the Protocol. Instruments of ratification or accession should be sent to:

Frédéric Jung
Ministère des Affaires Etrangères
Sous-Direction du Désarmement chimique, biologique et de la maîtrise des armements classiques
37 Quai d’Orsay
75 700 Paris 07 SP
France
E-mail: frederic.jung@diplomatie.gouv.fr
Phone: ++ 33 1 43 17 43 06
Fax : ++ 33 1 43 17 49 52

1.2 The 1972 Biological Weapons Convention

Full name: Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction
Date of opening for signature: 10 April 1972 (London, Moscow, Washington)
Date of entry into force: 26 March 1975
Depositaries: Governments of Russia, United Kingdom and United States
States Parties: 160
Other Signatory States: 15

The 1972 Biological Weapons Convention prohibits the development, production, stockpiling or other acquisition or retention, or transfer of biological and toxin weapons (which are defined in Article I using a general purpose criterion) and requires the destruction of existing weapons. BWC states parties have additionally agreed that BW use is effectively covered by the treaty’s prohibitions. The states parties have therefore renounced germ weapons in order to “exclude completely” the possibility of such weapons being used against humans, animals or plants. States that have signed but not ratified the BWC are nonetheless obliged to refrain from acts which would defeat the object and purpose of the treaty, such as developing or using biological weapons.

The BWC was negotiated by the Conference of the Committee on Disarmament (a precursor of today’s Conference on Disarmament) at a time of heightened international concern about chemical and biological weapons in the late 1960s and was the first occasion when the two categories of weaponry prohibited together in the Geneva Protocol were separated. The justification for separate treatment of the two categories of weapon was the perception that, unlike a comprehensive prohibition of CW, a ban on biological weapons did not require intrusive verification and that it could therefore be concluded quickly.

The Convention reflects the post-Second World War renunciation of biological weapons by the defeated Axis powers, for example as found in the 1954 Revised Brussels Treaty, as well as the subsequent unilateral renunciations by other states, particularly by the US in 1969. The BWC extends the existing regime prohibiting the use of chemical or biological weapons (CBW) (elaborated in the 1925 Geneva Protocol), by explicitly banning the development, production, stockpiling and transfer of biological and toxin weapons. However, the BWC essentially makes no provision for any particular procedures or forms of international cooperation or organization to implement its rules, to verify compliance with its obligations (aside from the consultation and cooperation procedure in Article V and the complaint procedure involving the UN Security Council in Article VI) or to enforce its norm of non-possession. The Convention has been strengthened at its periodic Review Conferences (in
1980, 1986, 1991, 1996, 2001/02 and 2006) and an attempt was made during the 1990s to negotiate a protocol to strengthen the BWC, although this ultimately failed in 2001.

The BWC now has 160 States Parties and 15 Signatory States, while 20 States have neither signed nor ratified. The depositaries of the BWC are the governments of Russia, the UK and the USA. States wishing to ratify or accede to the treaty should send their instrument of ratification/accession to one or more of these three countries.

### BWC Depositary Contact Details

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact Details</th>
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</table>
| Russia | Legal Department  
Ministry of Foreign Affairs of Russia  
32/34 Smolenskaya-Sennaya Square  
Moscow 121 200  
Russian Federation  
Phone: ++ 7 495 241 77 18  
Fax: ++ 7 495 241 11 66  
E-mail: dp@mid.ru  
[NB The instruments of ratification or accession are deposited in Moscow upon their transmittal through the established diplomatic channels] |
| UK | Treaty Section  
(Treaty Section)  
Room G62  
Old Admiralty Building  
Foreign and Commonwealth Office  
London  
SW1A 2PA  
United Kingdom  
Telephone: ++ 44 207 008 1109  
Fax: ++ 44 207 008 1115  
E-Mail: treaty.fco@fco.gov.uk  
Website: www.fco.gov.uk/treaty  
[NB Envelopes should be marked “For the attention of the Depositary”] |
| USA | Office of the Assistant Legal Adviser for Treaty Affairs  
United States Department of State, Suite 5420  
2201 C Street, N.W.  
Washington, D.C. 20520  
United States of America  
Phone: ++ 1 202 647 1345  
E-mail: treatyoffice@state.gov  
Website: www.state.gov/s/l/treaty  
[NB states wishing to deposit in Washington are advised to forward their instruments of ratification/accession to the Treaty Office through their embassies in Washington. Embassy staff should then call the Depositary Officer at the Treaty Office on the phone number above to schedule an appointment for hand-delivery of the instrument.] |

### 1.3 The 1977 ENMOD Convention

**Full name:** Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques  
**Date of opening for signature:** 18 May 1977  
**Date of entry into force:** 5 October 1978  
**Depositary:** Secretary-General of the United Nations  
**States Parties:** 73  
**Other Signatory States:** 48
The 1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques prohibits using the environment as a weapon in conflicts. Under Article I, States Parties commit not to engage in military or any other hostile use of environmental modification techniques having “widespread, long-lasting or severe effects” as the means of destruction, damage or injury to any other State Party. Also, States Parties undertake not to assist, encourage or induce any State, group of States or international organization to engage in such activities. The terms “widespread”, “long-lasting” and “severe” were defined in an annex to the 1976 report of the Conference of the Committee on Disarmament (CCD) to the UN General Assembly, not as an integral part of the Convention, but as an interpretative text applicable to, for example, the use of chemical herbicides. This defined “widespread” as encompassing an area of several hundred square kilometres; “long-lasting” as a period of months or a season, and “severe” as involving serious or significant disruption or harm to human life, natural and economic resources or other assets.

Prior to the negotiation of the ENMOD Convention, the massive US use of herbicides in Southeast Asia had become an issue of global controversy. This is partly why the prohibitions set forth in the BWC apply not only to anti-animal agents but also to anti-plant ones. US attempts at environmental modification prompted opposition from some members of the US Congress. After investigation confirmed the cloud seeding attempts of Operation Popeye in 1973, the US Senate passed a resolution urging President Nixon to initiate negotiations leading to a multilateral treaty. After a year of bilateral negotiations, in 1975 the Soviet Union and the United States submitted separate but identical texts of a draft convention to the UN. The draft was then finalized in the CCD and adopted by the UN General Assembly on 10 December 1976. Opened for signature on 18 May 1977, the ENMOD Convention entered into force when Laos, the twentieth State Party, deposited its instrument of ratification on 5 October 1978. States Parties to the Convention have met only twice to review its operation, in 1984 and 1992. The Second ENMOD Review Conference confirmed that the use of herbicides as an environmental modification technique is a violation of the Convention if such use upsets the ecological balance of a region. Similarly, the preamble to the CWC recognizes “the prohibition, embodied in the pertinent agreements and relevant principles of international law, of the use of herbicides as a method of warfare.”

The UN Secretary-General is depositary of the ENMOD Convention. States wishing to ratify or accede to the treaty should send their instrument of ratification/accession to:

Treaty Section
Office of Legal Affairs
United Nations
New York, NY 10017
USA
E-mail: treaty@un.org
Phone: ++ 1 212 963 5047
Fax: ++ 1 212 963 3693

1.4 The 1993 Chemical Weapons Convention

| Full name: | Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction |
| Date of opening for signature: | 13 January 1993 |
| Date of entry into force: | 29 April 1997 |
| Depositary: | Secretary-General of the United Nations |
| States Parties: | 183 |
| Other Signatory States: | 5 |
Efforts to negotiate a comprehensive global ban on CW were based on the 1925 Geneva Protocol which outlawed the use of chemical and biological weapons. Intergovernmental consideration of a chemical and biological weapons ban was initiated in 1968 within the Eighteen-Nation Disarmament Committee. Attention in the first few years became focused on the negotiation of the 1972 Biological Weapons Convention, which entered into force in 1975. Article IX of that treaty included the undertaking to “continue negotiations in good faith with a view to reaching early agreement” on the prohibition of CW.

In 1980 the negotiators decided to establish what would become the CD Ad Hoc Committee on Chemical Weapons to “define, through substantive examination, issues to be dealt with in the negotiations”. In 1984 the CD mandated the committee to begin negotiating a ban and in that year the committee began drafting a convention by way of a “rolling text”, the first time this negotiating method had been used in a disarmament treaty. The changing international political climate in the late 1980s and early 1990s allowed the committee to make much progress. The use of CW in the Iran-Iraq war, and the possibility of their use in the Gulf War gave added impetus to the negotiations.


The CWC not only bans the use of CW, but unlike the Geneva Protocol also bans their development, production, stockpiling and transfer and requires that all existing stocks of CW be destroyed within 10 years. Like the BWC, the CWC is also underpinned by a “general purpose criterion” which defines the substances to which its prohibitions apply. According to Article VI of the CWC, states parties must adopt measures to ensure that toxic chemicals and their precursors are only used for purposes not prohibited by the Convention. The general purpose criterion allows the Convention to keep up with technological change and, in the case of dual-use chemicals, to exempt application for peaceful purposes from its prohibitions. The Convention lists 43 chemicals and families of chemicals for the application of special procedures, but, by virtue of the general purpose criterion, the prohibitions of the treaty are not restricted to them.

However, in contrast to the BWC, the CWC includes extremely detailed provisions for the compliance verification and establishes an international organization, the Organization for the Prohibition of Chemical Weapons (OPCW), to oversee their application. The OPCW is based in The Hague and has a staff of approximately 500. The Organization’s principal body, the Conference of the States Parties meets annually, while its governing body, the Executive Council has quarterly sessions, often with additional ad hoc meetings.

The CWC consists of 24 main articles and three annexes:

- Article I outlines the basic prohibitions of the treaty
- Article II includes definitions of various terms used throughout the CWC
- Article III obliges states parties to submit declarations of their past programmes, including information on current holdings of CW and production facilities
- Articles IV and V lay out states parties’ responsibilities with regard to CW and their production facilities
- Article VI requires states parties to allow a degree of verification of chemical industry facilities working with certain “dual-use” chemicals
- Article VII contains rules to facilitate the implementation of the CWC by each state party.
- Article VIII establishes the OPCW and defines the powers and functions of its three constituent organs - the Conference of the States Parties, the Executive Council and the Technical Secretariat
- Article IX details procedures through which states parties can resolve any questions related to non-compliance which they may have
• Article X gives states parties the right to develop protective programmes against the use of CW and outlines assistance which can be provided by the OPCW, also in the event of an attack by CW

• Article XI states that the CWC should not inhibit the economic and technological development of states parties or hamper free trade in chemicals and related technology and information

• Article XII includes measures to redress a situation of non-compliance, including sanctions

• The remaining 12 articles are shorter and deal with legal issues such as the CWC’s relationship to other international agreements, settlement of disputes, amendments, duration and withdrawal, status of the annexes, ways in which states can join the Convention and the way in which it comes into force, reservations and the depositary.

The three annexes - on chemicals, on implementation and verification and on the protection of confidential information - are an integral part of the CWC. The Annex on Chemicals lists in three schedules 43 chemicals and families of chemicals which were selected for the application of special verification procedures. The Annex on Implementation and Verification provides great detail on the conduct of the CWC’s verification provisions, from declarations and inspections to challenge inspections and investigations of alleged use. The Annex on the Protection of Confidential Information sets out principles for the handling of confidential information, measures to protect sensitive installations and data during inspections and procedures in case of breaches of confidentiality.

The UN Secretary-General is depositary of the CWC. States wishing to ratify or accede to the treaty should send their instrument of ratification/accession to:

Treaty Section
Office of Legal Affairs
United Nations
New York, NY 10017
USA
E-mail: treaty@un.org
Phone: ++ 1 212 963 5047
Fax: ++ 1 212 963 3693
Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare. Signed at Geneva, June 17, 1925.

French and English official texts communicated by the President of the Council, Minister for Foreign Affairs of the French Republic. The registration of this Protocol took place September 7, 1929.

THE UNDERSIGNED PLENIPOTENTIARIES, in the name of their respective Governments:

Whereas the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilised world; and

Whereas the prohibition of such use has been declared in Treaties to which the majority of Powers of the world are Parties; and

To the end that this prohibition shall be universally accepted as a part of International Law, binding alike the conscience and the practice of nations;

DECLARE:

That the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.

The High Contracting Parties will exert every effort to induce other States to accede to the present Protocol. Such accession will be notified to the Government of the French Republic, and by the latter to all signatory and acceding Powers, and will take effect on the date of the notification by the Government of the French Republic.

The present Protocol, of which the French and English texts are both authentic, shall be ratified as soon as possible. It shall bear today's date.

The ratification of the present Protocol shall be addressed to the Government of the French Republic, which will at once notify the deposit of such ratification to each of the signatory and acceding Powers.

The instruments of ratification of and accession to the present Protocol will remain deposited in the archives of the Government of the French Republic.

The present Protocol will come into force for each signatory Power as from the date of deposit of its ratification, and, from that moment, each Power will be bound as regards other Powers which have already deposited their ratifications.

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1) **Ratification** : a treaty is generally open for signature for a certain time following the conference which has adopted it. However, a signature is not binding on a State unless it has been endorsed by ratification. The time limits having elapsed, the Conventions and the Protocols are no longer open for signature. The States which have not signed them may at any time accede or, in the appropriate circumstances, succeed to them.

**Accession** : instead of signing and then ratifying a treaty, a State may become party to it by the single act called accession.

2) **Reservation / Declaration** : unilateral statement, however phrased or named, made by a State when ratifying, acceding or succeeding to a treaty, whereby it purports to exclude or to modify the legal effect of certain provisions of the treaty in their application to that State (provided that such reservations are not incompatible with the object and purpose of the treaty).
The States Parties to this Convention,

Determined to act with a view to achieving effective progress towards general and complete disarmament, including the prohibition and elimination of all types of weapons of mass destruction, and convinced that the prohibition of the development, production and stockpiling of chemical and bacteriological (biological) weapons and their elimination, through effective measures, will facilitate the achievement of general and complete disarmament under strict and effective international control,

Recognizing the important significance of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on June 17, 1925, and conscious also of the contribution which the said Protocol has already made, and continues to make, to mitigating the horrors of war,

Reaffirming their adherence to the principles and objectives of that Protocol and calling upon all States to comply strictly with them,

Recalling that the General Assembly of the United Nations has repeatedly condemned all actions contrary to the principles and objectives of the Geneva Protocol of June 17, 1925,

Desiring to contribute to the strengthening of confidence between peoples and the general improvement of the international atmosphere,

Desiring also to contribute to the realization of the purposes and principles of the United Nations,

Convinced of the importance and urgency of eliminating from the arsenals of States, through effective measures, such dangerous weapons of mass destruction as those using chemical or bacteriological (biological) agents,

Recognizing that an agreement on the prohibition of bacteriological (biological) and toxin weapons represents a first possible step towards the achievement of agreement on effective measures also for the prohibition of the development, production and stockpiling of chemical weapons, and determined to continue negotiations to that end,

Determined for the sake of all mankind, to exclude completely the possibility of bacteriological (biological) agents and toxins being used as weapons,

Convinced that such use would be repugnant to the conscience of mankind and that no effort should be spared to minimize this risk,

Have agreed as follows:

**Article I**

Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain:

1. Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;

2. Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.
Article II
Each State Party to this Convention undertakes to destroy, or to divert to peaceful purposes, as soon as possible but not later than nine months after entry into force of the Convention, all agents, toxins, weapons, equipment and means of delivery specified in article I of the Convention, which are in its possession or under its jurisdiction or control. In implementing the provisions of this article all necessary safety precautions shall be observed to protect populations and the environment.

Article III
Each State Party to this Convention undertakes not to transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment or means of delivery specified in article I of this Convention.

Article IV
Each State Party to this Convention shall, in accordance with its constitutional processes, take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of the agents, toxins, weapons, equipment and means of delivery specified in article I of the Convention, within the territory of such State, under its jurisdiction or under its control anywhere.

Article V
The States Parties to this Convention undertake to consult one another and to cooperate in solving any problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention. Consultation and Cooperation pursuant to this article may also be undertaken through appropriate international procedures within the framework of the United Nations and in accordance with its Charter.

Article VI
(1) Any State Party to this convention which finds that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all possible evidence confirming its validity, as well as a request for its consideration by the Security Council.
(2) Each State Party to this Convention undertakes to cooperate in carrying out any investigation which the Security Council may initiate, in accordance with the provisions of the Charter of the United Nations, on the basis of the complaint received by the Council. The Security Council shall inform the States Parties to the Convention of the results of the investigation.

Article VII
Each State Party to this Convention undertakes to provide or support assistance, in accordance with the United Nations Charter, to any Party to the Convention which so requests, if the Security Council decides that such Party has been exposed to danger as a result of violation of the Convention.

Article VIII
Nothing in this Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any State under the Protocol for the Prohibition of the Use in War of
Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on June 17, 1925.

Article IX
Each State Party to this Convention affirms the recognized objective of effective prohibition of chemical weapons and, to this end, undertakes to continue negotiations in good faith with a view to reaching early agreement on effective measures for the prohibition of their development, production and stockpiling and for their destruction, and on appropriate measures concerning equipment and means of delivery specifically designed for the production or use of chemical agents for weapons purposes.

Article X
(1) The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes. Parties to the Convention in a position to do so shall also cooperate in contributing individually or together with other States or international organizations to the further development and application of scientific discoveries in the field of bacteriology (biology) for prevention of disease, or for other peaceful purposes.
(2) This Convention shall be implemented in a manner designed to avoid hampering the economic or technological development of States Parties to the Convention or international cooperation in the field of peaceful bacteriological (biological) activities, including the international exchange of bacteriological (biological) and toxins and equipment for the processing, use or production of bacteriological (biological) agents and toxins for peaceful purposes in accordance with the provisions of the Convention.

Article XI
Any State Party may propose amendments to this Convention. Amendments shall enter into force for each State Party accepting the amendments upon their acceptance by a majority of the States Parties to the Convention and thereafter for each remaining State Party on the date of acceptance by it.

Article XII
Five years after the entry into force of this Convention, or earlier if it is requested by a majority of Parties to the Convention by submitting a proposal to this effect to the Depositary Governments, a conference of States Parties to the Convention shall be held at Geneva, Switzerland, to review the operation of the Convention, with a view to assuring that the purposes of the preamble and the provisions of the Convention, including the provisions concerning negotiations on chemical weapons, are being realized. Such review shall take into account any new scientific and technological developments relevant to the Convention.

Article XIII
(1) This Convention shall be of unlimited duration.
(2) Each State Party to this Convention shall in exercising its national sovereignty have the right to withdraw from the Convention if it decides that extraordinary events, related to the subject matter of the Convention, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other States Parties to the Convention and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.
Article XIV
(1) This Convention shall be open to all States for signature. Any State which does not sign the Convention before its entry into force in accordance with paragraph (3) of this Article may accede to it at any time.
(2) This Convention shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.
(3) This Convention shall enter into force after the deposit of instruments of ratification by twenty-two Governments, including the Governments designated as Depositaries of the Convention.
(4) For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Convention, it shall enter into force on the date of the deposit of their instruments of ratification or accession.
(5) The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit or each instrument of ratification or of accession and the date of entry into force of this Convention, and of the receipt of other notices.
(6) This Convention shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article XV
This Convention, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of the Convention shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding states.
Fourth Meeting  
Geneva, 10-14 December 2007

Meeting of Experts  

### LIST OF STATES PARTIES TO THE CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS AND ON THEIR DESTRUCTION

as at August 2007

Prepared by the Implementation Support Unit

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62. Hungary 109. Poland
63. Iceland 110. Portugal
64. India 111. Qatar
65. Indonesia 112. Republic of Korea
66. Iran (Islamic Republic of) 113. Republic of Moldova
67. Iraq 114. Romania
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70. Jamaica 117. Saint Kitts and Nevis
71. Japan 118. Saint Lucia
72. Jordan 119. Saint Vincent and the Grenadines
73. Kazakhstan 120. San Marino
74. Kenya 121. Sao Tome and Principe
75. Kuwait 122. Saudi Arabia
76. Kyrgyzstan 123. Senegal
77. Lao People’s Democratic Republic 124. Serbia
78. Latvia 125. Seychelles
79. Lebanon 126. Sierra Leone
80. Lesotho 127. Singapore
81. Libyan Arab Jamahiriya 128. Slovakia
82. Liechtenstein 129. Slovenia
83. Lithuania 130. Solomon Islands
84. Luxembourg 131. South Africa
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141. The Former Yugoslav Republic of Macedonia
142. Timor Leste
143. Togo
144. Tonga
145. Trinidad and Tobago
146. Tunisia
147. Turkey
148. Turkmenistan
149. Uganda
150. Ukraine
151. United Kingdom of Great Britain and Northern Ireland
152. United States of America
153. Uruguay
154. Uzbekistan
155. Vanuatu
156. Venezuela
157. Viet Nam
158. Yemen
159. Zimbabwe

LIST OF SIGNATORIES TO THE CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS AND ON THEIR DESTRUCTION

as at August 2007

1. Burundi
2. Central African Republic
3. Côte d'Ivoire
4. Egypt
5. Guyana
6. Haiti
7. Liberia
8. Madagascar
9. Malawi
10. Myanmar
11. Nepal
12. Somalia
13. Syrian Arab Republic
14. United Arab Emirates
15. United Republic of Tanzania
Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques

Opened for signature at Geneva: 18 May 1977
Entered into force: 5 October 1978
Depositary: Secretary-General of the United Nations

The States Parties to this Convention,

Guided by the interest of consolidating peace, and wishing to contribute to the cause of halting the arms race, and of bringing about general and complete disarmament under strict and effective international control, and of saving mankind from the danger of using new means of warfare,

Determined to continue negotiations with a view to achieving effective progress towards further measures in the field of disarmament,

Recognizing that scientific and technical advances may open new possibilities with respect to modification of the environment,

Recalling the Declaration of the United Nations Conference on the Human Environment adopted at Stockholm on 16 June 1972,

Realizing that the use of environmental modification techniques for peaceful purposes could improve the interrelationship of man and nature and contribute to the preservation and improvement of the environment for the benefit of present and future generations,

Recognizing, however, that military or any other hostile use of such techniques could have effects extremely harmful to human welfare,

Desiring to prohibit effectively military or any other hostile use of environmental modification techniques in order to eliminate the dangers to mankind from such use, and affirming their willingness to work towards the achievement of this objective,

Desiring also to contribute to the strengthening of trust among nations and to the further improvement of the international situation in accordance with the purposes and principles of the Charter of the United Nations,

Have agreed as follows:

Article I
1. Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

2. Each State Party to this Convention undertakes not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the provisions of paragraph 1 of this article.

Article II
As used in Article I, the term ‘environmental modification techniques’ refers to any technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.

Article III
1. The provisions of this Convention shall not hinder the use of environmental modification techniques for peaceful purposes and shall be without prejudice to the generally recognized principles and applicable rules of international law concerning such use.
2. The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fullest possible exchange of scientific and technological information on the use of environmental modification techniques for peaceful purposes. States Parties in a position to do so shall contribute, alone or together with other States or international organizations, to international economic and scientific co-operation in the preservation, improvement, and peaceful utilization of the environment, with due consideration for the needs of the developing areas of the world.

Article IV
Each State Party to this Convention undertakes to take any measures it considers necessary in accordance with its constitutional processes to prohibit and prevent any activity in violation of the provisions of the Convention anywhere under its jurisdiction or control.

Article V
1. The States Parties to this Convention undertake to consult one another and to cooperate in solving any problems which may arise in relation to the objectives of, or in the application of the provisions of, the Convention. Consultation and cooperation pursuant to this article may also be undertaken through appropriate international procedures within the framework of the United Nations and in accordance with its Charter. These international procedures may include the services of appropriate international organizations, as well as of a Consultative Committee of Experts as provided for in paragraph 2 of this article.

2. For the purposes set forth in paragraph 1 of this article, the Depositary shall, within one month of the receipt of a request from any State Party to this Convention, convene a Consultative Committee of Experts. Any State Party may appoint an expert to the Committee whose functions and rules of procedure are set out in the annex, which constitutes an integral part of this Convention. The Committee shall transmit to the Depositary a summary of its findings of fact, incorporating all views and information presented to the Committee during its proceedings. The Depositary shall distribute the summary to all States Parties.

3. Any State Party to this Convention which has reason to believe that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all relevant information as well as all possible evidence supporting its validity.

4. Each State Party to this Convention undertakes to cooperate in carrying out any investigation which the Security Council may initiate, in accordance with the provisions of the Charter of the United Nations, on the basis of the complaint received by the Council. The Security Council shall inform the States Parties of the results of the investigation.

5. Each State Party to this Convention undertakes to provide or support assistance, in accordance with the provisions of the Charter of the United Nations, to any State Party which so requests, if the Security Council decides that such Party has been harmed or is likely to be harmed as a result of violation of the Convention.

Article VI
1. Any State Party to this Convention may propose amendments to the Convention. The text of any proposed amendment shall be submitted to the Depositary who shall promptly circulate it to all States Parties.
2. An amendment shall enter into force for all States Parties to this Convention which have accepted it, upon the deposit with the Depositary of instruments of acceptance by a majority of States Parties. Thereafter it shall enter into force for any remaining State Party on the date of deposit of its instrument of acceptance.

**Article VII**
This Convention shall be of unlimited duration.

**Article VIII**
1. Five years after the entry into force of this Convention, a conference of the States Parties to the Convention shall be convened by the Depositary at Geneva, Switzerland. The conference shall review the operation of the Convention with a view to ensuring that its purposes and provisions are being realized, and shall in particular examine the effectiveness of the provisions of paragraph 1 of Article I in eliminating the dangers of military or any other hostile use of environmental modification techniques.

2. At intervals of not less than five years thereafter, a majority of the States Parties to the Convention may obtain, by submitting a proposal to this effect to the Depositary, the convening of a conference with the same objectives.

3. If no conference has been convened pursuant to paragraph 2 of this article within ten years following the conclusion of a previous conference, the Depositary shall solicit the views of all States Parties to the Convention, concerning the convening of such a conference. If one third or ten of the States Parties, whichever number is less, respond affirmatively, the Depositary shall take immediate steps to convene the conference.

**Article IX**
1. This Convention shall be open to all States for signature. Any State which does not sign the Convention before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Convention shall be subject to ratification by signatory States. Instruments of ratification or accession shall be deposited with the Secretary-General of the United Nations.

3. This Convention shall enter into force upon the deposit of instruments of ratification by twenty Governments in accordance with paragraph 2 of this article.

4. For those States whose instruments of ratification or accession are deposited after the entry into force of this Convention, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or accession and the date of the entry into force of this Convention and of any amendments thereto, as well as of the receipt of other notices.

6. This Convention shall be registered by the Depositary in accordance with Article 102 of the Charter of the United Nations.
Article X
This Convention, of which the English, Arabic, Chinese, French, Russian, and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations, who shall send certified copies thereof to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective governments, have signed this Convention, opened for signature at Geneva on the eighteenth day of May, one thousand nine hundred and seventy-seven.

ANNEX TO THE CONVENTION

Consultative Committee of Experts

1. The Consultative Committee of Experts shall undertake to make appropriate findings of fact and provide expert views relevant to any problem raised pursuant to paragraph 1 of Article V of this Convention by the State Party requesting the convening of the Committee.

2. The work of the Consultative Committee of Experts shall be organized in such a way as to permit it to perform the functions set forth in paragraph 1 of this annex. The Committee shall decide procedural questions relative to the organization of its work, where possible by consensus, but otherwise by a majority of those present and voting. There shall be no voting on matters of substance.

3. The Depositary or his representative shall serve as the Chairman of the Committee.

4. Each expert may be assisted at meetings by one or more advisers.

5. Each expert shall have the right, through the Chairman, to request from States, and from international organizations, such information and assistance as the expert considers desirable for the accomplishment of the Committees work.
1. Convention on the prohibition of military or any other hostile use of environmental modification techniques

*New York, 10 December 1976*

**Entry into force:** 5 October 1978, in accordance with article IX (3).

**Registration:** 5 October 1978, No. 17119.

**Status:** Signatories: 48, Parties: 73.

**Text:**

**Note:** The Convention was approved by the General Assembly of the United Nations in its resolution 31/72¹ of 10 December 1976. In application of paragraph 2 of the said resolution, the Secretary-General decided to open the Convention for signature and ratification by States from 18 to 31 May 1977 at Geneva, Switzerland. Subsequently, the Convention was transmitted to the Headquarters of the Organization of the United Nations at New York, where it was open for signature by States until 4 October 1978.

**PARTICIPANTS**

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<th>Signature</th>
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<td>Yemen</td>
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<td>20 Jul 1977</td>
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</tbody>
</table>

**DECLARATIONS**

Declarations and Reservations
(Unless otherwise indicated, the declarations and reservations were made upon ratification, accession or succession.)

**Argentina**

The Argentine Republic interprets the terms "widespread, long-lasting or severe effects" in article I, paragraph 1, of the Convention in accordance with the definitions agreed upon in the understanding on that article. It likewise interprets articles II, III and VIII in accordance with the relevant understandings.

**Austria**

Reservation:

"Considering the obligations resulting from its status as a permanently neutral state, the Republic of Austria declares a reservation to the effect that its co-operation within the frame work of this Convention cannot exceed the limits determined by the Status of permanent neutrality and membership with the United Nations."

**Germany**

Upon signature:

"With the proviso that the correct designation of the Federal Republic of Germany in the Russian language is `Federativnuju Respubliku Germaniju'."

16 June 1977

"The correct designation of the Federal Republic of Germany in the Russian language following the preposition `sa` in the Russian text was spelled out in the afore-mentioned proviso as `Federativnuju Respubliku Germaniju'."

**Guatemala**

Reservation:

Guatemala accepts the text of article III, on condition that the use of environmental modification techniques for peaceful purposes does not adversely affect its territory or the use of its natural resources.

**Kuwait**

Reservation:

This Convention binds the State of Kuwait only towards States Parties thereto. Its obligatory character shall *ipso facto* terminate with respect to any hostile state which
does not abide by the prohibition contained therein.

Understanding:

"It is understood that accession to the Convention on the Prohibition of Military or any other hostile use of Environmental Modification Techniques, done in Geneva, 1977, does not mean in any way recognition of Israel by the State of Kuwait. Furthermore, no treaty relation will arise between the State of Kuwait and Israel."

**Netherlands**

Declaration:

"The Kingdom of the Netherlands accepts the obligations laid down in article 1 of the said Convention as extending to states which are not a party to the Convention and which act in conformity with article 1 of the Convention."

**New Zealand**

"The Government of New Zealand hereby declares its interpretation that nothing in the Convention detracts from or limits the obligations of States to refrain from military or any other hostile use of environmental modification techniques which are contrary to international law."

**Republic of Korea**

"It is the understanding of the Government of the Republic of Korea that any technique for deliberately changing the natural state of rivers falls within the meaning of the term 'environmental modification techniques' as defined in article II of the Convention.

"It is further understood that military or any other hostile use of such techniques, which could cause flooding, inundation, reduction in the water-level, drying up, destruction of hydrotechnical installations or other harmful consequences, comes within the scope of the Convention, provided it meets the criteria set out in article I therefore."

**Switzerland**

Because of the obligation incumbent upon it by virtue of its status of perpetual neutrality, Switzerland must make a general reservation specifying that its co-operation in the framework of this Convention cannot go beyond the limits imposed by this status. This reservation refers, in particular, to article V, paragraph 5, of the Convention, and to any similar clause which may replace or supplement this provision in the Convention (or in any other arrangement).

**Turkey**

Upon signature:

Interpretative statement:
"In the opinion of the Turkish Government the terms 'wide- spread', 'long lasting' and 'severe effects' contained in the Convention need to be clearly defined. So long as this clarification is not made the Government of Turkey will be compelled to interpret itself the terms in question and consequently it reserves the right to do so as and when required.

"Furthermore, the Government of Turkey believes that the difference between "military or any other hostile purposes" and "peaceful purposes" should be more clearly defined so as to prevent subjective evaluations."

### Territorial Application

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Date of receipt of notification:</th>
<th>Territories:</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>16 May 1978</td>
<td>Associated States (Antigua, Dominica, St. Kitts Nevis-Anguilla, St. Lucia and St. Vincent), Territories under the territorial sovereignty of the United Kingdom, the Solomon Islands, State of Brunei, United Kingdom Sovereign Base Areas of Akrotiri and Dhekelia in the island of Cyprus</td>
</tr>
</tbody>
</table>

### NOTES


2. With the following declaration with respect of Hong Kong Special Administrative Region and Macao Special Administrative Region:

   In accordance with the provisions of Article 153 of the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China and Article 138 of the Basic Law of the Macao Special Administrative Region of the People's Republic of China, the Government of the People's Republic of China decides that the Convention shall apply to the Hong Kong Special Administrative Region and the Macao Special Administrative Region of the People's Republic of China.

3. Czechoslovakia had signed and ratified the Convention on 18 May 1977 and 12 May 1978, respectively. See also note 1 under "Czech Republic" and note 1 under "Slovakia" in the "Historical Information" section in the front matter of this volume.

4. The German Democratic Republic had signed and ratified the Convention on 18 May 1977 and 25 May 1978, respectively. See also note 2 under "Germany" in the "Historical Information" section in the front matter of this volume.
5. See note 1 under “Germany” regarding Berlin (West) in the “Historical Information” section in the front matter of this volume.

6. For the Kingdom in Europe and the Netherlands Antilles. See also note 1 under “Netherlands” regarding Aruba/Netherlands Antilles in the “Historical Information” section in the front matter of this volume.

7. The accession shall also apply to the Cook Islands and Niue.

8. Democratic Yemen had acceded to the Convention on 12 June 1979. See also note 1 under “Yemen” in the “Historical Information” section in the front matter of this volume.

9. The Government of Argentina has specified that the understandings referred to in the declaration are the Understandings adopted as part of the report of the Conference of the Committee on Disarmament to the General Assembly at its thirty-first session, published under the symbol A/31/27. [Report of the Conference of the Committee on Disarmament to the General Assembly (Volume I, Annex I).]

10. On 23 June 1980, the Secretary-General received from the Government of Israel the following communication concerning the above-mentioned understanding:

“The Government of Israel has noted the political character of the statement made by the Government of Kuwait. In the view of the Government of Israel, this Convention is not the proper place for making such political pronouncements. Moreover, the said declaration cannot in any way affect whatever obligations are binding upon Kuwait, under general international law or under particular conventions. Insofar as concerns the substance of the matter, the Government of Israel will adopt towards the Government of Kuwait an attitude of complete reciprocity.”

11. See note 2 under “United Kingdom of Great Britain and Northern Ireland” regarding Hong Kong in the “Historical Information” section in the front matter of this volume.
NOTE BY THE TECHNICAL SECRETARIAT

STATUS OF PARTICIPATION IN THE CHEMICAL WEAPONS CONVENTION
AS AT 3 JANUARY 2008

SUMMARY

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Number of States Parties:</td>
<td>183</td>
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<tr>
<td>Number of States that had deposited an instrument of accession or ratification and for which the Chemical Weapons Convention (hereinafter “the Convention”) had not yet entered into force:</td>
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<tr>
<td>Number of signatory States that had not yet ratified the Convention:</td>
<td>5</td>
</tr>
<tr>
<td>Number of States that had neither signed nor acceded to the Convention:</td>
<td>7</td>
</tr>
</tbody>
</table>

Introductory note

1. The Convention was adopted in Geneva on 3 September 1992 by the Conference on Disarmament, which transmitted it to the United Nations (UN) General Assembly at its forty-seventh session. The General Assembly commended the Convention and requested the UN Secretary-General, as Depositary, to open it for signature in Paris on 13 January 1993. The Convention remained open for signature in Paris from 13 to 15 January 1993, and thereafter at UN Headquarters, New York, until 29 April 1997, when it entered into force. It had been signed by 165 States. States that did not sign the Convention before entry into force may join it at any time thereafter.

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1. The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, which entered into force on 29 April 1997
2. Article XXI, paragraph 2, of the Convention. The Convention enters into force on the 30th day following the date of deposit of the instrument of ratification or accession with the UN Secretary-General in his capacity as Depositary.
2. For States that ratify or accede to the Convention after 29 April 1997, it enters into force on the 30th day after the date on which they deposit the instrument of ratification or accession with the UN Secretary-General. For States that succeed to the Convention, it enters into force on the date as and from which they assume responsibility for conducting their own international relations.

3. The following list shows all States Parties as at 3 January 2008. The table that follows it, for each State Party as at that date, the dates on which it signed the Convention and/or deposited its instrument of ratification or accession or its instrument of succession with the Depositary, and on which the Convention entered into force for it. The second and third tables list signatory and non-signatory States, respectively, as at 3 January 2008. All lists are alphabetical.

**STATES PARTIES TO THE CHEMICAL WEAPONS CONVENTION AS AT 3 JANUARY 2008**

1. Afghanistan  
2. Albania  
3. Algeria  
4. Andorra  
5. Antigua and Barbuda  
6. Argentina  
7. Armenia  
8. Australia  
9. Austria  
10. Azerbaijan  
11. Bahrain  
12. Bangladesh  
13. Barbados  
14. Belarus  
15. Belgium  
16. Belize  
17. Benin  
18. Bhutan  
19. Bolivia  
20. Bosnia and Herzegovina  
22. Brazil  
23. Brunei Darussalam  
24. Bulgaria  
25. Burkina Faso  
26. Burundi  
27. Cambodia  
28. Cameroon  
29. Canada  
30. Cape Verde  
31. Central African Republic  
32. Chad  
33. Chile  
34. China  
35. Colombia  
36. Comoros  
37. Congo  
38. Cook Islands  
39. Costa Rica  
40. Côte d’Ivoire  
41. Croatia  
42. Cuba  
43. Cyprus  
44. Czech Republic  
45. Democratic Republic of the Congo  
46. Denmark  
47. Djibouti  
48. Dominica  
49. Ecuador  
50. El Salvador  
51. Equatorial Guinea  
52. Eritrea  
53. Estonia  
54. Ethiopia  
55. Fiji  
56. Finland  
57. France  
58. Gabon  
59. Gambia  
60. Georgia  
61. Germany  
62. Ghana  
63. Greece  
64. Grenada  
65. Guatemala  
66. Guinea  
67. Guyana  
68. Haiti  
69. Holy See  
70. Honduras  
71. Hungary  
72. Iceland  
73. India  
74. Indonesia  
75. Iran (Islamic Republic of)  
76. Ireland  
77. Italy  
78. Jamaica  
79. Japan  
80. Jordan  
81. Kazakhstan  
82. Kenya  
83. Kiribati  
84. Kuwait  
85. Kyrgyzstan  
86. Lao People’s Democratic Republic  
87. Latvia  
88. Lesotho  
89. Liberia  
90. Libyan Arab Jamahiriya  
91. Liechtenstein  
92. Lithuania  
93. Luxembourg  
94. Madagascar  
95. Malawi  
96. Malaysia  
97. Maldives  
98. Mali  
99. Malta  
100. Marshall Islands  
101. Mauritania  
102. Mauritius  
103. Mexico  
104. Micronesia (Federated States of)  
105. Monaco  
106. Mongolia  
107. Montenegro  
108. Morocco  
109. Mozambique  
110. Namibia  
111. Nauru  
112. Nepal  
113. Netherlands  
114. New Zealand  
115. Nicaragua  
116. Niger  
117. Nigeria
118. Niue
119. Norway
120. Oman
121. Pakistan
122. Palau
123. Panama
124. Papua New Guinea
125. Paraguay
126. Peru
127. Philippines
128. Poland
129. Portugal
130. Qatar
131. Republic of Korea
132. Republic of Moldova
133. Romania
134. Russian Federation
135. Rwanda
136. Saint Kitts and Nevis
137. Saint Lucia
138. Saint Vincent and the Grenadines
139. Samoa
140. San Marino
141. Sao Tome and Principe
142. Saudi Arabia
143. Senegal
144. Serbia
145. Seychelles
146. Sierra Leone
147. Singapore
148. Slovakia
149. Slovenia
150. Solomon Islands
151. South Africa
152. Spain
153. Sri Lanka
154. Sudan
155. Suriname
156. Swaziland
157. Sweden
158. Switzerland
159. Tajikistan
160. Thailand
161. The former Yugoslav Republic of Macedonia
162. Timor-Leste
163. Togo
164. Tonga
165. Trinidad and Tobago
166. Tunisia
167. Turkey
168. Turkmenistan
169. Tuvalu
170. Uganda
171. Ukraine
172. United Arab Emirates
173. United Kingdom of Great Britain and Northern Ireland
174. United Republic of Tanzania
175. United States of America
176. Uruguay
177. Uzbekistan
178. Vanuatu
179. Venezuela
180. Viet Nam
181. Yemen
182. Zambia
183. Zimbabwe
STATES PARTIES TO THE CHEMICAL WEAPONS CONVENTION
AS AT 3 JANUARY 2008

<table>
<thead>
<tr>
<th>No.</th>
<th>State Party</th>
<th>Signature</th>
<th>Deposit</th>
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<tr>
<td>1.</td>
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<tr>
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</table>

For each State Party listed below, the date in the “Signature” column is that on which it signed the original of the Convention, which was received by the UN Secretary-General as Depositary, while the date in the “Deposit” column is that on which the Secretary-General received an instrument of accession or ratification by the State Party. Throughout the table, “[a]” means “deposit of instrument of accession”, and “[d]” means “deposit of instrument of succession”.
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The UN Web site [http://untreaty.un.org](http://untreaty.un.org) reports as follows:


In a letter dated 10 October 2006, received by the Secretary-General on 23 October 2006 and accompanied by a list of multilateral treaties deposited with the Secretary-General, the Government of the Republic of Montenegro notified that:

‘[The Government of]…the Republic of Montenegro decided to succeed to the treaties to which the State Union of Serbia and Montenegro was a party or signatory. Montenegro succeeds to the treaties listed in the attached Annex and undertakes faithfully to perform and carry out the stipulations therein contained as from June 3rd 2006, which is the date the Republic of Montenegro assumed responsibility for its international relations and the Parliament of Montenegro adopted the Declaration of Independence.'
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[The Government of] the Republic of Montenegro does maintain the reservations, declarations and objections made by Serbia and Montenegro, as indicated in the Annex to this instrument, prior to the date on which the Republic of Montenegro assumed responsibility for its international relations."

* The square brackets in this citation appear in the UN text.

Depositary Notification C.N. 167.1997.TREATIES-4 indicates that, on 28 April 1997, the Netherlands deposited its instrument of ratification for Aruba and the Netherlands Antilles with the UN Secretary-General.
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\(^8\) The UN Secretary-General has indicated that all treaty actions undertaken by Serbia and Montenegro continue in force with respect to Serbia with effect from 3 June 2006.

\(^9\) Depositary Notification C.N. 1098.2005.TREATIES-9 indicates that, on 26 October 2005, the UN Secretary-General received from the Government of the United Kingdom of Great Britain and Northern Ireland a notification that that State Party's ratification of the Convention shall extend to the following territories, for whose international relations the State Party is responsible: Bailiwick of Guernsey, Bailiwick of Jersey, Isle of Man; Anguilla, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, Pitcairn, Henderson, Ducie and Oeno Islands, St Helena and Dependencies, South Georgia and the South Sandwich Islands, Sovereign Base Areas of Akrotiri and Dhekelia, and Turks and Caicos Islands.
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STATES NOT PARTY

SIGNATORY STATES THAT HAD NOT RATIFIED
THE CHEMICAL WEAPONS CONVENTION
AS AT 3 JANUARY 2008

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2. CWC Documents

Article VIII of the CWC set out the operational provisions of the treaty, including provision for special sessions of the Conference of the States Parties to “undertake reviews of the operation of this Convention.” These reviews shall “take into account any relevant scientific and technological developments.” The First Review Conference took place in The Hague in April/May 2003 with the second scheduled for 7-18 April 2008.

Included in this section of the Resource Guide are some documents from the First CWC Review Conference and others issued by the Conference of the States Parties, the Technical Secretariat and the Scientific Advisory Board. Documents of the Second Review Conference can be found on the internet at www.opcw.org and will be distributed to all delegates at the Review Conference.

2.1 CWC Review Conferences

The CWC stipulates that its States Parties should convene a Review Conference every five years to “undertake reviews of the operation” of the CWC. The Convention also specifies that such reviews “shall take into account any relevant scientific and technological developments”. In September 2001, the OPCW Executive Council established an open-ended working group, chaired by Ambassador Alberto Davéredé of Argentina, to prepare the agenda for the First Review Conference and to prepare the draft political declaration and report. The First CWC Review Conference itself took place from 28 April - 9 May 2003 in The Hague and was attended by 113 States Parties, two other Signatory States, two Non-Signatory States, five international organizations, 22 non-governmental organizations and six industry associations. The conference was chaired by Ambassador Nourreddine Djoudi of Algeria. At the Review Conference, the States Parties reviewed the operation of the CWC within the following themes: the role of the CWC in enhancing international peace and security; measures to ensure CWC universality; implementation of the CWC; and functioning of the OPCW. The First Review Conference adopted a Political Declaration and a Report, both of which are included in this section of the Resource Guide.

Preparations for the Second Review Conference have proceeding in a similar fashion to those for the First Review Conference. In March 2006 the Executive Council established an open-ended working group, chaired by Ambassador Lyn Parker of the UK. The working group has met numerous times since, reviewing the report of the First Review Conference and receiving papers from delegations, the Technical Secretariat and Scientific Advisory Board. It also hosted meetings with chemical industry representatives and non-governmental organizations.

2.2 Action Plans

The First Review Conference drew attention to the issues of national implementation and universality and recommended the adoption of action plans to facilitate progress on both issues, which were subsequently adopted by the Executive Council and Conference of the States Parties. The action plans incorporate various deadlines and reporting requirements to ensure that political pressure is maintained to promote their objectives. Both action plans have been reviewed at subsequent sessions of the Conference of the States Parties and follow-up decisions have been adopted. The number of States not party to the CWC has fallen from 40 in 2003 to 12 in early 2008 and the number of States Parties that have enacted “comprehensive legislation” has increased from 50 in 2003 to almost 80. The CWC action plans on national implementation and universality are included in this section of the Resource Guide for reference.

2.3 Scientific Advisory Board

The CWC directs the OPCW Director-General to establish a Scientific Advisory Board (SAB) to enable him to “render specialized advice in areas of science and technology relevant to this Convention, to
the Conference, the Executive Council or States Parties”. The members of the SAB are to be “independent experts” selected by the Director-General in consultation with States Parties on the basis of their expertise in particular scientific fields relevant to the implementation of the Convention. The second session of the Conference of the States Parties adopted the SAB’s terms of reference (C-II/DEC.10) in 1998 when it also held its first meeting. Membership of the SAB was originally set at 20 but was increased to 25 in 2007. The term of office for SAB members is three years, and they can serve for two consecutive terms. The SAB meets annually but it can also establish temporary working groups which meet more often. The SAB submits an annual report to the Director-General which he then passes on to the Executive Council and the Conference of the States Parties. It also submits a special report prior to each Review Conference.

2.4 Academic Forum and Industry and Protection Forum

In 2007, as part of the celebrations for the 10th CWC anniversary the OPCW hosted an Academic Forum in September and an Industry and Protection Forum in November. The Academic Forum brought together academics, scientists, diplomats, military officers, and policy-makers involved in shaping and implementing disarmament and non-proliferation policies, in particular those related to the prohibition of CW. The Industry and Protection Forum was attended by representatives from the chemical industry, government, international organisations, CWC National Authorities, national laboratories and agencies, academia, and other institutions that work in verification, assistance and protection and the safety and security of CW. Although neither event was directly related to the Second Review Conference, the recommendations and conclusions of both forums were relevant to the conference, and the Technical Secretariat therefore circulated a note to States Parties in February 2008 summarizing the discussions and observations. This note is included in this section of the Resource Guide.
Political Declaration as approved by the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention

The States Parties to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (hereinafter “the Convention”), having convened in The Hague for the First Special Session of the Conference of the States Parties to Review the Operation of the Convention (hereinafter “the First Review Conference”), solemnly declare the following:

1. The States Parties reaffirm their commitment to achieving the object and purpose of the Convention, as set out in its Preamble and provisions. The Convention and its implementation contribute to enhancing international peace and security. Its full, universal and effective implementation will exclude completely, for the sake of all humankind, the possibility of the use of chemical weapons (CWs), which is prohibited by the Convention. Furthermore, the Convention mandates the elimination of CW stockpiles and CW production capacities by all States Parties, aims at CW non-proliferation and at confidence building among States Parties, establishes an international system for verification of compliance with its provisions, and provides for the fostering of international cooperation and assistance in the peaceful uses of chemistry.

2. The States Parties will continue to take account of developments in science and technology in the implementation of the Convention, in accordance with its provisions.

3. The States Parties reaffirm their commitment to comply with all their obligations under all the provisions of the Convention, and their commitment to implement them fully, effectively, and in a manner which is non-discriminatory and which further enhances confidence among the States Parties and between the States Parties and the Technical Secretariat of the OPCW.

4. The States Parties note that universality of the Convention is fundamental to the achievement of its object and purpose. Much progress has been made since the entry into force of the Convention, to which there are now 151 States Parties. However, serious concerns exist that there remain States not Party to the Convention. The States Parties reaffirm, in particular, that achieving the goals of the Convention requires ratification or accession by those States that cause serious concern. The States Parties pledge to intensify their bilateral and multilateral efforts towards universality of the Convention, and urge all States not Party to join the Convention without delay.

5. The States Parties, recognising the role of the United Nations in the global fight against terrorism in all its forms and manifestations, stress that the full and effective implementation of all provisions of the Convention is in itself an important contribution to this fight. Universality of the Convention, in conjunction with its full and effective implementation, helps to prevent access to CWs by terrorists.
6. The States Parties reaffirm, in order to resolve any matter which may be raised relating to the object and purpose, or the implementation of the provisions, of the Convention, their undertaking to consult and cooperate, directly among themselves or through the OPCW, or by following other appropriate international procedures.

7. The States Parties, without prejudice to the right to request a challenge inspection, should, whenever possible, first make every effort to clarify and resolve any ambiguity or concern about compliance by exchanging information and by conducting consultations among themselves. The OPCW must ensure that requests for clarification and fact-finding, including requests for challenge inspections that meet the requirements of the Convention, can be dealt with expeditiously and effectively.

8. The States Parties reaffirm the obligation to destroy CWs and to destroy or convert CW production facilities within the time limits provided for by the Convention. The possessor States Parties are fully committed to meeting their destruction obligations and the verification costs, as required by the Convention. There has been progress in CW disarmament. However, there have been difficulties in the destruction of CW stockpiles, and the Conference of the States Parties has taken action on delays in some States Parties and granted extensions of destruction time limits, as provided for by the Convention.

9. The States Parties welcome the cooperation afforded by many States Parties to assist some possessor States Parties in meeting their obligation to destroy their CW stockpiles, and invite States Parties that are willing and able to do so, upon request, to continue to cooperate in this field, using, as appropriate, relevant international mechanisms.

10. The States Parties reaffirm the obligation to destroy or otherwise dispose of old CWs, in accordance with the Convention, and note the progress made in this regard. The States Parties, furthermore, attach importance to the destruction of abandoned CWs and to the cooperation that has developed between the Territorial and Abandoning States Parties. Such cooperation would also be necessary for any abandoned CWs discovered in the future.

11. The States Parties note that the OPCW has established an effective international verification system based on declarations and on-site inspections. This provides for the systematic verification of CW stockpiles and CW production facilities, including their destruction. Furthermore, it provides for the verification of activities not prohibited under the Convention that are of importance to its object and purpose. The effective application of the verification system builds confidence in compliance with the Convention by States Parties. It also provides for challenge inspections as one of the mechanisms for the resolution of concerns about possible non-compliance, and for the investigation of allegations of the use, or threat of use, of CWs.

12. The States Parties stress that this verification system should be applied in a non-discriminatory, efficient, and cost-effective manner, and take into account relevant developments in science, technology and industry, in accordance with the provisions of the Convention.

13. The States Parties underline the importance of, and their commitment to, a credible and effective verification regime related to CWs and their destruction. The same applies to the destruction of CW production facilities, as well as to converted CW production facilities. They stress the importance of further assessing the verification regime applied to CW storage, production and destruction facilities, with a view to optimising
verification measures, in accordance with the Convention.

14. The States Parties stress the importance of a credible verification regime related to the chemical industry and other facilities used for purposes not prohibited under the Convention, and of improving its effectiveness and efficiency, with a view to achieving the non-proliferation and confidence-building aims of the Convention, and to contributing to ensuring that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred or used for purposes not prohibited by the Convention. The States Parties also affirm the need to ensure adequate inspection frequency and intensity for each category of declared facilities under Article VI, taking into account, as relevant, all factors envisaged in the Convention, including, inter alia, risk to the object and purpose of the Convention, activities, characteristics and equitable geographical distribution.

15. The States Parties underline the importance of providing confidence in the implementation of the Convention by all States Parties, through submitting information to, and receiving information from, the OPCW, subject to the provisions of the Convention, including its Confidentiality Annex.

16. The States Parties stress that national implementation is one of the essential elements for the effective operation of the Convention. The States Parties will make every effort to overcome difficulties and delays in order to fully meet their obligation to adopt, in accordance with their respective constitutional processes, the necessary implementation measures, including penal legislation. They will cooperate with each other, through the OPCW or bilaterally, towards this objective and afford each other the appropriate legal assistance, upon request, to facilitate the adoption of national implementation measures, and will cooperate, as appropriate, to ensure the safety of people and to protect the environment.

17. The States Parties reaffirm 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 precursors except where intended for purposes not prohibited under the Convention, as long as their types and quantities are consistent with such purposes.

18. The States Parties stress the very important nature of the Convention’s provisions on assistance and protection against the use, or threat of use, of CWs. The States Parties will review and, where possible, further enhance the measures they have elected to provide assistance, with a view to ensuring an effective and timely response to any assistance request.

19. The States Parties reaffirm their undertaking to foster international cooperation for peaceful purposes in the field of chemical activities of the States Parties. The States Parties stress the importance of international cooperation and its contribution to the promotion of the Convention as a whole. The States Parties invite the OPCW to further enhance its international cooperation programmes, and to develop partnerships with other relevant international and regional organisations. In this regard, each State Party is encouraged to take into account relevant developments in science, technology and industry for the common benefit, consistent with their applications for purposes not prohibited under the Convention.

20. The States Parties reaffirm their desire to promote free trade in chemicals as well as
international cooperation and the exchange of scientific and technical information in the field of chemical activities for purposes not prohibited under the Convention, in order to enhance the economic and technological development of the States Parties. They also reaffirm their commitment to facilitate the fullest possible exchange of chemicals, equipment and scientific and technical information relating to the development and application of chemistry for purposes not prohibited under the Convention.

21. The States Parties reaffirm their commitment to implement the Convention in a manner which avoids hampering their economic and technological development for purposes not prohibited under the Convention. They further reaffirm their undertaking not to maintain among themselves any restrictions that are incompatible with the obligations undertaken under the Convention, which would restrict or impede trade and the development and promotion of scientific and technological knowledge in the field of chemistry for peaceful purposes.

22. The States Parties pledge to further strengthen the OPCW in order to achieve the object and purpose of the Convention and to ensure the full and effective implementation of its provisions.

23. The First Review Conference expresses its appreciation to the international community, including the United Nations and other international and regional organisations, the chemical industry sector, NGOs and civil society, for their active cooperation with, and support for, the work of the OPCW to help fulfil the object and purpose of the Convention.

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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

1. AGENDA ITEM ONE – Opening of the First Review Conference

1.1 The First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (hereinafter “the First Review Conference”) was opened at 10:35 on 28 April 2003 by its Chairman, Ambassador Nourreddine Djoudi of Algeria. It received a message from the Secretary-General of the United Nations (RC-1/4, dated 28 April 2003).

1.2 The following 113 States Parties participated in the First Review Conference: Albania, Algeria, Andorra, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belarus, Belgium, Benin, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Côte d’Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Ecuador, Eritrea, Estonia, Ethiopia, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Holy See, Hungary, Iceland, India, Indonesia, Iran (Islamic Republic of), Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Latvia, Lesotho, Lithuania, Luxembourg, Malaysia, Malta, Mexico, Monaco, Mongolia, Morocco, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Norway, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia and Montenegro, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Thailand, The former Yugoslav Republic of Macedonia, Togo, Tunisia, Turkey, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America, Uzbekistan, Venezuela, Viet Nam, Yemen, and Zambia.

1.3 In accordance with Rule 29 of the Rules of Procedure of the Conference of the States Parties (hereinafter “the Conference”), the following signatory States participated in the First Review Conference as observers: Haiti and Israel.

1.4 In accordance with Rule 30 of the Rules of Procedure of the Conference, and pursuant to decision RC-1/DEC.1/Rev.1, dated 8 May 2003, Angola and the Libyan Arab Jamahiriya were accorded observer status.
1.5 The First Review Conference, in decision RC-1/DEC.2, dated 28 April 2003, approved the participation of five international organisations and bodies in its Session.

1.6 The First Review Conference, in decision RC-1/DEC.3, dated 28 April 2003, approved the participation of 22 non-governmental organisations and six industry associations in its Session.

2. AGENDA ITEM TWO – Adoption of the agenda

The First Review Conference adopted the following agenda:

AGENDA ITEM ONE – Opening of the First Review Conference

AGENDA ITEM TWO – Adoption of the agenda

AGENDA ITEM THREE – Organisation of work and establishment of subsidiary bodies

AGENDA ITEM FOUR – Statement by the Director-General

AGENDA ITEM FIVE – Report of the Chairman of the Executive Council on the preparations for the First Review Conference

AGENDA ITEM SIX – General debate

AGENDA ITEM SEVEN – Review of the operation of the Chemical Weapons Convention as provided for in paragraph 22 of Article VIII, taking into account any relevant scientific and technological developments, and as required by paragraph 26 of Part IX of the Verification Annex to the Chemical Weapons Convention:

   (a) The role of the Chemical Weapons Convention in enhancing international peace and security

   (b) Measures to ensure the universality of the Chemical Weapons Convention

   (c) Implementation of the provisions of the Chemical Weapons Convention relating to:

      (i) General obligations and declarations related thereto
      (ii) General provisions on verification
      (iii) Chemical weapons and chemical weapons production facilities
      (iv) Activities not prohibited under the Convention
      (v) National implementation measures
      (vi) Consultation, cooperation, and fact-finding
      (vii) Assistance and protection against chemical weapons
      (viii) Economic and technological development
      (ix) Final clauses: Articles XII to XXIV
      (x) The protection of confidential information
(d) The functioning of the Organisation for the Prohibition of Chemical Weapons

AGENDA ITEM EIGHT – Reports of subsidiary bodies

AGENDA ITEM NINE – Any other business

AGENDA ITEM TEN – Adoption of the final documents of the First Review Conference

AGENDA ITEM ELEVEN – Closure

3. AGENDA ITEM THREE – Organisation of work and establishment of subsidiary bodies

3.1 The First Review Conference adopted the recommendations of the General Committee reported to it in accordance with Rule 43 of the Rules of Procedure of the Conference.

3.2 The First Review Conference adopted the recommendation of the General Committee that it be closed on 9 May 2003.

4. AGENDA ITEM FOUR – Statement by the Director-General

The First Review Conference noted the opening statement by the Director-General (RC-1/DG.3, dated 28 April 2003).

5. AGENDA ITEM FIVE – Report of the Chairman of the Executive Council on the preparations for the First Review Conference

The Chairman of the Executive Council (hereinafter “the Council”), Ambassador Lionel Fernando of Sri Lanka, reported to the First Review Conference on the work of the Council in preparation for the First Review Conference. At his request, the Chairman of the open-ended working group on preparations for the First Review Conference, Ambassador Alberto Davérède of Argentina, reported to the First Review Conference on the results of the informal discussions he had held after the Thirty-Second Session of the Council prior to the First Review Conference, and submitted to the First Review Conference the consolidated Chairman’s text for agenda item seven of the Provisional Agenda of the First Review Conference (RC-1/CRP.1, dated 17 April 2003), and the Chairman’s text of the draft political declaration of the First Review Conference (RC-1/CRP.2, dated 25 April 2003).

6. AGENDA ITEM SIX – General debate

The following delegations made statements during the general debate: the Netherlands, the Russian Federation, the United States of America, Australia, Switzerland, Nigeria (on behalf of the African Group), the UN, the Islamic Republic of Iran (exercising the right of reply), Greece (on behalf of the European Union and acceding and associated countries, and of the European Free Trade Association countries Iceland and Norway), Canada, Norway, China, Slovakia, the Republic of Korea, Algeria, Singapore, Ecuador, Nepal, South Africa, Bangladesh, New Zealand,
Ukraine, Saudi Arabia, the Philippines, Turkey, Cuba, Morocco, Brazil, Kuwait, Indonesia, France, the United Kingdom of Great Britain and Northern Ireland, Poland, Japan, Romania, India, Mexico, Bosnia and Herzegovina, Argentina, Gabon, the Czech Republic, The former Yugoslav Republic of Macedonia, the Islamic Republic of Iran, Pakistan, Qatar, the United Arab Emirates, Jamaica, the Sudan, Malaysia (on behalf of the Non-Aligned Movement and China), Thailand, Mongolia, Croatia, Ghana, and Panama.

7. **AGENDA ITEM SEVEN – Review of the operation of the Chemical Weapons Convention as provided for in paragraph 22 of Article VIII, taking into account any relevant scientific and technological developments, and as required by paragraph 26 of Part IX of the Verification Annex to the Chemical Weapons Convention**

   **Agenda item 7(a): The role of the Chemical Weapons Convention in enhancing international peace and security**

   7.1 The First Review Conference **emphasised** that the Chemical Weapons Convention (hereinafter “the Convention”) is the first global and verifiable ban on a whole category of weapons of mass destruction. The complete and effective prohibition of the development, production, acquisition, stockpiling, retention, transfer, and use of chemical weapons, and their destruction are an essential safeguard against the future use of chemical weapons.

   7.2 The First Review Conference **noted with satisfaction** that the Convention has been identified as one of the core treaties reflecting the fundamental purposes of the UN. It is an essential instrument for international peace and security. It is non-discriminatory in nature, and has set new standards for global disarmament under strict and effective international control, non-proliferation, assistance and protection against chemical weapons, and international cooperation in the chemical field for purposes not prohibited by the Convention.

   7.3 The First Review Conference **recognised, furthermore**, the essential contribution that the Convention has made to confidence-building and cooperation among the States Parties, to international peace and security, and to the national security of the States Parties.

   7.4 The First Review Conference **stressed** the important contribution of the Organisation for the Prohibition of Chemical Weapons (OPCW) to the global prohibition and elimination of chemical weapons.

   7.5 The First Review Conference **reaffirmed the commitment** of all States Parties to comply with the Convention and to fully and effectively, and in a non-discriminatory manner, implement all its provisions. The Conference must continue to ensure that all States Parties comply fully with the obligations they have assumed under the Convention, as foreseen by the Convention. The Council, in keeping with its powers and functions, shall continue to promote compliance with the Convention.
7.6 The First Review Conference reiterated the importance of the obligation of the States Parties to declare their chemical weapons. The First Review Conference reiterated, furthermore, the importance of subjecting chemical weapons stockpiles to international verification by the OPCW, and of completing their destruction in accordance with the provisions of the Convention, including its time limits. The same applies to the destruction or conversion of chemical weapons production facilities. The First Review Conference welcomed the efforts made by the States Parties in respect to the timely destruction of their chemical weapons capabilities, as well as the efforts of the Technical Secretariat (hereinafter “the Secretariat”) to further enhance the efficiency and cost-effectiveness of the verification measures applied to the chemical weapons stockpiles and chemical weapons production facilities and their elimination and conversion. The First Review Conference encouraged States Parties to provide assistance to others, upon request, in the destruction of chemical weapons.

7.7 The First Review Conference noted with satisfaction that the OPCW has established an effective verification system with a view to achieving the non-proliferation and confidence-building aims of the Convention. The further development of this regime should take account of relevant developments in science and technology, in accordance with the provisions of the Convention.

7.8 The First Review Conference, furthermore, recognised that the implementation of the Convention’s provisions on assistance and protection against chemical weapons makes a significant contribution to countering the threats still associated with the possible use of chemical weapons. These measures to provide assistance should be implemented in cooperation with the State Party requesting assistance, and with other States Parties and relevant regional and international organisations.

7.9 The First Review Conference reaffirmed the importance that the Convention attaches to the fostering of international cooperation in the field of the peaceful chemical activities of the States Parties, and the objective of implementing the Convention in a manner that avoids hampering their economic and technological development and international cooperation in the field of chemical activities for purposes not prohibited by the Convention. The First Review Conference reaffirmed the right of the States Parties, subject to the provisions of the Convention and without prejudice to the principles and applicable rules of international law, to use chemicals for purposes not prohibited by the Convention, and their determination to undertake to facilitate the fullest possible exchange of chemicals, equipment, and scientific and technical information relating to the development and application of chemistry for purposes not prohibited by the Convention.

7.10 The First Review Conference noted with concern that, along with the continued threat of possible use of chemical weapons by States, the international community faces a growing danger of the use of chemical weapons by terrorists. The First Review Conference took cognisance of the request of the UN Security Council that international organisations evaluate ways in which they can enhance the effectiveness of their action against terrorism, in particular those organisations whose activities relate to the control of the use of or of access to chemical and other deadly materials. The First Review Conference reaffirmed in this context the decision of the Council

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on the OPCW’s contribution to the global struggle against terrorism, and noted that work was progressing in the Council’s working group on terrorism.

**Agenda item 7(b): Measures to ensure the universality of the Chemical Weapons Convention**

7.11 The First Review Conference stressed the importance of universal adherence by all States to the Convention, and of full compliance by all States Parties with all the provisions and requirements of the Convention. The First Review Conference was convinced that universality and full compliance by all States Parties with all the provisions of the Convention are necessary to the achievement of the global ban on chemical weapons. Universal adherence to, and full implementation of, the Convention will contribute to the global anti-terrorist effort and strengthen the security of all states.

7.12 The First Review Conference recognised that the Convention has made considerable progress towards universality since its entry into force, with the number of States Parties now at 151. The First Review Conference noted with concern, however, that there remain a total of 43 States not Party to the Convention, including 25 signatory states and 18 non-signatory states. The First Review Conference recalled, in particular, that among the States not Party are some whose non-adherence to the Convention is a cause for serious concern. The First Review Conference recalled that it has reviewed progress towards universality at its past annual sessions, and repeatedly adopted decisions urging all states that have neither ratified nor acceded to the Convention to do so without delay.

7.13 The First Review Conference acknowledged the efforts made by the OPCW to promote universality, in the form, inter alia, of regional seminars, implementation workshops, and bilateral visits and discussions arranged by the Secretariat, with the cooperation and support of States Parties. The First Review Conference recognised that the efforts to achieve universality must coincide with the achievement of full implementation by all States Parties of their obligations under the Convention. The First Review Conference noted with particular concern information indicating that a large number of States Parties had not fulfilled, either in whole or in part, basic obligations associated with national implementation measures.

7.14 The First Review Conference was convinced that progress achieved towards universality is a reflection of the credibility and validity of, and of the global support for, the principles upon which the Convention is based.

7.15 The First Review Conference underlined that there are important political, economic, and security benefits of becoming a State Party to the Convention. The First Review Conference recognised the positive effect of international cooperation among the States Parties on universality. Furthermore, their desire for increased security and their determination to participate fully in the global community were incentives for them to adhere to the Convention. The First Review Conference also recalled that States that remain outside the Convention would not be able to take advantage of the benefits that the Convention offers the States Parties.
7.16 The First Review Conference **urged** all States that have neither ratified nor acceded to the Convention to do so without delay. The First Review Conference **called upon** the States Parties and the Director-General to continue to encourage all States not Party, and in particular those whose absence has given rise to particular concern, to ratify or accede to the Convention without delay. The First Review Conference **encouraged** States Parties to promote the achievement of the common objectives of the Convention in order to encourage other countries to join the Convention.

7.17 The First Review Conference **considered** that future universality efforts should be supported by the expansion of bilateral, regional, and appropriate measures on the part of States Parties and the Secretariat. These efforts should take into account factors for non-accession, in a manner that does not encourage delay.

7.18 The First Review Conference **recommended** that the Council, with the cooperation of the 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 Convention in their national preparations to implement it.

7.19 The First Review Conference **also noted** that more than one-fifth of States Parties had lost their voting privileges in the OPCW due to arrears in payment of their financial contributions. The First Review Conference **urged** States Parties and the Secretariat to consider all diplomatic measures to facilitate greater implementation and participation by all States Parties.

**Agenda item 7(c)(i): General obligations and declarations related thereto**

7.20 The First Review Conference **reaffirmed** the commitment of the States Parties to meet the obligations they have undertaken under Article I of the Convention.

7.21 The First Review Conference **reaffirmed** the continued relevance of the definitions contained in Article II of the Convention, which ensure the comprehensive nature of the prohibition of chemical weapons under the Convention.

7.22 The First Review Conference **emphasised** the importance of all States Parties ensuring that in implementing the Convention, all actions taken are consistent with all the provisions of the Convention.

7.23 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. The First Review Conference **noted**, however, that science is rapidly advancing. New chemicals may have to be assessed in relation to their relevance to the Schedules of Chemicals of the Convention. The First Review Conference **requested** the Council to consider the developments in relation to additional chemicals that may be relevant to the Convention, and assess, *inter alia*, whether these compounds should be considered in the context of the Schedules of Chemicals.
7.24 The First Review Conference stressed the importance of the timely, complete, and accurate submission of the declarations required of each State Party under Article III. The First Review Conference noted with satisfaction that, by the end of 2002, all but two States Parties had submitted their declarations under Article III. The First Review Conference called upon the remaining States Parties that had yet to submit their Article III declarations to do so without any further delay, and called upon those states that had become States Parties in the meantime to submit their declarations under Article III when they are due. The First Review Conference encouraged the Secretariat to monitor progress in this respect, to offer assistance, including to states preparing to join the Convention in the future, and to keep the Council informed about the situation. The First Review Conference also encouraged States Parties that are able to do so, to provide assistance to other States Parties, if requested, in the preparation and submission of declarations and amendments and to inform the OPCW about such assistance.

7.25 The First Review Conference, noting the obligation of the States Parties to declare any former chemical weapons development facility (Article III, subparagraph 1(d)), and further noting that the infrastructure and personnel of these facilities may remain in place for activities not prohibited under the Convention, and that the Convention does not provide for routine verification of these facilities, called upon the Council to reach agreement on the declaration criteria for former chemical weapons development facilities (facilities designed, constructed, or used since 1 January 1946 primarily for the development of chemical weapons), with a view towards promoting confidence among States Parties.

Agenda item 7(c)(ii): General provisions on verification

Overview

7.26 The verification system is one of the most important provisions of the Convention. It provides for the monitoring of the elimination of chemical weapons and chemical weapons production facilities, contributes to achieving the non-proliferation objectives of the Convention, and provides assurances of compliance by the States Parties with the provisions of the Convention.

7.27 The First Review Conference noted with satisfaction that the OPCW has established a verification system that meets the requirements of the Convention. The OPCW has at its disposal a well-trained inspectorate, approved equipment and other technical capabilities, procedures to plan and conduct on-site inspections as required under the Convention, and a network of designated laboratories for off-site chemical analysis. There is, however, room for increased efficiency. The First Review Conference also noted that a number of procedures and guidelines that the Convention requires remain to be finalised and adopted. The Council has already included these in its work programme, and should resolve them as soon as possible.

7.28 The Secretariat and the States Parties have acquired considerable experience in the conduct of routine inspections, which they should bring to bear when identifying ways to further optimise the system, increase efficiency, and improve the conduct of inspections.
7.29 The First Review Conference noted that no challenge inspections or investigations of alleged use had been requested of the OPCW since the entry into force of the Convention.

7.30 The First Review Conference noted the Note by the Director-General conveying to the States Parties the observations of the Scientific Advisory Board (SAB) in relation to developments in science and technology that are relevant to the review of the operation of the Convention (RC-1/DG.2, dated 23 April 2003), together with his recommendations on these observations and findings. The First Review Conference requested the Council, assisted by the Secretariat and members of the SAB, as appropriate, to study these recommendations and observations with a view to preparing recommendations to the Conference on them.

Declarations

7.31 The timely and accurate submission of declarations is an important condition for the functioning of the verification system of the Convention. The First Review Conference noted the efforts made by the States Parties in collecting declaration data and submitting them to the OPCW. The First Review Conference took cognisance of improvements in the degree of standardisation of declaration data since the entry into force of the Convention, but stressed that there is a need for further improvement.

7.32 The First Review Conference noted the efforts made by the Secretariat to implement an effective system for receiving, handling, analysing, and protecting declarations, and for submitting declaration data to States Parties in accordance with the provisions of the Convention. In this context, the First Review Conference emphasised that the Secretariat and the States Parties concerned should make expeditious efforts to clarify any ambiguities and discrepancies in declarations submitted.

7.33 The First Review Conference noted the efforts of the Secretariat, consistent with its responsibilities under the Convention, to cooperate with the States Parties in ensuring that declarations submitted in accordance with the Convention were full and accurate, inter alia by clarifying ambiguities and discrepancies and by providing technical assistance and technical evaluation to States Parties in the implementation of the provisions of the Convention. The First Review Conference encouraged the Secretariat to continue these efforts, in close consultation with the States Parties and their National Authorities.

7.34 The First Review Conference noted the information provided by the Secretariat on the possibility of submitting declarations in electronic form. The First Review Conference noted the need to evaluate whether such a system could bring advantages to the Secretariat as well as to the States Parties. The First Review Conference welcomed the efforts made by some States Parties and by the Secretariat to develop software that could be used for the preparation, submission, and receipt of industry declaration data in electronic form. The First Review Conference requested the Director-General to further explore this possibility and to report to the Council, and recommended that an expert meeting open to all States Parties be convened to study all aspects of the proposed submission of declarations in electronic form. The First Review Conference reiterated the need to ensure that confidential digital data is
effectively protected at all times, in accordance with the requirements of the Convention.

Inspections

7.35 The implementation by all States Parties of the standing arrangements required by the Convention is important to the proper conduct of inspections. These arrangements include, *inter alia*, the designation of points of entry; the issuance to OPCW inspection team members of multiple entry/exit and/or transit visas valid for at least two years, and other such documents to enable them to enter and to remain on the territory of the State Party for the purpose of carrying out inspection activities; the according of privileges and immunities to inspection-team members as required by the Convention; the timely issuance of diplomatic clearance numbers for non-scheduled aircraft used by the Secretariat for inspection purposes; arrangements for the amenities needed by the inspection teams; the provision of access to inspected facilities as required by the Convention, and other arrangements necessary to the transportation, storage, and use of approved equipment by inspection teams. The First Review Conference urged all States Parties to implement these measures as required by the Convention.

7.36 The First Review Conference noted that a large part of the OPCW’s verification resources have in the past been spent on the verification of chemical weapons destruction operations. The planned increase in chemical weapons destruction in coming years and any resource constraints will require a thorough review of the current verification methodology used for chemical weapons destruction verification, as part of the effort to optimise the verification regime of the Convention.

7.37 The First Review Conference requested the Council, assisted by the Secretariat, to intensify its study of how to further optimise the OPCW verification system, aiming at recommendations that should, if possible, take effect beginning in 2004. Such a study should take into account the findings of the SAB. The study should identify essential inspection tasks; assess how the different aspects of the inspection cycle, from planning to reporting, can be made more efficient; identify means that would further increase verification efficiency; and consider how best to meet the Convention’s requirement in relation to sampling and analysis for verification purposes.

Reporting of verification results

7.38 The First Review Conference agreed that the reporting by the Secretariat to the Council and to the States Parties on verification results is an important matter, enabling States Parties to be assured of continued compliance with the Convention by other States Parties. This reporting includes the submission by the Secretariat to the States Parties of certain information to be provided in annual declarations, as well as general information that the Secretariat provides about the results of its verification activities, in accordance with the provisions of the Annex on the Protection of Confidential Information (hereinafter “the Confidentiality Annex”).
Conclusions

7.39 The First Review Conference, in concluding its review of the general aspects of verification:

(a) **called upon** States Parties that have not yet done so to complete the national preparations required by the Convention for the receipt of inspections by the OPCW, and to afford full cooperation to OPCW inspection teams, in accordance with the provisions of the Convention;

(b) **called upon** all States Parties to submit declarations in a complete, accurate, and timely manner, and to amend them promptly as required;

(c) **encouraged** States Parties to avail themselves of their right to receive and examine declaration data from other States Parties, and to inform themselves about the results of the OPCW’s verification activities, in accordance with the provisions of the Convention;

(d) **recalled** its previous decisions on the declaration of aggregate national data, called upon all States Parties to take the measures necessary to implement these decisions, and called upon the Council to review the progress of implementation, supported by reports by the Secretariat;

(e) **called upon** the States Parties to work with the Secretariat to clarify any ambiguities contained in their declarations;

(f) **encouraged** the Secretariat to more effectively apply information technology in the implementation of the verification regime, and **encouraged** the Secretariat and States Parties to continue cooperating toward the early implementation of a system that, while seeing to it that confidentiality is protected, would allow them, if they so decided, to submit their industry declarations, and to receive the information they are entitled under the Convention to receive from the Secretariat on a routine basis, in electronic form (for example on a CD-ROM);

(g) **encouraged** the Council and the Secretariat to work together to further improve the submission of information on verification results to the States Parties, *inter alia* by further improving the form and content of the Verification Implementation Report, consistent with the provisions of the Confidentiality Annex;

(h) **stressed** how important it is for the Secretariat to inform and consult with the Council, in coordination with the States Parties concerned, regarding any adaptation related to the practical implementation of verification measures previously approved by the Council;

(i) **called upon** the Secretariat to continue its efforts to optimise verification measures, and requested the Council to intensify its study of the issue of verification resource optimisation, aiming at recommendations that should, if possible, be phased in beginning in 2004; and
(j) requested the Council to resolve urgently the development of recommendations on the still-unresolved issues pertaining to the Convention’s verification regime that the Convention requires it to adopt, and to submit draft decisions to the Conference as early as possible.

Agenda item 7(c)(iii): Chemical weapons and chemical weapons production facilities

7.40 The States Parties reaffirmed the obligation to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Convention. The possessor States Parties are fully committed to meeting their destruction obligations and the verification costs as required by the Convention. There has been progress in chemical weapons disarmament. However, there have been difficulties in the destruction of chemical weapons stockpiles, and the Conference has taken action on delays in some States Parties and granted extensions of destruction time limits, as provided for by the Convention.

7.41 The First Review Conference, whilst reaffirming that the destruction of chemical weapons is the responsibility of the possessor States Parties, called upon States Parties that are in a position to do so, to provide assistance to support the efforts of possessor States Parties that request such assistance in implementing their programmes of chemical weapons destruction.

7.42 The First Review Conference stressed how important it is that possessor States Parties implement appropriate measures to secure their storage facilities, and to prevent any movement of their chemical weapons out of the facilities, except their removal for destruction or, in accordance with the provisions of the Convention, the removal of Schedule 1 chemicals for use for research, medical, pharmaceutical, or protective purposes. The OPCW can serve as a forum for consultation and cooperation between the States Parties in this respect.

7.43 The First Review Conference requested the Council to continue exercising its important role in monitoring progress in the chemical weapons destruction activities. The First Review Conference urged possessor States Parties to provide realistic and required annual chemical weapons destruction plans, and to update these plans as may become necessary.

7.44 The First Review Conference noted that the declarations provided by the States Parties under Article III, which establish a baseline for measuring progress in the elimination of chemical weapons stockpiles, need to be comprehensive and accurate. The First Review Conference called upon the States Parties to ensure that their declarations under Article III are updated in a timely manner, if and when new information becomes available. The First Review Conference called upon the Secretariat to continue rendering technical assistance to the States Parties on the preparation of chemical weapons declarations, by mutual consent, and to submit proposals to the Council on any measures that may be necessary to maintain the technical competence of the Secretariat in this respect. The First Review Conference encouraged States Parties that are capable of doing so to assist other States Parties in the preparation and submission of declarations and amendments.
7.45 The First Review Conference reaffirmed that all chemical weapons shall be destroyed, under OPCW verification, in accordance with the provisions of Article IV and Part IV(A) of the Verification Annex to the Convention (hereinafter “the Verification Annex”).

7.46 The First Review Conference stressed the importance of the effective verification of chemical weapons stockpiles as well as of their destruction. The First Review Conference recognised that this verification can be optimised and its efficiency increased. The Council has begun working on this issue, supported by the Secretariat. Reducing the manpower requirements for the verification of chemical weapons destruction operations was identified as the issue that could have the greatest impact on optimising verification resource use. Within the context of the discussions under agenda item 7(c)(ii), the First Review Conference recommended that the Secretariat continue working with the Council, with the appropriate involvement of the States Parties possessing chemical weapons stockpiles and destroying them, towards mutually agreeable solutions for optimising chemical weapons verification, whilst maintaining the effectiveness of verification activities. The First Review Conference requested the Council to oversee this work, and to submit to the Conference proposals for recommendations and decisions, with a view toward their implementation starting in 2004.

7.47 The First Review Conference noted that the Convention provides for States Parties to implement verification activities under bilateral or multilateral agreements, provided that such agreements are, inter alia, consistent with the verification provisions of the Convention (paragraphs 13 and 16, respectively, of Articles IV and V). The First Review Conference noted that States Parties, under the purview of the Council, can further examine possibilities for concluding bilateral or multilateral agreements in this regard.

7.48 The First Review Conference recalled the Conference’s previous decisions on the mechanism for payment of verification costs by the inspected States Parties under Articles IV and V. The First Review Conference noted the efforts made by the States Parties concerned and by the Secretariat to effectively implement this mechanism. The First Review Conference called upon the Secretariat to ensure that invoices for relevant verification expenses under Articles IV and V are submitted to the possessor States Parties in a timely manner. The First Review Conference called upon the States Parties to pay Article IV and V verification costs in a timely manner, and called upon the Secretariat and the Council to monitor the efficacy of the steps taken to address problems related to the Article IV and V payment mechanism, and to implement any further measures to be agreed upon.

7.49 The First Review Conference reaffirmed the obligation to destroy or otherwise dispose of old chemical weapons, in accordance with the Convention, and noted the progress made in this regard.

7.50 The States Parties, furthermore, attached importance to the destruction of abandoned chemical weapons and to the cooperation that has developed between the Territorial and Abandoning States Parties. Such cooperation would also be necessary in regard to any abandoned chemical weapons discovered in the future.
The First Review Conference reviewed progress in relation to the destruction of chemical weapons production facilities, and noted with satisfaction that the elimination of CW production capabilities has progressed as required by Part V of the Verification Annex. The conversion of former chemical weapons production facilities for purposes not prohibited is permitted by the Convention, in exceptional cases of compelling need.

The First Review Conference reviewed the progress made in the field of conversion of former CW production facilities for purposes not prohibited by the Convention. The First Review Conference confirmed the States Parties’ commitment to complete conversion as early as possible and to keep the Secretariat and the Council informed about the progress being made. The First Review Conference noted the intention of the Secretariat to inspect, soon after 29 April 2003, all chemical weapons production facilities that are subject to conversion for purposes not prohibited by the Convention, but that have not yet been certified as completely converted, and to report to the Council about the conversion status of each of these facilities.

The First Review Conference recalled that, after conversion of former chemical weapons production facilities for purposes not prohibited has been completed, these facilities remain liable to on-site inspection in accordance with paragraph 85 of Part V of the Verification Annex for a period of 10 years after the certification by the Director-General of their conversion. The First Review Conference also noted that, in accordance with the provisions of the Convention, these converted facilities shall be no more capable of being reconverted into a chemical weapons production facility than any other facility used for industrial, agricultural, research, medical, pharmaceutical, or other peaceful purposes not involving chemicals listed in Schedule 1 of the Annex on Chemicals. The First Review Conference recalled that the States Parties that have converted facilities are required to report annually on the activities at these facilities. Upon completion of the 10-year period following the completion of conversion, the Council shall decide on the nature of continued verification activities. The First Review Conference reaffirmed that future planning of verification measures needs to take account of these requirements for the verification of converted chemical weapons production facilities, and requested the Secretariat to submit a concept for these verification measures to the Council for consideration and to enable the Council to submit proposals for recommendations or decisions that may be needed to the Conference.

The First Review Conference recalled the need to adopt decisions on a number of unresolved issues related to chemical weapons, old chemical weapons produced after 1925, abandoned chemical weapons, and chemical weapons production facilities. It noted that the Council has included several urgent and long-standing issues in its work programme, and requested the Council to continue working towards an early resolution of these issues.
Agenda item 7(c)(iv): Activities not prohibited under the Chemical Weapons Convention

Overview

7.55 The First Review Conference reaffirmed the right of the States Parties, subject to the provisions of the Convention, to develop, produce, otherwise acquire, retain, transfer, and use toxic chemicals and their precursors for purposes not prohibited under the Convention. The First Review Conference affirmed that the OPCW continues to provide a forum for discussing matters related to the observance of these rights among States Parties.

7.56 The First Review Conference reaffirmed that the provisions of the Convention related to activities not prohibited under it shall be implemented in a manner that avoids hampering the economic and technological development of the States Parties and international cooperation in the field of chemical activities not prohibited by the Convention, including the international exchange of information and chemicals and equipment for the production, processing or use of chemicals for purposes not prohibited by the Convention.

7.57 The First Review Conference reaffirmed the obligation of the States Parties to adopt the necessary measures to ensure that toxic chemicals and their precursors are developed, produced, otherwise acquired, retained, transferred, or used within their territories or in any other places under their jurisdiction or control, only for purposes not prohibited by the Convention.

7.58 The First Review Conference noted that progress has been made since the entry into force of the Convention in relation to the implementation of an effective verification regime in accordance with Article VI of the Convention. Major achievements in this connection include the submission of initial and annual declarations, and the conduct of on-site inspections by the Secretariat to verify that activities at declared chemical facilities were consistent with the obligations undertaken under the Convention, and consistent with the information to be provided in declarations.

7.59 The First Review Conference reaffirmed the importance of national implementation as an essential element of the implementation of the verification and other provisions of Article VI and Parts VI through IX of the Verification Annex. It addressed this issue in detail under agenda item 7(c)(v). The First Review Conference encouraged States Parties to share their experiences about the most effective ways to implement the Convention, and to cooperate in the resolution of issues they may encounter in the implementation of these provisions. The First Review Conference encouraged the Secretariat to continue providing technical assistance to States Parties, by mutual consent, in relation to the identification of declarable facilities, the submission of declarations under Article VI, the receipt of OPCW inspections and other technical questions that may arise in the implementation of the provisions related to activities not prohibited under the Convention.
Declarations

7.60 In relation to initial declarations, the First Review Conference recalled the serious concern it had, for several years after the entry into force of the Convention, about the level of implementation by all States Parties of this important provision, in particular in relation to the timeliness of submissions. The First Review Conference emphasised the importance of the timely submission of accurate and complete initial declarations by all States Parties, including by States joining the treaty in the future.

7.61 The First Review Conference noted that significant progress had been made since the entry into force of the Convention in relation to agreeing on common guidelines and criteria for the submission of declarations under Article VI. However, some important issues remain unresolved. The First Review Conference urged the Council to continue, with the support of the Secretariat, to work towards the early resolution of the unresolved Article VI declaration issues.

7.62 The First Review Conference stressed how important it is that all States Parties with facilities declarable under Article VI submit annual declarations in an accurate, complete, and timely manner. The same applies to the other declarations required under Article VI (aggregate national data, and notifications and declarations of transfers of Schedule 1 chemicals).

7.63 Furthermore, and recalling the decision taken by the Conference at its First Session on changes to annual declarations (C-I/DEC.38, dated 16 May 1997), the First Review Conference urged States Parties to implement, on a voluntary basis, the recommendation contained in paragraph 5 of the Annex to this decision to inform the Secretariat of cases when plants or plant sites that have been declared to undertake activities in relation to Schedule 2 or Schedule 3 chemicals cease to do so, and requested the Council to consider whether to require such submissions from States Parties.

Developments in science and technology

7.64 The First Review Conference considered scientific and technological developments in regard to activities not prohibited under the Convention, and recognised that the chemical industry is subject to change over time. The OPCW should therefore adapt its verification regime for the chemical industry so as to maintain its effectiveness and relevance, and its consistency with the inspection procedures established by the Convention.

7.65 The First Review Conference noted the Note of the Director-General submitting the Report of the Scientific Advisory Board to the First Review Conference (RC-1/DG.2, dated 23 April 2003), and recalled in this context its recommendation contained in paragraph 7.30 above.

Schedule 1 chemicals and facilities

7.66 In relation to the conduct of inspections at Schedule 1 facilities, the First Review Conference noted that all these facilities have been subjected to systematic inspections as required by the Convention. The First Review Conference recalled
information submitted by the Secretariat indicating that only a small number of these facilities were at this moment involved with the production or storage of significant amounts of Schedule 1 chemicals. The provisions of the Convention on the number, intensity, duration, timing, and mode of inspections at Schedule 1 facilities are based on the quantities of Schedule 1 chemicals produced, the characteristics of the facilities, and the nature of the activities carried out there (paragraphs 23 and 30 of Part VI of the Verification Annex). Guidelines on this matter, however, have yet to be considered and approved by the Conference. The First Review Conference noted that these guidelines would assist in the future optimisation of the use of resources set aside for verification under Part VI of the Verification Annex, and requested the Council, assisted by the Secretariat, to prepare these guidelines for consideration and adoption as early as possible.

7.67 The First Review Conference also addressed transfers of Schedule 1 chemicals. In this context, it received a proposal to introduce a de minimis rule for the notification of transfers of Schedule 1 chemicals, and requested the Council to study this issue and, if agreed, to prepare a proposal for consideration by the Conference at one of its forthcoming annual sessions.

The verification regime in the chemical industry and the re-examination of Part IX of the Verification Annex

7.68 In relation to inspections of Schedule 2 facilities, the First Review Conference noted that almost all initial inspections had already been conducted, and that re-inspection had begun. Inspections of Schedule 3 facilities had been conducted at 100 facilities as at 31 December 2002 (23% of the inspectable facilities). Inspections of other chemical production facilities producing discrete organic chemicals, including PSF chemicals, commenced in 2000 as provided for by the Convention. Ninety-seven other chemical production facility inspections had been completed by 31 December 2002.

7.69 In accordance with the provisions of the Convention, inspections of other chemical production facilities commenced only in May 2000. The inspections conducted have indicated the usefulness of OCPF inspections and their value for increasing confidence in the chemical activities of the States Parties. At the same time, the current selection algorithm does not use all the weighting factors provided for by the Convention and must be further improved. The First Review Conference also received the recommendations of the Director-General on the observations made by the SAB on the nature of other chemical production facilities (RC-1/DG.2, dated 23 April 2003). The First Review Conference agreed that there was a need to:

(a) fully implement all parts of the selection mechanism provided for in paragraph 11 of Part IX of the Verification Annex;

(b) reach early agreement on what basis (e.g., regional) proposals by States Parties for inspection should be presented to be taken into account as a weighting factor in the selection process specified in paragraph 11 of Part IX of the Verification Annex;
take account of the other chemical production facilities declared by the States Parties, of their technical characteristics and activities, and of trends in science and technology that impact on these parameters, to increase the number of other chemical production facility inspections to the extent found appropriate as the budget process unfolds in ensuing years; and

review the conduct of other chemical production facility inspections to ensure that they are conducted in a way that efficiently fulfils the inspection aims set out by the Convention.

The First Review Conference requested the Council to continue working on these issues, together with the Secretariat, and to prepare recommendations for the Conference’s consideration at an early date.

In relation to the verification regime for the chemical industry as a whole, the First Review Conference confirmed the validity of the overall balance provided for in the Convention. The States Parties also affirmed the need to ensure the adequate frequency and intensity of inspections for each category of declared facilities under Article VI, taking into account, as relevant, all factors envisaged in the Convention, including risk to the object and purpose of the Convention, activities, characteristics, and equitable geographical distribution.

The First Review Conference concluded that the allocation of resources to the verification regime for the chemical industry needs to be further optimised, taking due account of the nature of the declared facilities, the inspection experience gathered, developments in science and technology, and the principles set out in Article VI. To this end, the First Review Conference encouraged the Council, assisted by the Secretariat, to work toward:

(a) resolving outstanding chemical industry cluster issues and submitting recommendations to the Conference at an early date;

(b) improving the submission and handling of industry declarations (including, inter alia, common criteria and standards, simplified declaration forms, and the submission of declaration data in electronic form);

(c) refining inspection conduct to improve consistency, efficiency and effectiveness (including, inter alia, a common approach to verifying the absence of Schedule 1 chemicals at inspected plant sites, the simplification of the format used to record preliminary findings, and sampling and analysis procedures);

(d) providing guidance to the Secretariat in respect to reporting on verification results in the chemical industry in order to increase the utility of the information provided to the States Parties; and

(e) studying the need for a recommendation about the future treatment of salts of Schedule 1 chemicals that are not explicitly mentioned in Schedule 1.
Transfer regulations

7.72 In relation to transfers of scheduled chemicals to or from States not Party, the First Review Conference recalled the prohibitions on any such transfers of Schedule 1 chemicals and, since 29 April 2000, of Schedule 2 chemicals. The First Review Conference urged all States Parties to fully and effectively implement these prohibitions, including by enacting the necessary legislation, and to share experiences about the implementation of these provisions. The First Review Conference noted the impact that the full and effective implementation of these provisions can have on universality.

7.73 The question of whether there is a need for other measures in relation to transfers of Schedule 3 chemicals to States not Party remains under consideration in the Council. The First Review Conference reviewed this issue in the wider context of implementing effective transfer controls vis-à-vis States not Party. It concluded that all States Parties should take the necessary measures to ensure the full implementation of the Convention’s requirement for end-use certification by recipient States not Party. This would be important for the consideration of potential non-proliferation benefits, the impact on universality, and the economic consequences of any other measures in relation to transfers of Schedule 3 chemicals. The First Review Conference requested the Council to continue working towards an early resolution of these issues, and to submit a recommendation on this matter to the next regular session of the Conference.

Agenda item 7(c)(v): National implementation measures

7.74 The First Review Conference affirmed that national implementation is one of the essential conditions for the functioning of the Convention and for its full, effective, and non-discriminatory implementation.

7.75 National implementation is also important in relation to the ability of the Convention to respond to changes in the security environment or in science and technology that may affect the Convention. It contributes to meeting new challenges, including the possible use of toxic materials by non-state actors such as terrorists.

7.76 The First Review Conference noted that some progress had been made since the entry into force of the Convention in relation to the establishment or designation of National Authorities. One hundred and fifteen States Parties have now notified the OPCW of the establishment or designation of their National Authority. The First Review Conference noted with concern, however, that a large number of States Parties have yet to designate or establish a National Authority, and agreed that this situation needed urgent attention.

7.77 The adoption, in accordance with each State Party’s constitutional process, of implementing legislation including penal legislation is an important State Party responsibility. The First Review Conference took note of the current status of national implementation measures. A major concern was the fact that a large number of States Parties had still not notified the OPCW of the legislative and administrative measures they had taken to implement the Convention, as required under paragraph 5 of Article VII. Furthermore, the information provided by the Secretariat indicates that
an even larger number of States Parties have not adopted legislation covering all areas essential to adequate national enforcement of Convention obligations. Some States Parties may thus not be able to enforce the prohibitions required by the Convention, to provide legal cooperation to other States Parties, or to afford the appropriate form of legal assistance to facilitate the implementation of the obligations assumed under paragraph 1 of Article VII.

7.78 The First Review Conference noted that the Council had taken up the matter of implementing legislation, most recently in the context of its working group on terrorism. The First Review Conference noted that, while the threat of the use by terrorists of toxic chemicals has given added importance and urgency to the need to enact implementing legislation, the requirement that the States Parties adopt the necessary legislative and administrative measures to implement the Convention has its origin in the Convention itself.

7.79 The First Review Conference noted that a valuable aspect of national implementation measures involves ensuring that the chemical industry, the scientific and technological communities, the armed forces of the States Parties, and the public at large are aware of and knowledgeable about the prohibitions and requirements of the Convention.

7.80 The First Review Conference welcomed the efforts made by States Parties to assist each other in the development and enactment of implementing legislation, and in sharing experiences. The First Review Conference noted the value of both bilateral assistance, and networking within and among regions, especially for States Parties with limited resources.

7.81 The First Review Conference also noted that the Secretariat had developed a programme for implementation support aimed at providing technical assistance and technical evaluation in the implementation of the provisions of the Convention to States Parties, upon request. These include, inter alia, the provision of technical assistance and technical evaluation on-site, the training of National Authority personnel, the rendering of legal assistance, projects aimed at national capacity-building in areas relevant to the implementation of the Convention, support for regional networking among National Authorities, the development of tools and documentation to assist National Authorities, and other projects. The First Review Conference encouraged States Parties and the Secretariat to consult so as to further enhance the utility and effectiveness of these programmes.

7.82 The First Review Conference further agreed that the availability of effective support in the area of national implementation measures, rendered either by individual States Parties bilaterally or by the Secretariat, or in joint projects involving States Parties and the Secretariat, can help to promote the universality of the Convention.

7.83 The First Review Conference called upon States Parties that have not already done so to inform the OPCW by the next regular session of the Conference of the status of their adoption of the legislative and administrative measures necessary for or taken by them to implement the Convention, of any problems they have encountered, and of any assistance they require. Having considered the importance of national implementation measures for the proper functioning of the Convention, and having
reviewed the activities undertaken by the States Parties as well as the Secretariat, the First Review Conference:

(a) called upon States Parties that still have to designate or establish their National Authorities to do so as a matter of priority, and to notify the Secretariat accordingly;

(b) called upon States Parties that have yet to prepare and enact implementing legislation, including penal legislation, and to adopt the required administrative and enforcement measures, either in whole or in part, to complete their internal preparations as soon as possible;

(c) called upon States Parties to provide the OPCW with the full text of their national implementing legislation, including updates, or, in the case of States Parties with a monist legal system, with information on the specific measures they have taken to implement the Convention;

(d) encouraged States Parties to take measures to raise awareness about the prohibitions and requirements of the Convention, inter alia in their armed forces, in industry, and in their scientific and technological communities;

(e) encouraged States Parties to lend advice, upon request, to other States Parties in drafting and adopting national measures necessary to implement the Convention, inter alia to ensure that the laws reflect the comprehensive nature of the Convention by covering all activities that are to be prohibited or required in accordance with the Convention, and that involve the use of any toxic chemicals and their precursors; to cover the provision of annual declarations on past and anticipated activities; to ensure the implementation of the provisions related to transfers of scheduled chemicals; and to cover the annual submission of information on national protective programs in accordance with paragraph 4 of Article X;

(f) encouraged the Secretariat to further develop and improve its implementation support programme, including by mobilising States Parties’ efforts so as to provide, upon request and within the limits on available resources, technical assistance and technical evaluations to States Parties in the implementation of the provisions of the Convention, including in the areas identified in subparagraph 83(e) above;

(g) urged States Parties that have not yet done so to review their existing regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of the Convention;

(h) agreed to develop, at its next regular session, a plan of action based on a recommendation from the Council regarding the implementation of Article VII obligations, with the objective of fostering the full and effective implementation of the Convention by all States Parties;

(i) called upon the Council, in cooperation with the Secretariat, to closely monitor progress toward achieving effective implementation of Article VII
obligations by all States Parties, and, at an appropriate time, to make suitable recommendations to the Conference regarding measures to ensure compliance with Article VII; and

(j) **encouraged** the Secretariat as well as the States Parties to develop partnerships with relevant regional organisations and agencies that could render support to States Parties in their implementation work.

**Agenda item 7(c)(vi): Consultation, cooperation, and fact-finding**

7.84 The First Review Conference **reaffirmed** the commitment of the States Parties to consult and cooperate, directly among themselves or through the OPCW, or by using other appropriate international procedures, including those within the framework of the UN and in accordance with its Charter, on any matter that may be raised relating to the object and purpose, or the implementation of the provisions of the Convention.

7.85 The First Review Conference **recalled** that, 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 the exchange of information and consultation among themselves, any matter which may cause doubt about compliance with the Convention, or which gives rise to concerns about a related matter which may be considered ambiguous.

7.86 The First Review Conference **noted** that bilateral consultations to clarify issues had been used, and that this mechanism was valuable in ensuring compliance with the provisions of the Convention, and in clarifying and resolving concerns. The First Review Conference **encouraged** the States Parties to make full use of this bilateral-consultation mechanism.

7.87 The First Review Conference **noted** that the Council had received no clarification requests under paragraphs 3 to 7 of Article IX since entry into force. The First Review Conference **reiterated** that the Convention provides for all necessary arrangements to receive and expeditiously deal with any clarification request that a State Party may decide to submit in accordance with the applicable provisions of Article IX.

7.88 The First Review Conference **noted** that no challenge inspection had been requested since the entry into force of the Convention. The First Review Conference **reaffirmed** the right of each State Party to request an on-site challenge inspection, as provided for by the Convention, for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the provisions of the Convention. The First Review Conference also **reaffirmed** the right and obligation of each inspected State Party to make every reasonable effort to demonstrate its compliance, its obligation to provide access within the requested site for the sole purpose of establishing facts relevant to the compliance concern, and its right to take measures to protect sensitive installations and to prevent disclosure of confidential information and data not related to the Convention.

7.89 The First Review Conference **recalled** the provisions of the Convention intended to avoid abuse of the challenge inspection mechanism, and **expressed its confidence**
that the States Parties will continue to uphold the value of the challenge inspection mechanism for compliance and compliance assurance, and at the same time keep any challenge inspection request within the scope of the Convention, and refrain from requests that are unfounded or abusive.

7.90 The First Review Conference noted that a number of issues related to challenge inspections are yet to be resolved. The First Review Conference requested the Council to continue its deliberations in order to expeditiously resolve them.

7.91 The First Review Conference took note of the preparations that the Secretariat had undertaken since entry into force in order to respond swiftly and effectively to any request for a challenge inspection. The First Review Conference noted the value, to the States Parties as well as the Secretariat, of challenge inspection exercises, and it recalled with appreciation the support provided by States Parties in this respect and invited them to continue to offer it in the future. The First Review Conference requested the Secretariat to continue maintaining a high standard of readiness to conduct a challenge inspection in accordance with the provisions of the Convention, to keep the Council informed about its readiness, and to report any problems that may arise in relation to maintaining the necessary level of readiness to conduct a challenge inspection.

Agenda item 7(c)(vii): Assistance and protection against chemical weapons

7.92 The First Review Conference reaffirmed the continuing relevance and importance of the provisions of Article X, and of the activities of the OPCW in relation to assistance and protection against chemical weapons. These have gained additional relevance in today’s security context. The First Review Conference reaffirmed the rights of the States Parties to conduct research into, develop, produce, acquire, transfer, or use means of protection against chemical weapons, for purposes not prohibited under the Convention.

7.93 The First Review Conference also noted concerns related to the possibility that chemical facilities may become the object of attack, including by terrorists, which could lead to deliberate releases or theft of toxic chemicals. The First Review Conference was cognisant of the fact that some States Parties had taken measures to minimise these risks, and in this context recalled that the OPCW had been established as a forum for consultation and cooperation among the States Parties. States Parties could, if they so decided, make use of this framework to exchange experiences and to discuss issues related to this matter.

7.94 In relation to the annual provision by each State Party, for transparency purposes, of information on its national programme related to protective purposes, the First Review Conference noted that only 42 States Parties had submitted such information since the entry into force of the Convention. The First Review Conference reaffirmed the obligation of the States Parties to fully implement this requirement. The implementation of the requirement to submit this information annually would benefit from an early agreement on the procedures for such submissions. The First Review Conference requested the Council to expeditiously develop and submit for adoption the procedures called for by the Convention.
7.95 The First Review Conference requested the Secretariat to continue working on the OPCW data bank on protection, invited States Parties to contribute to the development of this data bank by submitting freely available information concerning various means of protection against chemical weapons and other relevant material for inclusion in the data bank, and encouraged States Parties to render support to the Secretariat in respect to the development, implementation, and maintenance of a database. The First Review Conference expressed concern about the hitherto slow progress in establishing this data bank.

7.96 In relation to the provision of expert advice by the Secretariat to States Parties that wish to further develop and improve their protective capacity, the First Review Conference noted the work of the OPCW protection network. The First Review Conference also noted that the number of requests for such expert advice received from States Parties recently exceeded the capacity of the Secretariat. The First Review Conference reiterated that the Secretariat must respond to such requests in an effective manner, within the limits on the resources available to it. Furthermore, States Parties should, on a voluntary basis, provide support to the OPCW so it can respond more effectively to requests for expert advice.

7.97 The First Review Conference noted with appreciation the measures elected by States Parties in relation to how they would provide assistance through the OPCW. It noted with concern, however, that only 63 States Parties had elected one or more such measures, and called upon the remaining States Parties to take the measures necessary to implement this requirement of the Convention.

7.98 The First Review Conference noted the need for the Secretariat to evaluate the assistance offers made in accordance with subparagraph 7(c) of Article X, in order to identify gaps, redundancies, and incompatibilities, and to help minimise the resource requirements for the OPCW. The First Review Conference requested the Secretariat to keep the policy-making organs informed about the status of assistance pledges by States Parties, and about any problems requiring attention and resolution.

7.99 In relation to a response to an assistance request in accordance with paragraph 8 of Article X, the First Review Conference noted that progress had been made in relation to the development and adoption of an operational concept of assistance. The First Review Conference noted in this context the OPCW’s readiness for the delivery of assistance in the case of the use or threat of use of chemical weapons.

7.100 The First Review Conference stressed the importance of investigations of alleged use or threat of use of chemical weapons. For such situations, the OPCW must have the capacity, and be ready at all times, to investigate the need for follow-on action by the OPCW and by individual Member States, and to facilitate the delivery of assistance. The First Review Conference noted that the Secretariat had established the Assistance Coordination and Assessment Team (ACAT), the overall function of which had yet to be defined. This was an important and urgent matter. ACAT has been tested in assessment mode in exercises. The First Review Conference requested the Council to take up the possible function of the OPCW in facilitating the efficient delivery of assistance. In this context, the need was stressed for the OPCW to coordinate its activities in an assistance operation with other international agencies involved in an emergency response, in particular the UN Office for the Coordination of
Humanitarian Affairs. Three principles were highlighted by the First Review Conference:

(a) the principle that the OPCW’s role in such an emergency-response context should be firmly based on its mandate as provided by the Convention and on its particular experience and competence;

(b) the need to avoid duplication of efforts; and

(c) the need for coordination among all the agencies involved.

7.101 The First Review Conference encouraged the Secretariat to identify and engage relevant international organisations that are likely partners in situations where the OPCW needs to respond to an assistance request by a Member State, and to submit proposals to the policy-making organs.

7.102 The First Review Conference stressed the comprehensive nature of the definition of “Assistance” contained in paragraph 1 of Article X, and the right of any State Party to conduct research into, develop, produce, acquire, transfer, or use means of protection against chemical weapons for purposes not prohibited by the Convention.

7.103 The First Review Conference reaffirmed the undertaking of the States Parties to facilitate, and their right to participate in, the fullest possible exchange of equipment, material, and scientific and technological information concerning means of protection against chemical weapons.

Agenda item 7(c)(viii): Economic and technological development

7.104 The First Review Conference reaffirmed the importance of the provisions of Article XI of the Convention relating to the economic and technological development of the States Parties. It recalled in this context that the full, effective, and non-discriminatory implementation of these provisions contributes to universality.

7.105 The First Review Conference reaffirmed the commitment of the States Parties to fully implement the provisions of the Convention on economic and technological development. It reaffirmed that the States Parties have the obligation to undertake to facilitate, and have the right to participate in, the fullest possible exchange of chemicals, equipment, and technical information relating to the development and application of chemistry for purposes not prohibited by the Convention. The First Review Conference stressed that the international cooperation programmes of the OPCW should also make a contribution to the development of States Parties’ capacities required to implement the Convention.

7.106 The First Review Conference reaffirmed that the Convention shall be implemented in a manner that avoids hampering the economic or technological development of States Parties, and international cooperation in the field of chemical activities for purposes not prohibited by the Convention, including the international exchange of scientific and technical information, and chemicals and equipment for the production, processing, or use of chemicals for purposes not prohibited under the Convention.
7.107 The First Review Conference **reaffirmed** the provision of Article XI that the States Parties shall:

(a) not maintain among themselves any restrictions, including those in international agreements, incompatible with the obligations undertaken under the Convention, which would restrict or impede trade and the development and promotion of scientific and technological knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical, and other peaceful purposes;

(b) not use the Convention as grounds for applying any measures other than those provided for, or permitted, under the Convention nor any other international agreement for pursuing an objective inconsistent with the Convention; and

(c) undertake to review their existing national regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of the Convention.

The First Review Conference **called upon** the States Parties to fully implement these provisions of the Convention. It also **urged** the Council to continue its facilitation efforts to reach early agreement on the issue of the full implementation of Article XI, taking into account earlier and recent proposals submitted.

7.108 The First Review Conference **stressed** the importance of international cooperation and its valuable contribution to the promotion of the Convention as a whole, including its universality, and in this context it:

(a) **reaffirmed** the commitment of the Conference to foster international cooperation for peaceful purposes in the field of chemical activities, and **further reaffirmed** its desire to promote international cooperation and exchange of scientific and technical information in the field of chemical activities;

(b) **stressed** the desirability of cooperation projects among States Parties in areas related to the peaceful uses of chemistry. The OPCW could facilitate the provision of expert advice on the peaceful uses of chemistry, as required and upon request, to and among States Parties;

(c) **recognised** the importance of assistance and national capacity-building in the field of chemical activities for peaceful purposes, particularly as it applies to the implementation of the Convention. An important component of these activities involves facilitating the provision of direct support on-site—bilaterally, regionally, or through or by the OPCW, for example, by experts from other States Parties or the Secretariat—to assist National Authorities with specific implementation tasks. The Secretariat should, in consultation with the States Parties, review and develop existing implementation support programmes;

(d) **noted** the relevance of the existing International Cooperation and Assistance Programmes and **recalled** that all OPCW programmes should be improved
through evaluation to optimise resource use and effectiveness, with consultations between the States Parties and the Secretariat aimed at achieving a clear understanding of the competencies available, the needs of the States Parties, and the requirements of the Convention;

(e) **recognised** the need for adequate resources, and **concluded** that decisions on adequate budgetary allocations for international cooperation should be based on the States Parties’ needs, and how the programme addresses these needs, bearing in mind overall resource constraints;

(f) **emphasised** how important it is that the OPCW coordinate its activities with those of other relevant international and regional organisations, as appropriate, in order to build on existing competencies, develop synergies, and avoid duplication of efforts. The OPCW should further integrate itself as a partner in the establishment of international programme-coordination mechanisms in the field of international cooperation, assistance, and capacity-building related to the peaceful uses of chemistry;

(g) **encouraged** the OPCW to continue to establish relations and partnerships, as appropriate, with relevant regional and international organisations, including chemical industry associations and civil society, in order to promote universal adherence and awareness of the objectives and purposes of the Convention; and

(h) **encouraged** the OPCW to continue to develop its relationship with the private sector and in particular maintain, through the States Parties concerned, a productive and lasting partnership with the chemical industry, *inter alia* so that the industry the world over stays aware of the Convention and remains committed to its full implementation.

### 7.109 The First Review Conference **concluded** that there was a need to develop guiding principles to be applied when determining international-cooperation programmes. These guiding principles should then be taken into account by the Secretariat when it is further developing proposals for such programmes. The Council should elaborate such guidelines on international cooperation programmes, and apply them when evaluating both reports by the Secretariat on existing programmes, and proposals it makes for new ones.

**Agenda item 7(c)(ix): Final clauses: Articles XII to XXIV**

7.110 The First Review Conference **reaffirmed** the continued relevance of the provisions of Articles XII through XXIV of the Convention.

**Agenda item 7(c)(x): The protection of confidential information**

7.111 The First Review Conference **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. The OPCW remains strongly committed to the principles and provisions set out in the Convention in relation to the protection of confidentiality, in particular in the Confidentiality Annex. The First Review
Conference recalled, in this context, the important role of the Director-General in ensuring the protection of confidential information, as well as the responsibility of each staff member of the Secretariat to comply with all rules and regulations pertaining to the protection of confidential information.

7.112 The First Review Conference noted that the Secretariat continues to improve the implementation of the confidentiality regime in order to avoid breaches of confidentiality. There have been incidents, but these have not compromised the effectiveness of the OPCW’s regime to protect confidentiality. The strict implementation of the OPCW’s confidentiality procedures should, however, be further improved.

7.113 Proper conduct on the part of staff is essential to the effective implementation of a robust confidentiality regime, and the First Review Conference underlined the need for adequate training.

7.114 The First Review Conference stressed the importance of the procedures to be applied in cases of alleged breaches of confidentiality. The First Review Conference reaffirmed, furthermore, the important role of the Commission for the settlement of disputes related to confidentiality (hereinafter “the Confidentiality Commission”) in settling any dispute related to breaches in confidentiality and involving both a State Party and the OPCW.

7.115 The First Review Conference noted that only 44 States Parties had, as required by the Confidentiality Annex, provided details, at the request of the OPCW, on their handling of information it had provided to them. The First Review Conference urged States Parties to provide that information expeditiously, as requested by the Secretariat.

7.116 The First Review Conference took cognisance of the fact that 85% of the information submitted to the Secretariat had been classified as confidential by the originating States Parties. The First Review Conference requested the Council, assisted by the Secretariat, to study the situation in relation to the classification of information held by the OPCW. The First Review Conference encouraged the Secretariat and the States Parties to review their respective practices in assigning levels of classification to such information, and if possible, and in accordance with the State Party’s confidentiality procedures, to reduce the classification level they assign to such information, in order to increase work efficiency and ensure the smooth functioning of the system to protect confidentiality.

7.117 The First Review Conference recalled that, following an external security audit, the Secretariat was operating a Secure Critical Network (SCN) for the processing and storage of confidential information related to the verification activities of the OPCW. With the support of States Parties, and taking account of the advice rendered by the external security audit team, the Secretariat is continuing its work towards the development of a relational-database management system to be operated on the SCN to support verification activities. The First Review Conference noted the security audit team recommendation to adopt the ISO-17799 information-security management standard, and requested the Secretariat to evaluate what resources would be required to do this, and to inform the Council of its findings.
7.118 The First Review Conference noted that current confidentiality guidelines provide neither for the destruction of confidential documents and other data, including those kept on the Secretariat’s SCN, nor for the downgrading of their classification levels over the long term. The First Review Conference encouraged the OPCW to take steps to reach agreement on developing and implementing guidelines regarding the long-term handling of confidential information.

7.119 The First Review Conference noted the need to ensure that the conditions in relation to the protection of confidentiality of information are met when the OPCW proceeds to the submission of declarations in electronic form (e.g., on CD-ROM; see also paragraph 7.39(f) above).

Agenda item 7(d): The functioning of the Organisation for the Prohibition of Chemical Weapons

7.120 The States Parties have established 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 the States Parties. Its effective functioning has a direct impact on the operation of the Convention.

7.121 The work of the policy-making organs is an important aspect of the OPCW’s effective functioning. They provide policy guidance to the OPCW, and the effectiveness of their work is essential to the involvement of all States Parties in the work of the OPCW. The First Review Conference called upon all States Parties to fully participate in the activities of the OPCW’s policy-making organs.

7.122 The Council, as part of its powers and functions under the Convention, promotes the effective implementation of the Convention and compliance with it, supervises the activities of the Secretariat, cooperates with the National Authorities of the States Parties, facilitates consultation and cooperation among them, and reports to the Conference. It is therefore especially important that the Council function effectively. The First Review Conference noted how important it was for the Chairperson and Vice-Chairpersons of the Council to be engaged with the work of the facilitation groups. The First Review Conference also noted that focused agendas for both the formal meetings and the intersessional consultations of the Council were required in order for the Council to make decisions effectively.

7.123 The First Review Conference expressed concern about delays in the Council’s implementation of Conference decisions on the resolution of unresolved issues. The First Review Conference noted that the Council had included important, long-standing, unresolved issues in its work programme, and urged it to increase momentum and strive to conclude all unresolved issues.

7.124 The First Review Conference reviewed the functioning of the subsidiary advisory bodies, and noted the following:

(a) The Confidentiality Commission has been established in accordance with the Convention’s Confidentiality Annex and the OPCW Policy on Confidentiality
to consider any cases of disputes concerning breaches or alleged breaches of confidentiality involving both a State Party and the OPCW. No such disputes have been brought before the Confidentiality Commission since entry into force. The First Review Conference stressed the need for the Confidentiality Commission to be fully operational at all times, and requested the Secretariat to ensure that all necessary support is provided for this purpose.

(b) The SAB was established by the Director-General following the direction given by the Conference on this matter, to enable him, in the performance of his functions, to render specialised advice in areas of science and technology relevant to the Convention, to the Conference, to the Council, or to the States Parties. The SAB has met in regular annual sessions since 1998, and its work has been supported by temporary working groups on a number of issues submitted to it for its consideration. The First Review Conference noted the advice rendered to the States Parties by the Director-General, following contributions made by the SAB, and recommended that the interaction between the SAB and delegations should continue and be further enhanced, in the context of the Council’s facilitation process. The First Review Conference noted, furthermore, that the SAB had prepared a report to the First Review Conference on relevant scientific and technological developments that the States Parties should take into account in their review.

(c) The Advisory Body for Administrative and Financial Matters (ABAF) has been established as a panel of experts of recognised standing to provide expert advice to the OPCW on administrative and financial matters. It has made valuable contributions to the work of the OPCW and prepared recommendations on financial and administrative matters on a regular basis.

7.125 The Secretariat assists the Conference and the Council in performing their functions, and carries out the verification measures provided for in the Convention, and other functions entrusted to it under the Convention, as well as those functions delegated to it by the Conference or the Council. The First Review Conference noted with satisfaction the dedication of Secretariat staff. The OPCW has at its disposal qualified and trained staff, and equipment and procedures fit for the tasks to be fulfilled under the Convention. Possible future improvements have been identified in the review by the First Review Conference of the operation of the Convention, and are recorded in different parts of this report.

7.126 The First Review Conference 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 organisation and functioning of the Secretariat. The First Review Conference, furthermore, recalled the provisions of paragraph 44 of Article VIII.

7.127 The First Review Conference considered the budgetary and financial mechanisms of the OPCW as they have evolved since entry into force. The First Review Conference stressed the need for the Council, with the support of the Secretariat, to continue monitoring and improving the implementation of these mechanisms. The First Review Conference underlined the importance of putting in place a more effective budgetary process, based on early consultations between the Secretariat and the States Parties, on thoughtful consideration and prioritisation of the programme objectives,
and on regular assessments of whether these objectives are being met. The First Review Conference encouraged the Director-General to move ahead with the stepwise introduction of results-based budgeting. Furthermore, the First Review Conference noted the need for the Council to accelerate its deliberations on the outstanding issues in relation to the OPCW’s Financial Rules.

7.128 The First Review Conference welcomed the decision by the Council on the effective starting date of tenure of staff, and recalled the Conference’s decision at its Second Special Session on 30 April 2003 (C-SS-2/DEC.1, dated 30 April 2003). These decisions will now be implemented, and the First Review Conference stressed the need to monitor the implementation of the OPCW’s tenure policy, and the need for regular reporting by the Director-General to the Council on its implementation, and in particular on the implementation of the guiding principles in effecting the turnover of staff. The First Review Conference also noted that the issue of the OPCW’s Staff Rules and amendments to Staff Regulation 3.3, and the issue of the classification of posts, remain within the purview of the Council and should be resolved without delay.

7.129 The First Review Conference reaffirmed the importance to the effective functioning of the Secretariat of the principles set out in the Convention on the employment of staff. The First Review Conference reaffirmed that the paramount consideration in the employment of staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence, and integrity. Due regard shall be paid to the importance of recruiting staff on as wide a geographical basis as possible. Recruitment shall be guided by the principle that the staff shall be kept to the minimum necessary for the proper discharge of the responsibilities of the Secretariat.

7.130 The First Review Conference stressed that Secretariat staff, and in particular its inspectors, need to keep abreast with developments in science and technology in order to maintain professional excellence and to efficiently discharge their responsibilities. The First Review Conference requested that the Director-General bear these requirements in mind when identifying the future training needs of the Secretariat.

7.131 The First Review Conference stressed that the Secretariat should seek to apply information technology more efficiently to improve the functioning of the OPCW.

7.132 The First Review Conference also recalled the Conference’s decision on the equal treatment of all official OPCW languages, and requested the Secretariat to continue its efforts to fully implement this decision.

7.133 The First Review Conference expressed its satisfaction at the excellent relations between the OPCW and the Host Country. The First Review Conference invited the Director-General to report to the Council, as appropriate, on this relationship.

7.134 The First Review Conference noted the evolving relationships between the OPCW and other international, regional, and sub-regional organisations, and in particular stressed the importance of the relationship with the UN, as provided for by the Agreement concerning the Relationship between the UN and the Organisation for the Prohibition of Chemical Weapons (EC-MXI/DEC.1, dated 1 September 2000, and C-VI/DEC.5, dated 17 May 2001).
8. AGENDA ITEM EIGHT - Reports of subsidiary bodies

Committee of the Whole

8.1 The First Review Conference noted the report of the Committee of the Whole on the results of its consideration of the agenda item referred to it on the recommendation of the General Committee (RC-1/CoW.1, dated 9 May 2003), and took action as required.

General Committee

8.2 The First Review Conference noted the reports of the General Committee, and took action as required.

Credentials Committee

8.3 The report of the Credentials Committee (RC-1/2 dated 7 May 2003) was presented by its Chairwoman, Mrs Maria Dulce Silva Barros of Brazil. The Chairwoman orally reported that, following the close of the Credentials Committee meeting, formal credentials were received for the representatives of Albania, Costa Rica, Czech Republic, Italy, Jordan, Kenya and Mongolia, and faxes or copies of credentials in the form required by Rule 26 of the Rules of Procedure of the Conference were received from Namibia, Senegal and Tunisia. Formal credentials would be submitted for the latter in due course. The First Review Conference noted this additional information and approved the report. The First Review Conference also remarked on the number of Member States that had failed to submit credentials for their representatives on time, and urged adherence in future sessions to the requirements of Rule 26 of the Rules of Procedure of the Conference. Under that Rule, the Director-General should receive credentials preferably one week in advance of a given session.

9. AGENDA ITEM NINE – Any other business

10. AGENDA ITEM TEN – Adoption of the final documents of the First Review Conference


10.2 The First Review Conference considered and adopted the report of the First Review Conference.

11. AGENDA ITEM ELEVEN – Closure

The Chairman closed the First Review Conference at 23:33 on 9 May 2003.
DECISION

PLAN OF ACTION REGARDING THE IMPLEMENTATION OF
ARTICLE VII OBLIGATIONS

The Conference of the States Parties,

Recalling the recommendations that the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference) made on national implementation measures (as covered under agenda item 7(c)(v) of its report, subparagraphs 7.74 to 7.83 of RC-1/5, dated 9 May 2003), in particular the agreement in subparagraph 7.83(h) of that report to develop, at its next regular session, a plan of action based on a recommendation from the Executive Council (hereinafter “the Council”) regarding the implementation of obligations under Article VII of the Chemical Weapons Convention (hereinafter “the Convention”), with the objective of fostering the full, effective, and non-discriminatory implementation of the Convention by all States Parties;

Stressing the need to fully implement the recommendations of the First Review Conference on national implementation measures;

Recognising how important and how urgent it is that States Parties complete their obligations under Article VII to adopt, in accordance with their constitutional processes, the necessary measures to implement the Convention;

Convinced that the full and effective implementation of Article VII by all States Parties also contributes to universal adherence to the Convention;

Concerned that a large number of States Parties have not yet fulfilled the range of obligations under Article VII, and recognising that many of them may have difficulties in doing so; and

Taking note of the report by the Director-General to the Eighth Session of the Conference on national implementation measures (C-8/DG.5, dated 18 September 2003, and Add.1, dated 22 October 2003);

Having received the recommendation by the Council on the Plan of Action on national implementation measures (EC-M-23/DEC.2, dated 21 October 2003),
Hereby:

Identification and analysis of problems and needs (action items for the Technical Secretariat and States Parties)

1. **Requests** the Technical Secretariat (hereinafter “the Secretariat”) to intensify its work with those States Parties that have difficulties in adopting the measures required under Article VII, by further identifying, analysing, and addressing those difficulties;

2. **Further requests** the Secretariat to submit to the Thirty-Sixth Session of the Council a report covering, *inter alia*, problems that have been identified, requirements of States Parties for support, the capabilities of the OPCW (that is, both of the Secretariat and of the States Parties) to provide implementation support, and any recommendations relevant to the implementation of the plan of action;

3. **Requests** States Parties seeking assistance of any kind in meeting their national implementation obligations and that have not yet informed the Secretariat of what assistance they require, to do so preferably before 1 March 2004;

Resources for implementation support (action items for the Technical Secretariat and States Parties)

4. **Requests** the Secretariat, within the parameters set by the OPCW Programme and Budget, to offer sustained technical support to States Parties that request it for the establishment and effective functioning of National Authorities, the enactment of national implementing legislation, and the adoption of any administrative measures required in accordance with Article VII;

5. **Welcomes** voluntary contributions from States Parties towards the implementation of this plan of action, and **requests** the Secretariat to implement the plan of action within the resources approved for the OPCW Programme and Budget, together with any voluntary contributions received for national implementation, and in a cost-effective manner;

6. **Encourages** States Parties to lend advice, upon request, to other States Parties in drafting and adopting national measures necessary to implement the Convention, *inter alia* to ensure that the laws reflect the comprehensive nature of the Convention by covering all activities that are to be prohibited or required in accordance with the Convention, and that involve the use of any toxic chemicals and their precursors; to cover the provision of annual declarations on past and anticipated activities; to ensure the implementation of the provisions related to transfers of scheduled chemicals; and to cover the annual submission of information on national protective programmes in accordance with paragraph 4 of Article X;

7. **Requests** States Parties able to provide assistance of any kind towards national implementation in other States Parties to inform the Secretariat, preferably before 1 March 2004, of what they can offer;
8. **Requests** the Secretariat to further develop and improve its implementation support programme, including by mobilising States Parties’ efforts so as to provide, upon request and within the limits on available resources, technical assistance and technical evaluations to States Parties in the implementation of the provisions of the Convention, in the areas identified in the section of the report of the First Review Conference on national implementation measures (subparagraph 7.74 to 7.83 of RC-1/5);

9. **Encourages** the Secretariat to identify and, by mutual consent, engage with regional, subregional and other relevant groups of States Parties that can render support to the States Parties concerned in their implementation efforts;

10. **Encourages** the Secretariat and the States Parties to develop partnerships with relevant regional organisations and agencies that could render support to States Parties in their implementation work;

**Overall time-frame, intermediate steps, and target date (action items for States Parties)**

11. Without prejudice to the timelines set by the Convention, recalling States Parties’ obligations under Article VII, and reminding them that it has been more than six years since the entry into force of the Convention, **agrees** that it is imperative that those States Parties that still need to do so take the necessary steps and set realistic target dates for these steps leading to the enactment of the necessary legislation, including penal legislation, and/or the adoption of administrative measures to implement the Convention no later than the Tenth Session of the Conference of the States Parties, scheduled for November 2005;

12. **Calls upon** those States Parties that still need to do so to make every effort to adhere to the overall time-frame established in paragraph 11 above, as well as to the steps and target dates they have established for themselves, and to maintain regular contact with the Secretariat about the implementation of these steps and target dates;

13. **Encourages** States Parties and the Secretariat to take measures to raise awareness of the prohibitions and requirements of the Convention, *inter alia* in their armed forces, in industry, and in their scientific and technological communities;

14. **Underlines** that the steps mentioned in paragraph 11 above should include:

   (a) designating or establishing a National Authority and notifying the Secretariat thereof in accordance with Article VII of the Convention, as soon as possible;

   (b) taking the steps necessary to enact the legislation, including penal legislation, and/or to adopt the administrative measures States Parties need in order to implement the Convention in accordance with their constitutional processes; and

   (c) providing the Secretariat with the full text of their national implementing legislation, including updates, or, in the case of States Parties with a monist legal system, with information on the specific measures they have taken to implement the Convention;
15. **Urges** States Parties that have not yet done so to review their existing regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of the Convention;

   **Oversight by the Executive Council and the Conference of the States Parties (action items for States Parties and the Technical Secretariat)**

16. **Requests** the Secretariat to report to the Ninth Session of the Conference and to every second session of the Council starting with the Thirty-Sixth, in March 2004, on the progress made in implementing this plan of action;

17. **Further requests** the Council to provide guidance to, and to coordinate with, the Secretariat as necessary and to monitor the implementation of this plan of action;

18. **Also requests** States Parties that lend advice, upon request, to other States Parties on the drafting and adopting of national measures to implement the Convention, to keep the OPCW informed of their actions and the results they have achieved; and

19. **Undertakes to review**, at its Ninth Session, the progress made in implementing this plan of action, and to **decide** on any further action needed; and **undertakes to review further**, at its Tenth Session, the status of implementation of Article VII and to **consider** and **decide on** any appropriate measures to be taken, if necessary, in order to ensure compliance by all States Parties with Article VII.
DECISION

ACTION PLAN FOR THE UNIVERSALITY OF THE CHEMICAL WEAPONS CONVENTION

The Executive Council,

Recalling that the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (hereinafter “the First Review Conference”) attached great importance to the attainment of universal adherence by States to the Chemical Weapons Convention (hereinafter “the Convention”) and acting upon the recommendation of the First Review Conference that the Executive Council (hereinafter “the 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 Convention in their national preparations for its implementation;

Recalling also resolutions of the United Nations General Assembly which stress the importance of achieving the universality of the Convention;

Recalling that the Conference of the States Parties has reviewed annually the progress, and has repeatedly adopted decisions entitled “Recommendation on ensuring the universality of the Chemical Weapons Convention” which, inter alia, have urged all States that have neither ratified nor acceded to the Convention to do so without delay;

Firmly believing that universality of the Convention is fundamental to the full achievement of its object and purpose;

Welcoming the substantial progress made towards universality of the Convention since its entry into force;

Noting however that among the States not Party are some whose non-ratification or non-accession is a cause for serious concern;

Recognising the positive effects that every new accession or ratification has for international peace and security and for global stability;

Recalling the decision of the Council that the OPCW’s contribution to global anti-terrorist efforts in the context of the Convention should focus, inter alia, on the promotion of universal adherence to the Convention;

Underlining the important political, economic, and security benefits of becoming a State Party to the Convention, recognising the positive effect of international cooperation (e.g. on Article XI) among the States Parties on universality, and 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;
Recalling that States that remain outside the Convention would not be able to take advantage of the benefits that the Convention offers the States Parties;

Encouraging States Parties to promote the achievement of the common objectives of the Convention in order to encourage other countries to join the Convention;

Conscious of the fact that States Parties can encourage States not Party to adhere to the Convention, and determined to take all appropriate steps to intensify bilateral and multilateral efforts towards universality of the Convention; and

Inspired by the objective of achieving universal adherence to the Convention ten years after its entry into force;

Hereby:

Urges the States Parties, in conjunction with the Council and the Technical Secretariat, to undertake further efforts to promote universality of the Convention, including initiatives to address specific regions, sub-regions, or States, and covering all States not Party, in particular those whose non-adherence is a cause of serious concern;

Strongly supports the designation of “points of contact” by States Parties, on a voluntary and informal basis, in all regions and sub-regions relevant for the effective promotion of universality, to assist regularly in the implementation of this Action Plan and for the purposes of effective coordination;

Recommends that the Director-General should designate an officer of the External Relations Division to act as the focal point within the Technical Secretariat for the implementation of this Action Plan and for the purposes of effective coordination;

Requests the Technical Secretariat, having consulted with States Parties, to prepare a comprehensive annual document on planned universality-related activities, and to provide information to the Council on proposed initiatives, including on potential synergies with States Parties willing and able to join in universality-related efforts. The document should contemplate and systematise activities in which the Technical Secretariat has traditionally engaged and, if deemed appropriate, formulate new universality-oriented projects. The document should set indicative targets for increased membership. In particular, the document could include:

(a) measures envisaged by the Technical Secretariat to assist States ready to join the Convention in their national preparations for implementing it;

(b) bilateral assistance visits;

(c) bilateral meetings with States not Party not represented in The Hague, as well as those represented in The Hague, and other activities of participation support and outreach;

(d) regional and sub-regional seminars and workshops;
(e) international cooperation activities which might include States in the process of ratifying or acceding to the Convention;

(f) measures to increase awareness of the Convention, and of the work of the OPCW, including publications in official languages, as well as measures to reach the appropriate audience in States not Party; and

(g) attendance at meetings of, or joint activities with, relevant international and regional organisations;

Requests the Technical Secretariat, in support of the document of planned activities, 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;

Requests the Technical Secretariat to implement the document of planned activities within the resources approved for the Organisation’s Programme and Budget, together with any voluntary contributions received for universality-related purposes, and in a cost-effective manner;

Strongly encourages States Parties to strengthen their efforts in the promotion of universality of the Convention, to actively pursue this objective, as appropriate, in their contacts with States not Party, and to seek the cooperation of relevant international and regional organisations;

Requests the Director-General to submit to the Conference at its regular sessions an annual report on the implementation of the Action Plan, and to keep the Council regularly informed, so that the Conference and the Council may review progress and monitor its implementation effectively;

Requests that this Action Plan be brought to the attention of the Conference at its Eighth regular session; and

Recommends that the Conference decide to review, at its Tenth Session, the implementation of this Action Plan, and take any decisions deemed necessary.
NOTE BY THE DIRECTOR-GENERAL

REPORT OF THE SCIENTIFIC ADVISORY BOARD ON
DEVELOPMENTS IN SCIENCE AND TECHNOLOGY

1. Introduction

1.1 The Scientific Advisory Board (SAB) has prepared a comprehensive report on relevant developments in science and technology that States Parties to the Chemical Weapons Convention (hereinafter “the Convention”) may wish to take into account in their review of its operation, as provided for in paragraph 22 of Article VIII. The Director-General hereby submits this report, which is annexed to this Note, for the attention of the States Parties, together with his own assessments and recommendations.

1.2 The SAB has recorded fourteen main findings in the report’s executive summary, and has included other detailed observations and explanations elsewhere in the report.

2. The main findings of the SAB

2.1 The first three observations relate to the schedules of chemicals—i.e. the chemicals identified by the Convention for the application of verification measures. The SAB has not considered it practical to propose amending these schedules, although such amendments might be necessary in the future for a number of reasons: the increase in knowledge about toxic compounds, including toxins; the growth in the number of these compounds; and the issues related to novel agents-toxic chemicals that had not been considered by the time negotiations on the Convention were concluded. Instead, the SAB has suggested that States Parties that have information about these chemicals be encouraged to submit it to the OPCW for assessment. Furthermore, the SAB has referred to the Convention’s definition of chemical weapons (CW) and observed that it provided protection against any unscheduled toxic compounds being used for CW purposes, whether old or new.

2.2 The Director-General, having considered the SAB’s recommendations and cognisant of discussions among Member States on related matters, concurs with its view that it would not be practical at this stage to propose amending the schedules. Although new chemicals relevant to the Convention have been encountered and will undoubtedly be encountered in the future, the situation in relation to the existence of unscheduled chemicals that could be used for CW purposes has not fundamentally changed since
the Convention was concluded. At the same time, proliferation concerns continue, and adding new chemicals to the schedules may not at this moment be the best approach. It is, however, important that the OPCW be aware of such new chemicals, and that the States Parties have confidence in the effectiveness of the Convention’s prohibitions in relation to CW. With these considerations in mind, the Director-General wishes to submit the following recommendations to the First Review Conference for consideration:

(a) the First Review Conference may wish to take note of developments in science and technology in relation to chemicals relevant to the Convention, and may wish to reaffirm that the definition of CW contained in paragraph 1 of Article II continues to ensure all unscheduled chemicals meeting its definitions of “toxic chemical” or “precursor” are covered by the prohibitions of Article I, if they were to be used for CW purposes. In this context, the First Review Conference may also wish to draw the attention of the States Parties to the provisions of paragraph 1 of Article VII, in relation to national implementation measures; and

(b) the First Review Conference may wish to invite States Parties that have information about relevant chemicals to submit that information to the OPCW for assessment, in confidence if necessary.

2.3 The SAB has studied developments in the production of relevant chemicals and has arrived at two conclusions: first, that it would be prudent to increase the number of inspections of other chemical production facilities (OCPFs) without decreasing the effectiveness of the verification regime for facilities involved with scheduled chemicals; and second, that that suitable training must be provided—for example, with the help of interested States Parties to OPCW inspectors so that they can keep abreast of new production routes and processes.

2.4 The Director-General is well aware of discussions among Member States on the allocation of resources to the conduct of inspections under Article VI, and he wishes to emphasise that developments in science and technology are not the only factors that need to be taken into account in future decisions on this matter. At the same time, it is important that the States Parties have full confidence in the industry verification regime. As technology and industrial operations evolve, and as the experience of the OPCW in the conduct of industry verification expands, improvements to the verification regime and to the allocation of resources will be possible, within the framework established by the Convention. The SAB’s observation that it would be prudent to increase the number of OCPF inspections without decreasing the effectiveness of the verification regime for facilities involved with scheduled chemicals, coincides both with the evolutionary approach that the Convention itself establishes for OCPFs, and the limited experience of the Technical Secretariat (hereinafter “the Secretariat”) with the conduct of OCPF inspections. The Director-General also agrees with the SAB that inspectors must be familiar with technological developments in the chemical industry.

2.5 With these considerations in mind, the Director-General proposes that the First Review Conference consider doing the following:
(a) that when it reviews the overall verification regime for the chemical industry and makes recommendations so as to improve its effectiveness, as required under paragraph 26 of Part IX of the Verification Annex, it takes into account the SAB conclusion that developments in the production of chemicals call for an increase in the number of OCPF inspections; and

(b) that it confirms the need for OPCW inspectors to keep abreast of scientific and technological developments in the production of chemicals, and that it encourages those States Parties that have the capacity to do so to assist the OPCW in its efforts to maintain a high level of competence among its inspectors.

2.6 The SAB has observed that the current procedures for on-site analysis meet the needs of the Convention without being intrusive in a way that would threaten commercial confidentiality, and has concluded that the OPCW Central Analytical Database (OCAD) should be extended to include certain unscheduled chemicals that are either related to the scheduled chemicals (e.g. well-known impurities, additives, and degradation products) or are a cause for concern, given their potential as chemical warfare agents. States Parties should be encouraged to submit analytical data on such chemicals for possible inclusion in the OCAD. The sensitive nature of such information and the potential impact that its release beyond the OPCW could have on non-proliferation may warrant its submission as confidential data.

2.7 The Director-General notes with satisfaction the SAB’s conclusion that the current procedures for on-site analysis conform to the requirements of the Convention. On-site analysis has regularly been used at chemical weapons destruction facilities (CWDFs) to verify the identity of declared chemical warfare agents and to confirm that such agents are absent from effluent streams. The frequency with which on-site analysis has been used in chemical industry inspections does not, however, currently reflect the role that the Convention assigns to this inspection tool. The Secretariat continues to study and to discuss with interested States Parties how best to use sampling and on-site analysis in chemical industry inspections.

2.8 The Director-General also firmly believes that the addition to the OCAD of data pertaining to certain unscheduled chemicals that are clearly related to scheduled chemicals would both enhance the usefulness of the database for verification purposes and further increase the reliability of the verification regime without increasing its intrusiveness. States Parties should be encouraged to submit such data for validation and inclusion in the OCAD, in accordance with existing procedures.

2.9 The above-mentioned proposal to invite States Parties to submit analytical data on chemicals whose potential as chemical warfare agents gives rise to concern warrants careful consideration. As mentioned in paragraph 2.1 above, the inclusion of such novel agents in the schedules could raise a number of difficulties, including the sensitive nature of such information and the potential impact that its release beyond the OPCW could have on non-proliferation. Such chemicals, however, do exist. If the tools in the CWC’s verification regime (as opposed to its scope) are limited to the chemicals listed in the schedules, verification is blinded in relation to such unscheduled potential chemical warfare agents. This might not matter much in the majority of routine inspections. But there might be situations in which the
Convention’s verification regime would be incapable of detecting relevant verification information if the OPCW had no knowledge of such chemicals, for example in the form of analytical data.

2.10 With these considerations in mind, the Director-General submits the following considerations to the First Review Conference:

(a) when addressing the general provisions of the Convention on verification, the First Review Conference may wish to take into account the SAB’s conclusion that existing procedures for on-site analysis meet the needs of the Convention;

(b) in the same context, the First Review Conference may wish to take note of the present status of the OCAD, and encourage States Parties and the Secretariat to continue working on expanding it, in part by including data on chemicals directly related to the scheduled chemicals it already contains; and

(c) in relation to potential new chemical warfare agents, the review conference may wish to encourage States Parties that have analytical information on such chemicals to consider submitting it to the OPCW for validation and subsequent submission to the Executive Council (hereinafter “the Council”) for its consideration and its recommendation on whether to include it in the OCAD.

2.11 In relation to toxins, the SAB has proposed that on-site analytical techniques other than gas chromatography coupled with mass spectrometry (GC-MS), such as immunoassays, be developed. It has also observed that, for off-site analysis, liquid chromatography coupled with mass spectrometry (LC-MS) offers a suitable alternative.

2.12 The proposal to develop immunoassays for on-site analysis of toxins would require, inter alia, an addition to the list of approved equipment. The Director-General is currently studying the SAB proposal and will consult with States Parties about the need to provide for an on-site analytical capability for toxin analysis. If necessary, he will submit a proposal for a new item of approved equipment to the Council, in accordance with the established procedures (C-7/DEC.20, dated 11 October 2002). The Director-General also understands that the using LC-MS primarily would affect the procedures and equipment used by designated laboratories. The Director-General does not believe that the First Review Conference needs to take specific action on this issue, other than taking note of it.

2.13 The SAB report contains two further recommendations related to sampling and analysis: that research be undertaken in order to improve on-site sample preparation, and that flexible procedures be developed for on-site sampling and analysis in inspections with short inspection periods (Schedule 3 and OCPF inspections).

2.14 The Director-General welcomes the proposal to further develop the OPCW’s sample preparation procedures for on-site analysis. While the current procedures have been validated and work well, they are logistically complex and time-consuming. Developing alternative methods could lead to improvements in verification and to more efficient inspections. The Secretariat will take up this matter with interested
States Parties, to assess whether such alternative methods can be identified and
developed. Their adoption would likely involve a requirement that the
Director-General propose an update to the list of approved equipment, in accordance
with the established procedures.

2.15 As for the SAB proposal to develop flexible procedures for on-site sampling and
analysis in inspections with short inspection periods, the Director-General agrees that
current procedures would be difficult to implement because it would take too long to
set up and calibrate equipment, and to prepare and analyse samples. Also, these time
constraints are not the only factor. The Secretariat has begun to study some of the
technical aspects of on-site analysis during such inspections, with a view to
developing practical solutions. At a later stage, it will be useful to discuss specific
proposals with interested States Parties and eventually to submit proposals to the
Council.

2.16 The Director-General is of the view that the First Review Conference need not take
specific action on these issues, but can instead request the Secretariat to develop
suitable proposals, consult with interested States Parties, and submit proposals to the
Council.

2.17 The evaluation of approaches to the analysis of biomedical samples in investigations
of the alleged use of CW is a matter that the SAB has been asked to consider and offer
advice on. The temporary working group has not yet been formed, in part because of
the OPCW’s recent financial difficulties. The Director-General wishes to inform the
States Parties that he will proceed with the formation of that group soon after the First
Review Conference has completed its work.

2.18 The Director-General has taken note of the SAB’s readiness to assist in the upcoming
discussions on how to optimise the verification of CW destruction operations.
The Director-General will invite comments from the SAB on the proposals the
Secretariat developed for the consideration of the Council at its Thirty-Second
Session, and then also make these available to the Council. Depending on which
decisions the First Review Conference takes on this matter, the Director-General may,
at the appropriate time, offer proposals on how best to involve the SAB in this future
work. The First Review Conference may wish to invite the Director-General to
involve the SAB in studies aimed at optimising the verification regime of the
Convention.

2.19 The SAB has included in its report some reflections on the requirements regarding
assistance and protection against CW. New requirements have been identified in the
areas of detection, identification, and decontamination, in part because of the danger
that terrorists might use toxic materials. The SAB has specifically suggested that the
OPCW arrange advance training for States Parties, and that it further enhance its
ability to investigate allegations of CW use. The review conference may wish to take
these views into account when reviewing the operation of the Convention in relation
to assistance and protection against CW.

2.20 In relation to international cooperation and related matters, the SAB has concluded
that the OPCW needs to clearly establish what it requires in the field of education,
outreach, and international cooperation. At the same time, the SAB has observed that
current OPCW international cooperation programmes appear to be making useful contributions to the development of States Parties’ national capacities in the peaceful uses of chemistry. OPCW international cooperation programmes and its educational and outreach activities would benefit from increased cooperation with other international, regional, and national organisations.

2.21 The Director-General is submitting these views to the First Review Conference in the hope that this will facilitate its review of how the Convention is operating in relation to economic and technological development.

2.22 The SAB has observed that the technical capabilities of the Secretariat must be maintained by ensuring that staff receive the correct training and have fit-for-purpose equipment.

2.23 The Director-General is of the view that training has received insufficient attention and funding in the past. It is important to realise that the chemical industry is very dynamic, and that technologies and the equipment being used are subject to change. There is a risk that, the longer the time that inspectors with a chemical and/or industry background work with the OPCW, the more unaware they will become about these developments. In addition, there is a need for skill development and maintenance.

2.24 The First Review Conference may wish to consider and reaffirm the continuing need for the adequate training of staff, so that they can continue to carry out the tasks of the Secretariat effectively and competently. This need applies especially to the training of inspectors as they implement the verification provisions of the Convention. In relation to equipment, the Director-General will use the adopted procedures as and when required. It would appear that there is no need for the First Review Conference to take action on these matters.

3. Other matters related to the SAB report

3.1 In addition to the main findings mentioned above, the SAB report contains a good number of detailed observations and recommendations that the States Parties and the Secretariat may find useful for their implementation work. These are, however, of such a nature that they do not lend themselves to consideration by the First Review Conference. The Director-General wishes to suggest that States Parties use an approach similar to that used in past reviews of SAB reports, whereby the Council would review the suggestions contained in the SAB report and take appropriate action on them. This Council review could take the form of expert consultations, for example. If such discussions are to be scheduled, the Director-General will arrange for a number SAB members to be present, so as to facilitate the consultations and the free exchange of views between the SAB and the experts from the States Parties.

3.2 For the benefit of delegations attending the First Review Conference, the Director-General intends to make arrangements for some members of the SAB to attend the conference for a limited time (during the general debate).
Annex:

Report of the Scientific Advisory Board on Developments in Science and Technology for the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference)
REPORT OF THE SCIENTIFIC ADVISORY BOARD ON DEVELOPMENTS IN
SCIENCE AND TECHNOLOGY
FOR THE
FIRST SPECIAL SESSION OF THE CONFERENCE OF THE STATES PARTIES
TO REVIEW THE OPERATION OF THE CHEMICAL WEAPONS CONVENTION
(FIRST REVIEW CONFERENCE)

1. Introduction

1.1 Paragraph 22 of Article VIII of the Convention states that “The Conference shall not later than one year after the expiry of the fifth and the tenth year after the entry into force of this Convention, and at such other times within that time period as may be decided upon, convene in special sessions to undertake reviews of the operation of this Convention. Such reviews shall take into account any relevant scientific and technological developments….”. The first such session has been scheduled for 28 April to 9 May 2003.

1.2 The OPCW’s SAB was established by the Director-General in accordance with Article VIII, subparagraph 21(h), and paragraph 45, of the Convention, so that he could offer to the Conference of the States Parties (hereinafter “the Conference”), the Council, and the States Parties specialised advice in those areas of science and technology that are relevant to the Convention. In keeping with this mandate, and as its contribution to the preparations for the review of the operation of the Convention by the First Review Conference, the SAB has prepared this report, which analyses relevant developments in science and technology over the past decade, and presents to the States Parties 14 recommendations and observations that the SAB feels are important both to the review of the operation of the Convention and to the future implementation of its provisions.

1.3 This report contains sections on the following topics:

(a) the schedules of chemicals;
(b) the production of chemical compounds;
(c) sampling and chemical analysis on-site;
(d) chemical analysis off-site;
(e) the destruction of chemical weapons and its verification;
(f) assistance and protection;
(g) education, outreach, and international cooperation; and
(h) the technical capabilities of the Secretariat.
2. Executive Summary

2.1 The findings of the SAB are elaborated below.

2.2 It is not practical at this stage to amend the Schedules of Chemicals. However, the existence of these schedules is in itself no guarantee against violations of the Convention. Furthermore, given the increasing number of toxic compounds, including toxins; the advances in what is known about these; and matters related to toxic chemicals that had not been considered when the negotiations on the Convention were concluded (“novel agents”), there may be a need to adjust the schedules in the future.

2.3 States Parties should be encouraged to submit data on potential novel agents for further assessment. The SAB stands ready to contribute to any such assessments.

2.4 The definition of “chemical weapons” in Article II continues to provide cover against unscheduled and new toxic compounds. However, it is not only toxicity, but the potential for weaponisation, that determines the threat. Unscheduled toxic chemicals that meet the above criteria must therefore not be ignored when the OCAD is being developed further.

2.5 The chemical industry has developed a range of highly flexible manufacturing facilities designed to respond rapidly to changing market demands. Many of these facilities also have extremely effective safety and containment features. Thus, it is to be expected that a small percentage of these industrial facilities will have the potential to be used directly, or to be easily converted, for the production of scheduled and unscheduled chemical warfare agents. Increasing the number of OCPF inspections would thus be prudent, but this should be done without decreasing the effectiveness of the verification regime for facilities involved with scheduled chemicals. In this context, there is a need to improve the selection mechanism for future OCPF inspections. It should be noted that the strong support of the chemical industry for the Convention remains unchanged.

2.6 To make inspectors aware of new production routes and processes, suitable training must be provided, for example, with the help of interested States Parties.

2.7 On-site-analysis procedures based on GC-MS, combined with the use of the AMDIS software and of the OCAD as the target spectral library, now comprise a technique that meets the needs of the Convention without being intrusive in a way that would threaten commercial confidentiality. Extending the database is necessary to allow for the possible inclusion of certain unscheduled chemicals that are either related to the scheduled chemicals (e.g. well-known impurities, additives, and degradation products), or that are of concern because of their potential as chemical warfare agents. States Parties should be encouraged to submit analytical data on such chemicals for validation and possible inclusion in the OCAD. Such data may need to be treated as OPCW-confidential information, to minimise proliferation risks.

2.8 The limitations of GC-MS for the analysis of toxins means that other on-site analytical techniques, such as immunoassays, need to be developed. For off-site analysis, LC-MS offers a suitable alternative.
2.9 To improve the overall verification capabilities of the OPCW and reduce costs, some research is needed to resolve those problems that have become apparent as a result of the experience gained from inspections. For example, there is a need to improve sample preparation on-site by improving its efficiency, reducing its cost, and simplifying the logistics involved. Such research could be conducted by the OPCW Laboratory, by designated laboratories, or by other adequately certified State Party laboratories.

2.10 Flexible procedures need to be developed and agreed, in order to allow for the on-site analysis of samples taken during Schedule 3 and OCPF inspections, where the inspection time is limited to 24 hours.

2.11 A temporary working group should be established to evaluate approaches to the analysis of biomedical samples in investigations of alleged use.

2.12 The optimisation of the verification of CW destruction operations, which currently is far too labour-intensive, needs to be accomplished without further delay. Technologies and procedures, such as remote monitoring and random checks instead of continuous on-site verification, offer the possibility of substantially reducing the size of the inspection teams without incurring a loss of confidence in the overall adequacy of verification measures. The SAB is ready to assist in resolving this issue.

2.13 Cooperation and exchanges among States Parties in assistance and protection have been accorded greater importance in the light of the increased risk that terrorists will use toxic chemicals. Additional efforts are particularly necessary in detection, identification, and decontamination. It is worthwhile assessing what role the OPCW could play in such situations. Such a role might include arranging advance training to States Parties, and the further enhancement of the OPCW’s capabilities for investigations of alleged use of CW.

2.14 The OPCW needs to generate greater awareness among scientific and technical communities worldwide about the Convention’s objectives and benefits, and about the key issues the OPCW faces. Current OPCW international cooperation programmes appear to be making useful contributions to the development of the national capacities of the States Parties in the peaceful uses of chemistry, but raising awareness about the OPCW and the CWC requires that these programmes be complemented by further efforts to create educational and outreach activities aimed at scientific and technical communities worldwide. Furthermore, these programmes and activities would benefit from increased cooperation with other international, regional, and national organisations.

2.15 The technical capabilities of the Secretariat must be maintained by ensuring that staff receive the correct training and have fit-for-purpose equipment. On this latter point, the SAB welcomes recent decisions that establish a mechanism to update the technical specifications for approved OPCW inspection equipment, and that delegate responsibility to the Director-General to pursue the approval of new inspection equipment whenever the need arises. The SAB is of the view that flexibility is needed in adjusting the approved equipment in order to keep pace both with progress in
science and technology and with changing supply situations, in order to avoid inefficiency and wastefulness in the conduct of inspections.

3. **The Schedules of Chemicals**

3.1 The relationship between the definition of CW and the schedules has been the object of extensive negotiations. The Schedules of Chemicals list those toxic chemicals and their precursors that were seen to pose a particular risk to the Convention when it was opened for signature, and they were therefore identified for the application of verification measures.

3.2 Some of the chemicals listed in Schedule 1 were developed during the 1940s and 1950s, while certain binary components were developed during the 1960s and 1970s. Other Schedule 1 chemicals are even older than that. In any case, all the chemicals listed in Schedule 1 have been in the public domain for more than 20 years. Consequently, the Schedules in their current shape do not contain any new CW agents that may have conceivably emerged during the past decades. They also take no account of any other highly toxic chemicals that could possibly be considered as potential candidates for CW purposes\(^1\), and that have been discovered over the past two decades. The approach of including chemicals (and their homologues) in Schedule 1 only when their past weaponisation and/or stockpiling is a known fact, or when highly toxic compounds have no legitimate uses, carries the inherent risk that the OPCW and its State Parties could be caught entirely by surprise, should any unscheduled chemical(s) be used as CW.

3.3 It is not for the SAB to speculate about the likelihood of such an occurrence, nor can the SAB assess the vulnerability of the States Parties. The SAB is convinced, however, that the number and types of unscheduled chemicals that could cause considerable harm, if they were misused for CW purposes, have expanded significantly. This is the result of recent advances in science and technology. The inspection regime of the OPCW, perhaps with the exception of challenge inspection, would at this moment not be capable of detecting such a violation.

3.4 On the other hand, while Article I prohibits any type of CW, as defined in paragraph 1 of Article II, not all toxic chemicals or precursors are, or in fact should be, subjected to routine verification by the Convention.

3.5 The Convention contains a mechanism to amend the Schedules. Chemicals can be added to, or deleted from, the Schedules, or they can be moved from one Schedule to another, should the States Parties consider this beneficial for verification purposes. Threat perceptions would be important aspects of such decisions. The definition of CW contained in Article II, as well as the provisions of the Schedules of Chemicals, make it clear that the Schedules do not embrace the entire scope of the Convention. The Convention's prohibitions related to "chemical weapons" apply to all toxic chemicals and their precursors, except when intended for purposes not prohibited by

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\(^1\) The last addition of this kind was PFIB, a toxic chemical known for more than two decades.
the Convention, as long as the types and quantities are consistent with such purposes.² Without that broad scope, chemical warfare agents of novel identity (including those which are as yet undisclosed or undiscovered) would remain outside the reach of the Convention.

3.6 The SAB is fully aware of the wisdom of the drafters of the Convention – that international verification procedures complement the obligation of States Parties to take the necessary measures to implement the Convention, including legislation in relation to toxic and precursor chemicals. The distinction between scheduled chemicals (i.e. chemicals that need to be declared and that become subject to verification measures) and unscheduled chemicals is a regulatory matter. Wherever this distinguishing line is drawn, there will always be unscheduled chemicals that, if misused, would pose a risk to the Convention. In relation to the verification regime, a certain degree of risk is unavoidable in order to keep verification acceptable, feasible, and affordable. Scientific advances will, however, have an impact on that risk, and therefore they need to be reviewed. At the same time, scientific advances can help with enhancing the OPCW’s verification capabilities.

Previous observations of the SAB

3.7 The SAB recalled its recommendations and observations in relation to the Schedule 1 chemical ricin³ and resubmits to the States Parties the suggestion to apply in their implementation work an understanding that ricin should remain accountable as long as the A-S-S-B bond is not broken, irrespective of the isoform(s) present. The understanding could, for example, be incorporated into the OPCW Declaration Handbook.

3.8 The SAB furthermore recalled its observations with respect to salts of scheduled chemicals. These salts are chemically distinct from their parent compounds, and have different physical and chemical properties, as well as their own CAS registry numbers. However, the salt can easily be re-transformed into the base (with the exception of quaternary salts). In industry, a base is often converted to a salt if it is more convenient to handle a compound in that form. Normally, from the standpoint of the end user, there is no essential difference between the free base and the corresponding salt.⁴ The SAB noted that States Parties, on regulatory grounds, had disagreed with its recommendation to treat all salts of scheduled chemicals in the same way as their corresponding free bases. Consequently, salts of scheduled chemicals are to be treated differently from their corresponding free bases in relation to, for example, the Convention’s provisions on trade with scheduled chemicals. It should be pointed out, however, that there are cases when scheduled chemicals are an intermediate in the production of such salts. Even though these bases are not isolated or captured from the equipment, they could be removed from the production

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² See subparagraph 1(a) of Article II; some States Parties and many commentators on the Convention refer to this as the “general purpose criterion”.
³ See subparagraph 2.2 of SAB-II/1, dated 23 April 1999.
⁴ See subparagraph 2.10 of SAB-II/1.
equipment if that was so decided. Declarations may thus still be due, depending on the amounts produced.5

3.9 One issue that the SAB noted in the context of the previous recommendations mentioned above is the role of the CAS registry numbers indicated in the Schedules of Chemicals. There appears to be a question whether these CAS registry numbers have a regulatory function. The SAB would like to caution against such a view, as there is not necessarily a one-to-one relationship between CAS registry numbers and chemical structures. While CAS registry numbers are a useful tool to clearly identify a chemical compound, this should not be confused with the assumption that CAS registry numbers should have any regulatory power. At the same time, it could be helpful if the OPCW Declaration Handbook would provide references to the different CAS numbers related to an entry in the Schedules (e.g. for mixtures containing a scheduled chemical).

**Developments in chemical synthesis and screening of chemical compounds**

3.10 Except as set out in paragraph 3.11 below, the SAB is not aware of any unscheduled toxic chemicals or precursors that were not already known when the Convention was concluded in 1992, and that have actually been weaponised or stockpiled as CW. The SAB, as an international advisory body, has no access to intelligence information related to the development of novel CW agents, nor to classified information other than confidential information submitted to the OPCW by the States Parties. It is therefore not in a position to speculate about the existence of new agents. It is possible, however, that there are such novel agents, including some that would meet the criteria for Schedule 1 chemicals. The SAB stands ready to assist in the assessment of any information that States Parties might submit on such chemical compounds, should they decide to do so.

3.11 An example of toxic chemicals that had not been considered when the Schedules were elaborated is the family of dialkylaminoalkyl (dialkylamido)fluorophosphates.6 The information available on these compounds in the public domain indicates that their toxicity is comparable to that of other nerve agents, and that they have other (physico-chemical) properties that make them (as well as their precursors, i.e. dialkylamidophosphoryldifluorides) relevant for the Convention. In relation to the guidelines for the Schedules, these compounds meet some of the criteria for Schedule 1 chemicals, namely the criteria contained in subparagraphs 1(b)(ii) and 1(c) of the guidelines for Schedule 1. If a decision were to be taken to include these chemicals and similar compounds that have been alluded to in the literature into the Schedules, Schedule 1, from a scientific perspective, would be the appropriate category to place them.

5 Examples of such “captive use” of a scheduled chemical in the production of a corresponding salt that is not listed in the Schedules can be found in Schedule 1 (e.g. the production of HN-2 hydrochloride), as well as in Schedule 2 (e.g. the captive use of BZ in the production of clidinium bromide).

3.12 The SAB reviewed the report to the OPCW and its States Parties prepared by the International Union of Pure and Applied Chemistry (IUPAC) entitled the "Impact of Scientific Developments on the Chemical Weapons Convention". Based on this information and after having conducted its own review of relevant scientific developments, the following observations were made by the SAB:

(a) over recent years, many new procedures have been developed to speed up the synthesis of new chemicals required, in particular, for biological evaluation by the pharmaceutical industry. Some relevant examples of this are combinatorial chemical techniques, together with other methods for rapid synthesis and screening;

(b) advances in molecular biology (such as genomics and proteomics) are creating new opportunities both to design new biologically active chemicals and to develop processes to synthesise such chemicals using enzymes or cell-based systems. The rapid pace of developments in the biomolecular sciences, coupled with advances in chemical synthesis, increase the possibility that new toxic chemicals will be found that may have properties that would make them suitable candidates for CW. However, these advances do not significantly change the situation, in view of the large numbers of already known toxic compounds, many of which are not listed in the Schedules;

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8 "Combinatorial chemistry" refers to the use of combinatorial methods in chemistry. Combinatorial experiments involve three common features: combinatorial libraries of related compounds, the structures of which are built from a common set of chemical building blocks and a common structural core or synthetic linkage; attainable and useful diversity of the molecules contained in the library (ranging from thousands of compounds to hundreds of thousands per library); and a screening process using methods such as chromatographic affinity selection for binding partners from a common pool of all the members of a library or enzyme inhibition assays on each individual compound in a spatially addressable library (J. Ellman, B. Stoddard, and J. Wells "Combinatorial Thinking in Chemistry and Biology", Proceedings of the National Academic of Sciences, USA, Vol. 94, pp. 2779-2782, (April 1997). See also M. Wheelis' “Biotechnology and Biochemical Weapons”, The Non-proliferation Review, Spring 2002.

9 “Genomics”, a term coined by Thomas Roderick in 1986, refers to the new scientific discipline of mapping, sequencing, and analysing genomes. Genomic sequences allow possible targets for biologically active compounds to be identified, such as the ion channels of membrane receptor proteins. Many new such targets can be identified in genomic sequences, the corresponding genes can be cloned, and the corresponding protein synthesised in quantities sufficient for study and screening (combinatorial libraries). See also M. Wheelis’ article, quoted above.

10 “Proteomics” is the study of the full complement of proteins in a cell. It involves the study of changes in the protein expression in a cell or system, relative to some control. An alternative description refers to the use of advanced technology to examine the multiple protein products of the genome. The word derives from ‘PROTein complement to a genOME’. Unlike the genome, the proteome is intrinsically dynamic, and the cellular complement of proteins changes throughout the cell life cycle. Current research included, inter alia, the identification of cellular proteins, the development of protein micro-arrays to search for ligand-target combinations, and predicting the three-dimensional structures from genomic sequences. These techniques may complement and eventually supplant traditional wet chemical methods of ligand identification in the search for new biologically active compounds. See also M. Wheelis’s article, mentioned above.
in particular, while the time required for the early stages of agent development may have shrunk considerably as a result of these developments, the subsequent stages in the development of such a new toxic chemical into an effective CW (in the traditional meaning of the term, but see also paragraph 3.13 below) are much less affected by these developments in science and technology; and

(d) these developments underline, on the other hand, the importance of the assertion that the Schedules do not constitute a definition of CW. They also suggest the need to look beyond the Schedules in the future development of the OCAD, by proposing the addition of analytical data of new toxic compounds that are directly relevant to the Convention (see also paragraph 5.11 below).

3.13 Notwithstanding these scientific developments and the SAB’s conclusion that they do not significantly change the situation with respect to CW, it must also be noted that experience has shown that there is a possibility that less sophisticated CW may be opted for, with little regard to agent stability and shelf life (i.e. weapons filled for immediate use). In that context, even toxic chemicals (as well as precursor chemicals) that would not normally be considered to pose a risk to the Convention may be relevant. The same would apply to terrorists using toxic materials as weapons.

3.14 The SAB was also aware of concerns about the development of new riot control agents (RCAs), and other so-called "non-lethal" weapons utilising certain toxic chemicals (such as incapacitants, calmatives, vomiting agents, and the like). There are specific provisions in the Convention that deal with RCAs and the legitimate use of toxic chemicals for law enforcement purposes. The SAB noted that the science related to such agents is rapidly evolving, and that results of current programmes to develop such "non-lethal" agents should be monitored and assessed in terms of their relevance to the Convention. However, based on past experience and the fact that many of these compounds act on the central nervous system, it appears unlikely from a scientific point of view that compounds with a sufficient safety ratio would be found.

3.15 The SAB stressed the importance that all new toxic chemicals, no matter what their origin or method of synthesis, are covered by the Convention's definition of CW, unless they were intended for purposes not prohibited by it, and only as long as their types and quantities would be consistent with these purposes. The SAB underlined the importance of this aspect of the definition of CW as a safeguard for the validity of the Convention.

3.16 In summary, the SAB, at this stage, did not consider it practical to make recommendations aimed at amending the Schedules of Chemicals. The SAB observed, however, that the composition of the Schedules should be kept under review because:

(a) scheduled chemicals are not the only means of breaching the Convention's regime;

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11 See Section B of the Annex on Chemicals.
there is a distinct risk associated with certain types of unscheduled novel compounds, and the number of such chemicals posing a potential threat continues to increase; and

(c) the route of unscheduled chemicals could be appealing to anyone who would want to minimise the chances of being detected.

3.17 States Parties may wish to consider submitting to the OPCW information on those unscheduled chemicals that they consider pose a direct threat to the Convention. Without such information present in its database, the OPCW could be caught by surprise.

4. The production of chemical compounds

4.1 Significant developments have taken place in the industrial production of chemicals. These developments are relevant for the application of the verification regime under Article VI of the Convention. Their impact is twofold. First, the significance for the object and purpose of the Convention of certain facilities to be declared under the different sub-regimes under Article VI (i.e. Parts VI through IX of the Verification Annex) may have changed as a result of these developments. Second, new technologies and equipment used for the industrial-scale production of chemicals are likely to be encountered more often by OPCW inspectors, who must be able to recognise them and draw accurate conclusions about the nature of the activities at an inspected plant site.

4.2 Changes in the chemical industry are related not only to production technology and processes, but equally to organisational and structural developments. Vertical integration of chemical manufacturing, which was typical until the 1980s, has changed. Environmental and safety regulations, liability concerns, as well as market pressures, made industry change production in a number of ways: production was taken up in countries previously not known for their chemical production; the industry focussed on core business and outsourced synthesis to contractors, while at the same time, production volumes of bulk chemicals became global; multiple ownership became a typical feature; principles of just-in-time production were introduced; and transfers of chemical materials increased considerably. Furthermore, the versatility of chemical manufacturing increased and chemical plants, due to environmental and safety regulations, tend to be more easily convertible to the production of a variety of chemicals than they used to be in the past. At the same time, they tend to be more highly regulated. The chemical industry’s commitment to the Convention has remained as strong as ever, but the industrial environment in which the Convention is being implemented has become much more complex.

Previous observations by the SAB

4.3 In relation to the production by synthesis of discrete organic chemicals, the SAB concluded that, from a scientific standpoint, it is no longer possible to make a clear distinction between "chemical" and "biological and biologically mediated" processes.
The emphasis should be on the product rather than on the process. That view was not shared by a meeting of governmental experts, but there was agreement that the issue should be kept under review. The SAB reassessed this issue and observed that it is indeed increasingly difficult to say whether in certain cases a process is chemical or biological, or mixed. The SAB recognises that the concerns of some States Parties in relation to biological processes and the production of discrete organic chemicals relate to facilities in the food and drink industry that use fermentation. The declaration and inspection provisions of the Convention should not cover these facilities. From a product point of view, the food and drink industry is not relevant to the Convention, and their products should not be considered as DOCs.

**New developments in the production of relevant chemicals**

4.4 The SAB reviewed the IUPAC Report on the "Impact of Scientific Developments on the Chemical Weapons Convention". Based on this information, and on the results of its own review, the SAB submitted the observations below:

(a) many parts of the chemical industry around the world operate with multipurpose batch facilities that can readily be switched from one product to another. The versatility of chemical manufacturing is being enhanced by technological developments (process automation, microwave chemistry, catalysis, supported chemistry, biotechnology, and continuously operated microreactors that can be run in parallel to increase output). This increased versatility also changes the appearance of chemical production plants. Some of these plants have safety and containment features not dissimilar to those seen in the past at CW production facilities. As a result, although features that distinguish chemical plants that manufacture highly toxic chemicals from other chemical plants continue to exist (such as remote operations, or protection of personnel), there is a small, yet increasing number of small-to-medium scale chemical plants with high technological relevance to the objectives of the Convention in the category of "other chemical production facilities" (OCPF plant sites). It should also be noted that the two matching components of a binary weapon (whether scheduled or not) could conceivably be produced in many of the existing OCPF plant sites, given their lack, or moderate level, of toxicity. With the increasing globalisation of the industry, there is a need to review the verification regime for OCPF plant sites, to ensure that this regime is effective in monitoring the relevant parts of the chemical industry. There would appear to be a need for conducting a larger number of inspections at OCPF facilities than in previous years, because there are some OCPF facilities that are highly relevant to the Convention, and because the OPCW has as yet little knowledge about the OCPF plant sites from on-site inspections. This is not, however, to suggest that the risk assessment in relation to the chemicals regulated by the Convention ought to be changed;

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12 See subparagraph 2.3 of SAB-II/1.
13 See footnote 7 for this reference.
(b) the experience gathered from inspections of Schedule 1 facilities, Schedule 2 plant sites, Schedule 3 plant sites, and OCPF plant sites must be evaluated carefully to reduce costs and increase effectiveness. While declaration and inspection conduct is governed by the actual activities of these facilities (in terms of which chemicals they produce and in what quantities), the capability of the facilities to produce Convention-relevant chemicals may be an even bigger concern. Some increase of the overall number of OCPF inspections would thus be prudent, if this could be done without decreasing the effectiveness in the inspection regime of facilities involved with the production of scheduled chemicals;

(c) there also would appear to be a need to develop guidelines for the conduct of OCPF inspections. If CW capability is the driving factor for OCPF inspections, inspection conduct would have to emphasize qualitative features and assessments, which would be accomplished in a walk-through fashion, rather than by the application of quantitative, audit-like inspection methodologies; and

(d) it may be helpful to devise criteria and risk assessment methodology for prioritising and better targeting OCPF inspections to those facilities that pose a particularly high risk to the Convention, rather than to go for an all-out, non-targeted increase in the frequency of inspections at OCPF plant sites. The selection methodology for OCPF plant sites should then be applied in such a way that these criteria and methodologies can be effectively used.

4.5 Furthermore, the SAB concluded that these developments in the production of chemicals at industrial scale over the past decade or so, involving both processes (e.g. biological processes, biocatalysis, and supported reagents) and equipment (e.g. multi-purpose production equipment, micro-reactors, and microwave reactors) have resulted in some of these plants looking considerably different from traditional chemical plants. While the versatility of such plants is increasing, the nature of some components of the production equipment is changing and certain "traditional signatures" that in the past were associated with the handling or manufacturing of hazardous and/or volatile compounds are disappearing. It is important that OPCW inspectors are capable of recognising and assessing such novel industrial operations and equipment.

5. Sampling and chemical analysis on-site

5.1 Sampling and analysis are inspection activities that OPCW inspection teams may employ, in accordance with the applicable provisions of the Convention, in both routine and challenge inspections, or in investigations of alleged use. Samples are, as a rule, taken by the representative of the inspected State Party or the inspected facility in the presence of OPCW inspectors. Wherever possible, the analysis of the samples is done on site. The inspection teams have the right to use their approved equipment for such on-site analysis. Alternatively, they may request the assistance of the inspected State Party to perform the analysis in the presence of the inspection team.
Current OPCW capabilities for sampling and on-site analysis

5.2 Sampling and on-site analysis is required for routine inspections, challenge inspections, and investigations of alleged use of CW. For routine inspections, effective on-site analysis has the advantage over off-site analysis in that, while meeting the need of the OPCW inspection teams, it also minimises the risk of any loss of confidential information.

5.3 The main equipment currently available to the OPCW for on-site analysis is GC-MS\(^{14}\), with associated databases and software, as well as sample preparation methods. The mode of operations is that, following appropriate sample preparation, the chromatography and mass spectroscopy data of the sample run through the equipment is compared with data contained in an instrument database. Inspection teams on site can load either commercial spectral databases, or extract the OCAD as the instrument’s target database. If the instrument database was extracted on-site from the OCAD, it would only contain validated data pertaining to (at the moment) some 600 scheduled chemicals, including toxic chemicals, precursors, and degradation products. This allows for a convenient check for the presence (or absence) of the most relevant scheduled chemicals without otherwise revealing the composition of the sample. If, on the other hand, the instrument database was extracted from a commercial database, the likelihood of false-positive results would decrease, but the actual sample composition would be revealed to a considerable degree.

5.4 The capability of the equipment is sufficient to allow detection of scheduled chemicals at levels likely to be present in production and storage facilities (i.e. chemicals in bulk, materials contained in mixtures at concentration levels regulated by the decision of the Conference on low concentration guidelines, and scheduled chemicals and their degradation products in environmental samples collected in close proximity to the production or storage equipment), and therefore is most suitable for use in routine inspections. The software was specifically designed for this purpose, and also allows information to be purged from the hard disk of the instrument's computer after the instrument has been used by the inspectors. To all intents and purposes, as operated and designed, this is a very non-intrusive method of analysis, which is very well suited to the purpose of avoiding compromising confidential information contained in the sample.

5.5 The SAB concluded that the OPCW has established an adequate, state-of-the-art sampling and on-site analysis capability. There are, however, factors that limit the utility of this capability. These factors are primarily in the area of logistics, and are thus affecting the cost of inspections as well as causing certain practical problems (e.g. long set-up times on site, and considerable time and effort required for sample preparation).

\(^{14}\) The SAB suggested that the use of LC-MS also be considered in the future, particularly in relation to the detection of larger molecules. Other options that the SAB believed should be explored related to chemical sensors and biochemical analysis.
Past recommendations by the SAB in relation to on-site analysis

5.6 The SAB observed that in routine inspections, simple methods such as infrared spectroscopy would suffice for identifying declared chemicals in bulk. The SAB was told, however, that infrared spectroscopy is no longer in use by the OPCW for on-site analysis. Alternatively, the SAB pointed out that analytical equipment belonging to the inspected State Party could be used when this has been regulated in a facility agreement, and when conditions are fulfilled to ensure the independence of the analytical results.15

5.7 The SAB also observed that simple screening techniques will not be sufficient if, during a routine inspection, sampling and analysis become necessary to demonstrate the absence of scheduled chemicals (in particular the absence of Schedule 1 chemicals in industry inspections). At the same time, the removal from the inspection site of a large number of samples for analysis at designated laboratories would be impractical and expensive. The best approach, in cases when immediate on-site analysis is not feasible, would be to collect for subsequent analysis an appropriate number of samples, and leave them on site under secured conditions, and under conditions aimed at minimising sample degradation.16 An analytical team could then be sent to the site, with the agreement of the inspected State Party, and the analysis could be undertaken at a later stage. The SAB continues to believe that concepts such as this, or the use of analytical equipment belonging to the inspected State Party under conditions that demonstrate the independence and reliability of the analytical results, could help resolve problems associated with logistics, and reduce the cost of sampling and analysis in routine inspections.

5.8 In relation to the OCAD, the SAB continues to believe that data relating to characteristic degradation products (whether scheduled or unscheduled), chemicals found in old and abandoned CW, salts of scheduled chemicals, non-scheduled precursors and by-products of the synthesis of scheduled chemicals, and standard riot control agents should be incorporated, and that priorities must be set for the inclusion of additional spectra.17 The SAB noted the inclusion of the retention indices and mass spectra of additional compounds, and concluded that the database is rapidly becoming a reliable reference point for on-site analysis. This is important when on-site instruments use the OCAD database as the instrument's target database and the AMDIS software is being used, because the scope of the on-site database extracted from the OCAD sets the limits according to which scheduled chemicals can and cannot be identified.

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15 See subparagraph 2.10 of SAB-III/1, dated 27 April 2000.
16 See subparagraph 2.11 of SAB-III/1.
17 See subparagraph 2.14 of SAB-III/1, dated 27 April 2000 and subparagraph 2.5 of SAB-IV/1, dated 6 February 2001.
New developments

5.9 The SAB then reviewed developments in chemical analysis relevant to on-site sampling and analysis, taking into account the issues presented in the IUPAC Report to the OPCW entitled "Impact of Scientific Developments on the Chemical Weapons Convention".\(^{18}\)

5.10 In future, the analytical capability should be increased by continuing to expand the validated OCAD by:

(a) including data on chemicals likely to be confused with scheduled chemicals, as well as well-known impurities, additives, and degradation products of scheduled chemicals; and

(b) adding data on certain non-scheduled toxic chemicals which have the potential to be used in chemical warfare (see also paragraph 3.11 above).

5.11 The latter could be done in a manner that would keep the data confidential within the domain of the OPCW (i.e. the data would be available to all States Parties, but would otherwise be kept confidential), and would allow the OPCW to have and to use data on potential threat agents without alerting terrorist organisations or States not party to the existence of these chemicals. In other words, this approach would be an important step in assuring the Convention’s verification regime with minimum inconvenience to the chemical industry. The SAB recognised that new compounds are not automatically incorporated into the OCAD, and that care must be taken that the adopted procedures of OPCW for the inclusion of new data into the OCAD are followed.\(^{19}\)

5.12 Thus, what is being developed is an analytical system that could fully meet the requirement of not being too intrusive, while meeting most requirements for inspections at Schedule 2 and Schedule 3 facilities, as well as at OCPFs. In future, as further development occurs, GC-MS will become more effective, easier to transport, and easier to use, so it will be necessary for the OPCW to keep up to date with commercially available equipment.

5.13 The above discussion relates generally to small molecules and not to toxins, including ricin and saxitoxin, for which generic GC-MS procedures that are currently being used are inappropriate. It is suggested that for toxins, consideration should be given to obtaining and validating a range of specific immunoassays. If these were available, the OPCW would have a battery of techniques that would be suitable for the purpose of on-site inspections and that would also be of considerable value for challenge inspections and investigations of alleged use. The SAB observed that, at the moment, the OPCW has no on-site capability for analysing toxins.

\(^{18}\) See footnote 7 for this reference.

\(^{19}\) See EC-IV/DEC.2, dated 5 September 1997, which was adopted by the Conference at its Second Session (subparagraph 11.2(c) of C-II/8, dated 5 December 1997).
5.14 The rate-determining step for on-site analysis is the time and effort necessary for sample preparation. For Schedule 2 facilities, the 96 hours allocated for inspection conduct provide ample time for analysis, if this is required. For Schedule 3 and OCPF inspections, where only 24 hours are available for the inspection, there may be problems, depending on the number of samples to be analysed. Thus, alternative procedures may need to be agreed, such as those previously suggested by the SAB, i.e. storage of samples and subsequent analysis on site by a separate analytical team.

5.15 Furthermore, the OPCW should devote more research efforts to addressing the problems related to sample preparation. This would not only reduce the time needed for analysis on site, but would also reduce the amount of auxiliary equipment to be transported. The SAB noted that it is important for the OPCW to understand that it needs to invest adequate resources into research that is aimed at developing analytical and sampling techniques. Such research could be done at the OPCW laboratory or by designated or other competent States Parties’ laboratories. The SAB stands ready to assist in such endeavours.

6. Off-site chemical analysis

6.1 To perform off-site analysis of samples acquired by OPCW inspection teams during on-site inspections, the Convention assigns the primary responsibility for the security, integrity, and preservation of those samples, and for the protection of the confidentiality of samples transferred off-site to the Director-General. The Director-General is required to do this in accordance with procedures which the Conference was to adopt at its First Session. The States Parties continue to negotiate these procedures, and no decision has yet been taken by the Conference.

6.2 The Convention requires that the Director-General establish a stringent regime for the entire chain, from sample collection to sample transportation for off-site analysis. The Director-General must certify that the laboratories designated to perform different types of analysis, must oversee the standardisation of equipment and procedures for both on-site and off-site activities related to sampling and analysis, including the monitoring of quality control, and must select from among the designated laboratories those which shall perform analytical or other functions in relation to specific investigations.

6.3 Although the Conference has yet to adopt the procedures for sampling and analysis, the OPCW has developed and tested technical procedures for sampling and analysis as part of its quality assurance policy, and has designated laboratories to analyse authentic samples.

Current capabilities of the OPCW for off-site analysis

6.4 The proficiency testing for the designated laboratories organised by the OPCW has been targeted primarily on analysing scheduled chemicals and related compounds (in particular, degradation products) in environmental samples. Good progress has been made in developing techniques and protocols, and in ensuring that the staff of designated laboratories are well trained and experienced. Some of the lessons learned, particularly in regard to sample preparation, are also applicable to on-site analysis.
6.5 If, however, on-site analysis becomes the normal approach, particularly during routine inspections, it will become necessary to redefine the primary anticipated role of the designated laboratories, and to ensure that they are experienced in terms of responding to likely scenarios.

6.6 For example, perhaps the main role of designated laboratories will be to analyse environmental samples in instances of alleged use or for challenge inspection, typically in situations where the levels of concentration are too low for unequivocal analysis by on-site techniques or by some of the off-site techniques currently being used. If this is the case, the designated laboratories will need to become well versed in analytical methods and protocols for both scheduled and unscheduled chemicals in trace concentrations. Some preparatory work in this direction is necessary.

6.7 Additionally, there may be a need, in incidents of investigations of alleged use, for there to be a capability to analyse other types of biomedical/forensic samples, in addition to toxic chemicals and their metabolites. A small number of laboratories have undertaken research in identifying and analysing biomarkers resulting from poisoning by scheduled chemicals. There are good prospects that analysis of other biomarkers will soon be possible. Much more work is needed in order to validate these techniques. These techniques should be shared so that more laboratories are capable of carrying out such an analysis. There are many issues connected with this kind of analysis, not least on how to set standards and maintain expertise so that, as in the designated laboratories, there can be high confidence in the results. The SAB suggested dealing with these issues as soon as possible.

New developments

6.8 The SAB reviewed developments in chemical analysis relevant to off-site analysis by designated laboratories.

6.9 The SAB concluded that there were few developments that would drastically change the current potential in the near future. The above discussion of on-site and off-site analysis is based on this premise. One major problem was the cost of developing new equipment that would be specifically designed to meet the OPCW's requirements. The one development necessary to meet OPCW needs seems to be the necessity to introduce immunoassays for toxins. The SAB supported the need to have such techniques available to inspectors, as well as to designated laboratories.

6.10 Most other techniques would have to be specifically developed or would await their development for commercial purposes. The SAB concluded that the only action necessary is for the OPCW (and the SAB itself) to continue monitoring these advances, until such time that specific developments for the OPCW occur.
7. **Destruction and verification of destruction of CW**

**CW destruction technologies**

7.1 The SAB noted a recent publication that provided a comprehensive and authoritative overview on the chemistry underlying the current technologies for the destruction of CW.\(^{20}\) The SAB welcomed this publication.

7.2 Selecting and assessing CW destruction technology is the responsibility of the individual State Party concerned. This will involve not only technological assessments, but also the consideration of other factors, including workplace safety, any environmental impact, and commercial factors. The SAB stressed that there is an opportunity for enhanced international cooperation in the field of CW destruction technologies, and that the OPCW could play a role in facilitating such cooperation. Members of the SAB, furthermore, are ready to make their expertise available in relation to CW destruction technologies.

**Verification of CW destruction**

7.3 Previously, the SAB discussed measures to reduce the number of inspector days in the field that are necessary for permanent on-site monitoring of CW destruction operations. It concluded that the approach developed within the Secretariat was sound.\(^{21}\) The SAB's temporary working group on equipment will continue monitoring developments in relation to available instrumentation.

7.4 The Secretariat informed the SAB in September 2002 that work was under way to further refine the verification approach for, inter alia, CWDFs, and to develop proposals for methodological and instrumental solutions that would enable the inspection team sizes to be reduced, without compromising the verification objectives of the Convention. The SAB reviewed with interest a recent informal Secretariat paper on CW verification. The SAB noted that specific CWDFs require their own verification approaches. Some progress has been made in economising verification resources, but if the methodology is not changed (finding an alternative to the tracking of individual weapons through all aspects of the CWDF), a limit will soon be reached. The SAB continued to be concerned that more progress has not been made in identifying the critical steps that require monitoring, and in introducing statistically based methods for random, rather than continuous, inspections, as well as the use of instruments such as CCTV monitoring or remote monitoring with computer-based cameras combined with proximity sensors and remote data transmission. The SAB stressed that the question of how the inspection conduct at CW facilities can be further economised may not primarily be a matter of identifying new technologies, instruments, or scientific solutions to existing problem. These technologies and equipment exist at an affordable price. It is essentially a matter of improved management and agreed verification policy.


\(^{21}\) See subparagraph 2.7 of SAB-IV/1, dated 6 February 2001.
7.5 The SAB requested an early opportunity to review the proposals that are presently being prepared to optimise verification resource utilisation.

8. **Assistance and protection against CW**

8.1 The SAB noted the different projects implemented by the OPCW in the area of assistance and protection against CW. These relate to the further development of national capacities in the field of protection, as well as increased cooperation between States Parties. Some of the activities form parts of the offers for assistance submitted to the OPCW by States Parties under Article X. There is also an OPCW Protection Network to coordinate activities in the field of protection, to share information and experiences, and to provide assistance to States Parties upon request for expert advice on how to enhance their protective capacities. Finally, the Convention requires that the OPCW maintain, for the benefit of its States Parties, a databank on protection.

8.2 The SAB noted that cooperation and exchanges between the States Parties in these areas have received additional significance in the light of the increased terrorist threat, including with respect to the possible use of toxic, infective, or radiological materials by terrorist organisations. The threat associated with CW has changed from fully-fledged chemical warfare operations to an increased potential of smaller-scale incidents involving other types of toxic chemicals in addition to “classical” CW agents. States Parties with developed capabilities in the area of protection against toxic chemicals have a responsibility to help others in developing their capabilities for protection against these new threats. Enhanced cooperation between the States Parties in the field of protection is not only a matter of increasing their preparedness to respond to attacks with CW, but also involves increasing the readiness of the States Parties to respond to other incidents that could threaten their security, including any deliberate releases of toxic chemicals during conventional attacks.

8.3 The requirements that need to be met in the context of a terrorist threat involving toxic chemicals differ significantly from those for which military forces have made preparations in the past. In addition to a sharing of experience and technology between the States Parties, particular areas where the SAB felt additional scientific and technical work was needed in the areas of detection, identification, and decontamination. In respect to the latter, there also is the question of the level of contamination that can be accepted as a reasonable end-point of decontamination measures.

8.4 Another area that will need attention, and where extended cooperation between the States Parties could be beneficial, is sampling and on-site analysis at incident sites. The OPCW and some of its States Parties have acquired considerable experience with respect to field analysis. It may be worthwhile analysing how that experience could be made available on a broader scale, to the States Parties as well as to agencies within States Parties that at the moment lack experience and capacity in this respect, but which might get involved, should a terrorist attack with toxic chemicals ever have to be dealt with.

8.5 It may also be worthwhile assessing what role the OPCW inspectors, as well as the OPCW Laboratory, could play in such situations. The OPCW is, of course, not a first
9. **Education, outreach, and international cooperation**

9.1 Greater publicity is needed by OPCW about its aims and objectives, and about the key issues it faces. This must include information on the requirements in relation to the declaration, destruction, and verification of CW and related facilities; the methodologies the OPCW uses (particularly for analysis); the nature of and the reasons for industrial declarations; the nature of and reasons for industrial inspections and the value gained from such inspections; the role of National Authorities; and the requirements to provide assistance and to foster international cooperation.

9.2 Greater efforts in terms of education and outreach to the worldwide scientific and technical community are needed in order to increase awareness of the Convention and its benefits. An informed scientific community within each country can be helpful in providing advice to States Parties and in disseminating unbiased information to the public. Education of, and outreach to, signatory States and non-signatory States could be helpful in increasing the awareness of the importance of universal adherence to the Convention, thereby enhancing the safety and security of all states.

9.3 The SAB noted that the Secretariat had developed certain projects that supported these goals, in particular the Associate Programme and the Ethics Project.

9.4 The SAB was convinced that efforts in the area of education and outreach are important to further the objectives of the Convention; these efforts include raising awareness, assuring that the principles of the Convention become firmly anchored in professional ethics and teaching, and promoting international cooperation in the field of chemistry. International cooperation and outreach were also important with respect to attracting additional countries to adhere to the Convention. The SAB expressed a strong desire to further discuss and clarify its own role in relation to education, outreach, and international cooperation. At the same time, the SAB noted and welcomed the contributions that certain non-governmental organisations, as well as national chemical societies and science academies, have been making in relation to creating awareness about the Convention. Public awareness and education about the Convention can contribute significantly to encouraging compliance with its norms and provisions.

9.5 There are a number of opportunities in the area of outreach, education, and international cooperation. In particular, the SAB reviewed the OPCW’s programmes in the area of international cooperation in the light of the developments in science and technology, and concluded as follows:

(a) there is good reason for close cooperation between the OPCW and other relevant international organisations, such as UNITAR, WHO, or UNEP, in further developing the international cooperation programmes of the OPCW;
(b) the programmes and projects currently being implemented by the OPCW in the area of international cooperation appear to be contributing to the development of the national capacities of the States Parties in the area of the peaceful uses of chemistry. Two members of the SAB are involved in one of these programmes (i.e. the programme for support of research projects implemented by the ICA Division); and

(c) in further enhancing these programmes, particular attention should be given to projects aimed at improving the capabilities of the States Parties to monitor chemical compounds.

9.6 The SAB considered it useful for the OPCW to continue and intensify its dialogue with other organisations, such as the IUPAC and its chemistry education division; with other international science unions in relevant fields such as biochemistry and molecular biology (IUBMB) or biological sciences (IUBS); with professional and chemical industry associations; with international institutes and programmes; with organisations of engineers and scientists committed to CW disarmament; and with national as well as regional science academies.

9.7 The SAB concluded that it will need to continue discussing practical and useful measures in relation to education, outreach, and international cooperation as part of its future work programme.

10. The technical capabilities of the Secretariat

10.1 The SAB noted the observations included in the IUPAC report to the OPCW22, and endorsed the following statements made in the report:

(a) "Given the rapid pace of developments in the screening of new unscheduled chemicals and in the development of new, more flexible production processes for chemicals, attention needs to be given to ensuring that the Technical Secretariat is kept up to date and has the necessary competence to take such developments into account in the implementation of the Convention."

(b) "For sampling and analysis only the highest standards are acceptable because of the importance of accurate results. Such standards, both in the OPCW Technical Secretariat and in the designated laboratories that support the OPCW analytical activities, cannot be achieved and sustained without all the staff involved being well trained and well practised. There is a need to review what training is provided, how it is provided and whether sufficient resources are available to sustain the process."

(c) "Consideration should be given to the organisation of periodic workshops to review relevant scientific and technological developments. Such workshops should be part of the ongoing training of staff members but could also benefit States Parties. Planning for such workshops is principally the responsibility of the Technical Secretariat and the OPCW Scientific Advisory Board, but

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22 See footnote 7 this for reference.
IUPAC and other appropriate international scientific bodies might be consulted as appropriate."

10.2 In addition, the SAB strongly supported the following:

(a) that as analytical techniques and instruments evolve and supply situations change on the market, the previously agreed equipment specifications for approved equipment that were adopted, together with the list of approved equipment by the Conference, need to be updated by the Secretariat; and

(b) that there is a need to have a sufficiently flexible mechanism to approve new inspection equipment in order to increase verification efficiency, reduce costs, improve logistics, and/or improve the health and safety of inspection teams. That mechanism should give adequate authority to the Director-General to pursue the approval of new equipment, when needed. The States Parties should focus on the functionality of such proposals, as well as on such aspects as cost, improved verification effectiveness, improved protection of confidentiality, commercial availability and the like, rather than on the equipment itself.

10.3 In this respect, the SAB noted two decisions taken recently on procedures for updating the list of approved equipment\(^{23}\) and on procedures for revising the technical specifications for approved equipment\(^{24}\).

10.6 From the perspective of a scientist, only with flexibility in adjusting the available approved equipment to reflect both the progress being made in science and technology and the prevailing supply situations, will it be possible to avoid inefficiency and wastefulness in the conduct of inspections.

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\(^{23}\) Conference decision C-7/DEC.20, dated 11 October 2002.

\(^{24}\) Council decision EC-31/DEC/8, dated 12 December 2002.
NOTE BY THE TECHNICAL SECRETARIAT

THE 2007 OPCW ACADEMIC FORUM AND THE INDUSTRY AND PROTECTION FORUM:
IN SUPPORT OF COMPREHENSIVE IMPLEMENTATION
OF THE CHEMICAL WEAPONS CONVENTION

INTRODUCTION

1. As part of the celebrations of the tenth anniversary of the entry into force of the Chemical Weapons Convention (hereinafter “the Convention”), the Technical Secretariat (hereinafter “the Secretariat”), together with representatives of the chemical industry and a number of prestigious academic institutions, organised the OPCW Academic Forum (held on 18 and 19 September 2007) and the OPCW Industry and Protection Forum (held on 1 and 2 November 2007).

2. Both forums provided a platform for discussion amongst the Organisation for the Prohibition of Chemical Weapons (OPCW) and other key stakeholders in the Convention, such as the National Authorities, the chemical industry, the scientific community, and other international organisations. A wide range of topics was considered, including a review of the accomplishments of the OPCW, the progress made in national implementation, and the political and technical challenges that will confront the Organisation in the future. Specifically, participants had the opportunity to discuss how the OPCW can adapt to the new security environment and to the changes that are occurring in science, technology, and the chemical industry, especially in regard to new chemicals and processes.

3. These two forums were organised in recognition of the multi-stakeholder nature of the Convention and the need to involve all relevant sectors of society in its implementation. The overall goal involved enhancing cooperation amongst the chemical industry, National Authorities, and other parties interested in full implementation.

4. The proceedings of both forums will be published in due course. Given that the recommendations and conclusions of both forums are relevant to the objectives of the upcoming Second Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention, the Secretariat has prepared this Note to inform the States Parties in a timely fashion of the discussions that took place and the observations that emerged.
5. No funding had been allocated for the forums in the 2007 Programme and Budget, and financial support came in the form of contributions by the Government of the Netherlands as well as by the European Union (EU).

**THE ACADEMIC FORUM**

6. The Academic Forum was organised in association with the Netherlands Institute for International Relations “Clingendael” (“Instituut Clingendael”) and the Netherlands Organisation for Applied Scientific Research or TNO (“Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek”). It brought together leading academics, scientists, diplomats, military officers, and policy-makers involved in shaping and implementing disarmament and non-proliferation policies, in particular those related to the prohibition of chemical weapons.

7. The forum was opened by the Director-General of the OPCW, Ambassador Rogelio Pfirter, who also chaired the meeting. Welcome addresses were delivered by Dr Ph. de Heer, Secretary-General of the Dutch Ministry of Foreign Affairs, and Admiral (ret.) Cees van Duyvendijk from the TNO. Statements at the opening plenary were made by the representatives of the United Nations (UN), the World Health Organization (WHO), the United Nations Training and Research Institute (UNITAR), and the Clingendael Institute. The keynote presentation was given by Ambassador Rolf Ekeus, Chairman of the Governing Board of the Stockholm International Peace Research Institute (SIPRI) who, from 1991 and 1997, was Chairman of the UN Special Commission on Iraq (UNSCOM).

8. Parallel workshops on four broad themes took place, and covered the following topics: the destruction of chemical weapons stockpiles, the non-proliferation of chemical weapons, the impact of science and technology on the Convention, and the role of the Convention in a world that is essentially free of chemical weapons. In addition, a multilateral game formed part of the programme. This game simulated some of the scenarios that might unfold and the negotiation-related challenges the OPCW would have to face in relation to future implementation of the Convention.

**Issues related to chemical weapons and their destruction**

9. The workshop participants noted that all possessor States Parties had at times experienced significant difficulties and delays in destroying their chemical weapons stockpiles. Determined to complete their destruction operations as soon as possible, States Parties are aware that they must do so observing stringent requirements with regard to the safety of people and the environment. So far, no deaths have taken place that are directly related to the implementation of chemical weapons destruction operations, although some injuries have occurred. This is noteworthy, given the intrinsic risks involved in the storage, handling, transportation, and destruction of chemical weapons, and especially given the fact that stockpiles are aging. The workshop stressed the need for adequate and timely funding of the destruction programmes and of the provision of assistance where it is needed and requested.

10. The workshop also considered the challenges related to the destruction of old and abandoned chemical weapons (OACWs), an issue that will undoubtedly become more important in the future. At this stage, three countries have declared abandoned
chemical weapons (ACWs), and 13 countries have declared old chemical weapons (OCWs). However, it is known that there are many other sites where training with chemical weapons was conducted in the past, or where military operations took place, with chemical weapons forming part of the armoury of the belligerents. One should therefore still expect more—potentially many more—declarations of OACWs in the future.

11. The workshop participants noted that little was known about what changes have ensued to the chemical weapons that had been disposed of by dumping at sea, during a period long before the negotiations of the Convention had been completed. For all practical purposes, given that States Parties have discretion as to whether to declare chemical weapons disposed of in this manner and whether to destroy them in accordance with the Convention, this issue remains outside the purview of this disarmament treaty. It remains to be seen how States Parties proceed in relation to this matter, and what the involvement, if any, of the OPCW would be in terms of any future recovery and destruction operations in regard to these chemical weapons.

12. On a more general note, the workshop concluded that, although destruction deadlines cannot always be met, they are important. Deadlines help to focus the efforts of States Parties and ensure that sufficient funding for the destruction of chemical weapons is provided. Because of the potential danger to the public involved in the destruction of chemical weapons, which can have a major environmental and health impact on the communities concerned, most speakers stressed the importance of public outreach and information, given that this is a topic of public interest. In addition, the Convention points out that the protection of human health and of the environment is an essential precondition for the conduct of chemical weapons destruction operations.

**Issues related to the non-proliferation of chemical weapons**

13. There was recognition by the workshop participants that the concept of chemical weapons non-proliferation has evolved over the years. Today, it is considered that the use of chemical weapons lacks legitimacy, and the main object of concern is the possibility that some States outside the Convention or non-State actors could acquire chemical weapons covertly.

14. The workshop participants made the observation that, given their regional and political contexts, countries have different reasons for joining the Convention. This has an impact on how they prioritise the responsibilities related to implementation, and underlines the fact that measures in regard to national implementation ought to be country-specific and must take into account the prevailing historical, legal, regulatory, economic (including trade), security and other factors and conditions. No one-size solution fits all conditions and requirements.

15. In terms of implementation of the Convention, there is also a need to find the right balance between prohibitions related to chemical weapons, and free access to chemicals and to chemical equipment and technology.

16. Participants also stressed that effective national implementation remains an essential condition for providing reliable non-proliferation assurances. There is a need to
move from a quantitative approach that focuses simply on numbers of States Parties and National Authorities (and calculations on how many of them have drafted the required implementing legislation) to a more qualitative approach that concentrates on improving the effectiveness of implementation and enforcement measures. Capacity building by the OPCW remains an important tool for improving the situation.

17. National implementation was seen as vital in terms of countering the possible terrorist use of toxic materials. But the Convention’s routine verification regime was originally formulated with militarily significant quantities of chemical agents/precursors in mind.

18. The workshop participants were of the view that the comprehensive scope of the Convention—the “General Purpose Criterion”—needs to be preserved and restated, so as to maintain the relevance of the Convention in the light of scientific, technological, and political developments.

19. The conclusion was reached that the Convention needed to be embedded in the scientific community through education, the discussion of ethics, and the raising of the awareness of dual-use issues. It was noted, however, that there are divergent ministerial/departmental responsibilities amongst States Parties, and National Authorities need to persuade and advise other stakeholders in government and society to take action to this end.

20. The workshop raised a number of longer-term issues that may require future consideration and action by the OPCW. These included the following:

(a) Should there be a broader implementation concept of the Convention, allowing the Secretariat to consider longer-term strategic issues?

(b) It may be useful to learn from the evolution of the Organisation for Economic Cooperation and Development (OECD), which was originally a technical agency, but which now follows a “knowledge-based” model, and which provides policy support at the same time.

(c) Are there lessons to be learned from the intersessional process of the Biological and Toxin Weapons Convention, such as the conduct of thematic meetings of States Parties (at expert and diplomatic levels) on key subjects?

(d) Is there room for a joint approach with other international organisations in terms of developing a policy on the management of chemicals, and could that be a significant incentive in persuading States Parties to adopt and implement their own plans in terms of national implementation?

**Advances in science and technology**

21. The starting point for discussions during the third workshop was that the Convention is science-based; in other words, the drafters of the Convention had recognised that advances in sciences and technology could have an impact on the definition of what actually constitutes chemical warfare, on what agents could be produced and by what
means, and on how these developments could have an impact on the verification of compliance.

22. The workshop took account of the rapid developments in the life sciences, including the increasing convergence of chemical and biological sciences, the advances in combinatorial chemistry and nanotechnology, the changing nature of chemical-production processes (including the use of micro-reactors), and the globalisation of chemical production and trade. These developments will bring major benefits to humankind (for example in terms of sustainable development, improved public health, better food production, and enhanced international cooperation in the peaceful uses of chemistry). They may also help to provide better protective measures against chemical weapons (detection, protection, medical counter-measures, forensic analysis, and decontamination).

23. However, there was a recognition that the rapid advances in science and technology, including in chemistry and related sciences, also present a number of challenges to the Convention. These include the following:

(a) chemicals of biological origin (CBOs)—developments in this field could lead to the design or discovery of novel chemical weapons agents;

(b) databanks of many thousands of novel synthetic chemicals—their existence and enlargement could lead to a future generation of chemical weapons agents;

(c) targeted delivery—developments in this area could result in a more efficient dissemination of chemical weapons agents; and

(d) incapacitants—advances in science and technology, it was observed, could well add to the existing problems that had been inherited from the original negotiations that took place in regard to the Convention.

24. Concerns were expressed in relation to the fact that, given the way the OPCW is structured and the processes by which decisions are taken, the Organisation simply does not have the flexibility it needs to respond quickly and effectively to developments in science and technology that necessitate changes to the implementation process.

25. At the same time, it should be borne in mind that advances in science and technology create new opportunities for international cooperation between States Parties in the peaceful uses of chemistry. The workshop participants acknowledged the achievements of the OPCW in this field, and also recognised the following:

(a) the importance of ensuring that international-cooperation projects correspond to the needs of the States Parties;

(b) the importance of developing synergies between the OPCW and other international organisations involved in international cooperation and development projects; and
(c) the usefulness of academic collaboration projects between developed and developing countries, in that these endeavours support the objectives of the Convention; these projects would also benefit from being linked to the OPCW’s International Cooperation Programme.

**The Convention in a chemical-weapons-free world**

26. The participants acknowledged that the Convention has been successful in reducing the likelihood of State-to-State use of chemical weapons. The military use of chemical weapons is much less likely today than when the Convention was first drafted. The possibility of chemical agents falling into the hands of terrorists, on the other hand, constitutes a potential problem.

27. During discussions, questions were raised as to whether the OPCW needed to take an integrated approach towards regulating toxic chemicals and what its role should be with regard to non-State actors (participants, however, acknowledged that the Convention was not an anti-terrorism instrument). The specific and important question was raised as to whether the Convention was able to deal with the threats that lie ahead. Some argued that there now was a need for a global governance scheme for science and technology, and posed the question as to whether the OPCW was capable of adjusting its mandate to deal with these emerging issues.

28. For example, participants asked whether the present categorisation of chemicals in the schedules of chemicals will remain useful in the future, and whether there is any utility remaining in regard to challenge-inspection schemes. Some stated that there was an enormous role to be played by non-governmental organisations (NGOs) and professional organisations, and argued for the further extension of the OPCW’s relationships with other international and regional organisations.

29. In any event, participants concluded that the Convention will have to undergo a functional shift after the destruction of chemical weapons has been completed, thus requiring changes to the processes by which it is implemented. It was suggested that a governance approach might be adopted, but to follow such an approach, more stakeholders would need to be involved and allowed to actively participate in comprehensive implementation.

30. To ensure continued success for the Convention in the post-destruction environment, three areas require consideration, that is, whether:

   (a) to establish networks to assist in reviewing the impact on the verification regime of advances in science and technology; and

   (b) to facilitate a greater involvement by stakeholders (such as other international organisations, regional organisations and NGOs).

31. Looking beyond the challenges of chemical warfare in the traditional sense, the workshop observed that the Convention now faces new challenges, such as the potential use of toxic industrial chemicals (for example, by non-State actors). This may require States Parties to look again at the assistance-and-protection provisions in
the Convention, and some participants argued it would be necessary to reconsider the
definition of what constitutes a chemical weapon.

32. The medical aspects of current and emerging threats were discussed, and the need
was highlighted for effective collaboration and coordination with international
organisations such as the WHO, regional non-governmental scientific and/or medical
organisations, as well as national organisations (such as societies of chemistry and
toxicology, others involved in the safe use of toxins and poisons, and groups working
on the development of codes of ethics). It was agreed that more training and
exercises simulating chemical exposure should be offered to first responders, so that
medical-response systems can be improved. The workshop also noted that there was a
need for more participation on the part of the chemical industry.

33. The observation was made that the Convention as it is constituted is a delicate
balance of rights and prohibitions, making this treaty unique and offering an incentive
for countries to join. If that balance is disturbed, then the attractiveness of the
Convention may be reduced. It was noted that the OPCW does not simply deal with
chemical weapons, but also with the safe use and management of chemicals.
Consequently, participants stated that an integrated approach should be formulated,
and that the OPCW would be well advised to further develop its partnerships with
other treaties or treaty organisations involved in the issue of chemical safety. An
integrated framework needed to be developed, and the OPCW should play a part in
this.

FINAL OBSERVATIONS

34. The discussions of the Academic Forum highlighted a key point: The world has
changed since the Convention was negotiated. The Convention has been successful in
reducing the threat of State-to-State use of chemical weapons. But as the global
context changes, so must the OPCW. For this to take effect, interaction between the
OPCW and society, including the academic world and the chemical industry, is
becoming ever more vital.

35. The eventual completion of the destruction of chemical weapons stockpiles will shift
the global focus from chemical weapons disarmament to the prevention of the
acquisition of chemical weapons. The transition of the verification regime from a
focus primarily on disarmament to one which concentrates on non-proliferation,
cooperation, and assistance will call for adjustments in the mandates given to the
OPCW by its Member States, and for a conceptual rethinking of some of the
Organisation’s programmes and approaches.

36. The Academic Forum recognised the value of academic input to the OPCW and the
processes by which it implements the Convention. Although a range of mechanisms
already exist to enable such interaction, there was a sense that it would be beneficial
if this dialogue and cooperation were enhanced.

The Industry and Protection Forum

37. With the financial support of the EU, the Industry and Protection Forum was
organised in association with the International Council of Chemical Associations
(ICCA) and the European Chemistry Council (CEFIC). It brought together representatives from the chemical industry, government, international organisations, National Authorities, national laboratories and agencies, academia, and other institutions that work in the different fields (verification, assistance and protection, and the safety and security of chemical weapons) that formed the focus of this Forum.

38. A non-commercial exhibition that demonstrated solutions for how the different requirements of the Convention can be met was also organised.

39. The Forum was opened by the Director-General of the OPCW, Ambassador Rogelio Pfirter. Welcome addresses were delivered by Mr René van Sloten, Executive Director for Industrial Policy of the CEFIC, and Ms Ana Gomes, Vice-President of the Committee for Security and Defence of the European Parliament. The Director-General delivered a second statement at a joint plenary session attended by Forum participants and National Authority representatives. This was followed by a statement by Mr Jack Gerard, Chief Executive Officer of the American Chemistry Council (ACC) and Secretary of the International Council of Chemical Associations (ICCA), speaking on behalf of the latter organisation.

40. Three parallel workshops were organised on the following subject areas: issues surrounding verification and implementation of the Convention that are of relevance to the chemical industry (including sampling and analysis), assistance and protection, and the safety and security of chemical plants.

Verificação e implementação no setor químico (incluindo amostragem e análise durante inspeção de indústria)

41. The workshop started with the discussion of the idea that the chemical industry, since entry into force of the Convention, considers implementation-related processes as a normal part of their day-to-day activities. Of course, there are issues that still need to be addressed. The complexities inherent in the definitions, terms, and regulations of the Convention can create difficulties. Also, there remain differences in relation to national regulations, the nomenclature used by various countries/associations, the declaration of transfers, and the declaration of mixtures containing scheduled chemicals. In all these areas, the chemical industry needs clarity and consistency in order to implement requirements and to ensure that equitable and similar standards are applied to all States Parties. The adjustments made in the selection methodology for inspection of other chemical production facilities (OCPFs) were seen as a way of devising a fairer distribution in terms of this type of inspection.

42. It was noted that it remains important for the Organisation to provide practical help to countries and companies in order to enable them to identify all declarable facilities and/or activities. A joint CEFIC-OPCW project has made progress on updating a spreadsheet that identifies scheduled chemicals. This update should be made available to States Parties and to companies involved in the chemical industry by April 2008.

43. The workshop recognised that the knowledge that chemical companies have of how the requirements of the Convention are to be implemented needs to be maintained. Preserving awareness and transferring knowledge within and between companies was an important responsibility of chemical-industry associations. In addition, it was
important that the National Authorities remain engaged with the chemical industry as partners and advisors in the implementation process.

44. The workshop reviewed the progress that the OPCW had made with regard to the use of sampling and analysis as an inspection method in the chemical industry, and discussed the results of the trial phase of sampling and analysis during Schedule 2 inspections.

45. One conclusion that emerged during the discussions was that National Authorities should educate facilities about, and prepare them for, the use of sampling and analysis in industry inspections. It was pointed out that the conditions on-site are checked. Regulations may also exist in States Parties that may affect the transportation or use of the equipment and chemicals carried by OPCW inspection teams for on-site analysis.

46. The issue of performing on-site analysis in open or “blinded” mode was analysed. The Secretariat explained that any issues related to this should be resolved during the course of an inspection. It is known that false positives can occur. If the analytical equipment is operated in “blinded” mode, a resolution of any difficulties requires the setting-up of the instrument from scratch and beginning the analysis once again. It was noted, in this context, that operating the instrument in open mode must not be confused with undertaking a full analysis—significant protections exist in open mode to ensure that the sample composition will not be disclosed, except with regard to the confirmation that no scheduled chemicals are present.

47. Concerns were raised in relation to the possibility that, during on-site analysis, small quantities of scheduled chemicals might be detected (for example, unknown impurities). This appears unlikely, however, given the detection limits that are applied. It would be desirable to fill the gaps in the OPCW Central Analytical Database (OCAD) so as to avoid false positives.

48. There were a number of practical issues that the pilot phase had highlighted, such as the option for inspectors to use a facility for on-site analysis that is in close proximity but outside the perimeters of the inspected facility (in other words, “in-country off-site”) to obtain supplies needed for analysis from local sources, or to shift the check of inspection equipment from the point of entry to the inspection site.

49. To summarise, the workshop noted that sampling and analysis in industry inspections has been demonstrated to work well, and that the necessity to protect confidentiality can be met with the existing equipment, software, databases, and procedures. Whilst it places an extra burden both on the facility to be inspected and on the OPCW, some participants stressed that it was a requirement under the Convention, and the only means of providing scientific proof of the absence of scheduled chemicals.

**Assistance and protection**

50. The workshop came to the conclusion that the submission of information by States Parties on their national protective programmes under paragraph 4 of Article X is important, in that not only does it provide transparency, but it also enables States Parties capable of providing assistance to be identified, as well as those in need of it.
51. The observation was also made that States Parties are fully supportive of, and recognise the need to meet, the requirements of Article X of the Convention. Despite the newly adopted formats for the annual submission of information on national protective programmes, only 76 declarations about protective programmes were submitted in 2006 (and, by the time of the Forum, only 50 in 2007).

52. As for the assistance offers made by States Parties, the workshop noted a number of examples of what they had offered, which included international or regional training courses, or national-assistance offers (including procedures, and equipment for detection, protection, and decontamination). Forty-four assistance offers had been received from States Parties by the time of the Forum.

53. The workshop also recalled that, by the end of 2007, the databank on protection required under Article X would be made available (by means of a password-controlled network) to the National Authorities and to the Permanent Representatives outside the OPCW headquarters.

54. The provision of expert advice to States Parties that wish to enhance their protective capacity has become an important implementation issue. Whilst in the early years after entry into force, the focus of such measures was on national capacity building, that focus has shifted since 2004 to regional (and subregional) capacity building.

55. States Parties’ contributions under subparagraph 7(a) of Article X remains limited, and stands at EUR 1.3 million, well short of what would be required to fund any large-scale operation. The workshop was informed about the exercises conducted in Croatia (in 2002) and in Ukraine (in 2005), and about the efforts to improve cooperation and coordination with other relevant international organisations.

56. The Secretariat reviewed its standard operating procedures and its work instructions so as to take account of the practical experiences gained in the various exercises that had been conducted. The lessons learned also extended to identifying what equipment most suitable for the delivery of assistance and investigations of the alleged use of chemical weapons needed to be procured, what training needed to be provided, and what training concepts needed to be developed.

57. The participants of the workshop raised a number of issues that they considered deserved further consideration. These included:

(a) whether attacks on chemical facilities with conventional weapons should be considered a violation of the Convention, and whether a State Party so attacked would be able to request assistance;

(b) what methods needed to be developed in relation to developing the coordination between the different international agencies and units that would respond to a request for assistance (this included such issues as different languages involved, communications systems, standard operating procedures, equipment, tactics, and so on);
(c) whether States Parties should focus on building up regional capacity (for example by setting up regional training centres) and whether, consequently, assistance offers could be made on a regional basis;

(d) how the Organisation could ensure that the right people attended the training courses; and

(e) what would constitute an appropriate level of chemical defence once chemical weapons stockpiles had been destroyed.

58. The participants recognised the wide range of possible scenarios for assistance operations and what the requirements for such activities would be, and also the need for more information on what the States Parties’ assistance offers actually included. There were only limited resources for the building-up of regional networks and for “train the trainers” events. States Parties needed to be better prepared to receive any assistance that was needed; this included enhanced coordination between all organisations involved in an emergency response.

Safety and security at chemical plants

59. This workshop began with the premise that the Convention was neither a counter-terrorism nor a chemical-safety treaty. However, an analysis of its effectiveness indicated that it had helped to make it more difficult for malicious acts involving the use of toxic chemicals to occur. Given that the deadlines for the completion of chemical weapons disarmament are approaching, the view was expressed that new perspectives in terms of implementation need to be formulated, and that more attention should be paid to issues related to the chemical industry.

60. The workshop participants identified a number of challenges that potentially loom ahead:

(a) the fact that it would take only one incident for trust in the Convention to be lost;

(b) the recognition that attacks on chemical facilities or the theft of toxic chemicals would constitute only the beginning of a chain of events that would subsequently start to unfold, and therefore there was a need to consider how to manage all the consequences of such an incident;

(c) there remained a lack of clear and internationally agreed definitions of what constitutes terrorism and how to define “criminal acts”; and

(d) issues involving safety and/or security needed attention in regard to the entire chain of the existence of chemicals, from their production to their eventual disposal.

61. There were a number of balances that needed to be struck: The provision of enhanced security could help catalyse the development of innovations in industry, but could also become a hindrance. There was also a need to raise awareness about safety and security issues, but also an inherent danger of creating hysteria by doing so. The need also existed to make information available to the public on possible
chemical hazards, but such information could also be useful to malicious actors. Finally, there needed to be an assessment as to what the responsibilities and activities of industry, government, and international bodies were.

62. At the international level, the workshop recognised the need for synchronised action of all stakeholders in the Convention. The chemical industry needs to participate in the efforts being made to enhance safety and security, and these efforts must be inclusive. There was a need to create a level playing field for the chemical industry with regard to security costs. Lessons can be learned from the International Atomic Energy Agency (IAEA) and the WHO in terms of promoting safety and disseminating best practices in the field of safety and security.

63. The workshop recalled that the OPCW has been established by the Convention as a forum for consultation and cooperation between the States Parties, which could include the exchange of ideas and the discussion of best practices in such areas as chemical safety and security. This may, in fact, increase the attractiveness of the OPCW framework for States not yet Party, and may help to improve national implementation by exploiting the synergisms between national implementation of the Convention and measures to ensure the safety and security of activities related to chemicals.

64. The workshop also recognised the relevance of the provisions of Articles X and XI, and that opportunities existed to more fully meet the objectives of these provisions by raising chemical safety and security issues in the context of the OPCW.

**FINAL OBSERVATIONS**

65. The Industry and Protection Forum highlighted the fact that, the chemical industry, like any other modern enterprise, is continuing to evolve, while the Convention’s verification mechanism remains relatively stable. The increasing overlaps between chemical and biological sciences, the integration of chemical engineering into the life sciences, and the fusion between these and information technology are factors that are having a significant impact on the Convention.

66. The Forum, at this stage, focused much of its attention on sampling and analysis in industry inspections. There will be a need to broaden this agenda in the future and to continue to address other issues related to the effective and consistent implementation of the Convention in the chemical industry. This would have to include many of the issues that were also discussed at the Academic Forum.

67. Other challenges to non-proliferation are emerging as a result of changes to the security environment. Risks include actions by non-State actors, such as criminals and terrorists, to produce or acquire chemical weapons. There is a need for especial vigilance in establishing and maintaining controls on the manufacturing, transfer, and use of dual-use materials through national and international regulatory mechanisms, as well as through effective self-governance in industry and by scientific and teaching institutions.

68. It is crucial that the OPCW be able to adapt to the changing realities so that the verification and implementation regimes of the Convention can continue to prevent
the proliferation of chemical weapons and the materials for making them, and in a manner that does not impede legitimate developments in the chemical industry. Non-State actors must not be allowed to gain access to toxic chemicals or to the means for producing them.

69. In this ever-changing world, the smooth interaction between the National Authorities and other stakeholders in the Convention, both from the government and private sectors, is of the essence. There is a need to focus more on the quality of implementation, the involvement at the national level of other agencies, and the coordination of national-implementation measures between all the agencies involved. Such an integrated approach at the national-implementation level can lead to the increased adoption and implementation of non-proliferation and safety-and-security regulations, and of UN Security Council Resolution 1540.

NEXT STEPS

70. The Academic Form and the Industry and Protection Forum confirmed that, for the Convention to be comprehensively implemented, it is vital that all stakeholders, including the chemical industry and the scientific community, become involved in the promotion of its goals, especially in relation to national implementation, assistance and protection against chemical weapons, and the achievement of universality. In this context, these forums reaffirmed the need for the continuing interaction between the OPCW and all parties that are interested in achieving full implementation of this crucial disarmament treaty.

71. The Conference of the States Parties, at its Twelfth Session (which took place from 5 to 9 November 2007), took note of both forums and encouraged participation on the broadest possible geographical basis of all stakeholders in such events in the future. The overall objective is the continuation of the discussions and interchanges that had been initiated at the forums, especially in terms of promoting national implementation, international cooperation, and universality.

72. The continuation of the forums will provide a useful platform for the active engagement of OPCW stakeholders in promoting and/or supporting comprehensive implementation of the Convention, especially in relation to Articles VI, VII, X, and XI.

73. This dialogue between the multiple stakeholders of the Convention could, for example, involve more detailed studies of specific issues by small project groups, specialised workshops on topics relevant to the Convention and that require broad involvement from a variety of parties (including from the chemical industry), and the use of the worldwide web as a platform for raising and discussing issues.

74. The support of the Member States of the OPCW is essential to ensuring the success of the emerging platform for cooperation and dialogue, and thus the Secretariat would like to encourage Member States and their institutions to do all they can to foster its continuing development.
75. No funds will be allocated in the OPCW Programme and Budget for any activities associated with the follow-up process, and thus any such activities would rely on funding through voluntary contributions.
3. UN Headquarters Documents

The CWC is a product of the international community’s multilateral disarmament negotiating forum in Geneva. Now known as the Conference on Disarmament (formerly the Ten-Nation Committee on Disarmament (1960), the Eighteen-Nation Disarmament Committee (1962-68), the Conference of the Committee on Disarmament (1969-78) and the Committee on Disarmament (1979-1984)), the CD is not a formal UN organ but it has a special relationship with the UN. Under this relationship, the CD adopts its own agenda and rules of procedure, but acts on recommendations from the UN General Assembly and it reports annually to the General Assembly.

Besides the CD, chemical weapons issues have also been taken up periodically by the main organs of the UN based at UN Headquarters in New York, namely the General Assembly and the Security Council and also by the Secretary-General.

3.1 UN General Assembly

Discussions in the UN General Assembly on CW stretch back to its first resolution in 1946. Every year since 1992, the General Assembly has adopted resolutions on the CWC. These resolutions typically stress the vital importance of full and effective implementation of, and compliance with, all CWC provisions; stress the importance of the OPCW in verifying compliance with CWC provisions as well as in promoting the timely and efficient accomplishment of all its objectives; and urge all States Parties to meet in full and on time their obligations under the Convention and to support the OPCW in its implementation activities. This section of the Resource Guide includes the most recent CWC resolution adopted by the General Assembly.

In September 2006, the General Assembly adopted resolution 60/288 setting out the United Nations Global Counter-Terrorism Strategy. The plan of action annexed to the resolution includes a number of measures to prevent and combat terrorism such as: strengthening coordination and cooperation among States in combating crimes that might be connected with terrorism, including the smuggling of chemical materials; the updating of the UN Secretary-General’s investigative mechanism (see below); stepping up efforts to improve border and customs controls in order to prevent and detect illicit trafficking in CW and materials; inviting the UN to improve coordination in planning a response to a terrorist attack using weapons of mass destruction; and encouraging the OPCW to continue its efforts in helping States to build capacity to prevent terrorists from accessing chemical materials, to ensure security at related facilities and to respond effectively in the event of an attack using such materials. A copy of General Assembly resolution 60/288 is included in this section of the Resource Guide.

3.2 UN Security Council

At its first summit meeting, held in January 1992, the Security Council agreed a Presidential Statement in which it stated that proliferation of weapons of mass destruction (WMD) was a “threat to international peace and security.” This section of the Resource Guide includes a copy of Security Council resolution 620 (1988) and the 1992 Presidential Statement, S/23500.

The UN Security Council has also established subsidiary bodies to carry out mandates relating to chemical (as well as nuclear and biological) disarmament. For example, the Security Council established the UN Special Commission (UNSCOM) in 1991 (by resolution 687) and the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) in 1999 (by resolution 1284) to monitor, verify and assist in the disarmament of Iraq’s WMD programmes. In June 2007, the Security Council adopted resolution 1762 which ended UNMOVIC’s mandate. For reasons of space, no UNSCOM or UNMOVIC documents are included in the Resource Guide, but most are available at www.un.org/Depts/unscom/ and www.unmovic.org. This section of the Resource Guide does however include a copy of Security Council resolutions 687 (1991), 1284 (1999) and 1762 (2007).
In April 2004, the Security Council adopted resolution 1540 under Chapter VII of the UN Charter, on the non-proliferation of weapons of mass destruction. The resolution affirms that the proliferation and illicit trafficking of nuclear, biological and chemical weapons are threats to international peace and security and it requires all UN Member States to enact and enforce laws to prohibit and prevent the manufacture, acquisition, possession, development, transport, transfer or use of nuclear, chemical or biological weapons and their means of delivery by non-state actors. States must also take and enforce national measures to prevent the proliferation of these weapons, including means to account for and secure weapons and their means of delivery, physical protection measures, effective border controls and export controls. The resolution also obliges Member States to refrain from supporting attempts by non-state actors to acquire WMD capabilities.

All States were required to provide a report on their implementation of the resolution to a committee (the ‘1540 Committee’), which is assisted in its work by a group of experts. This committee had a two-year mandate under resolution 1540, which was extended for a further two years by Security Council resolution 1673 in April 2006 and which is now therefore due to expire in April 2008. Resolution 1673 calls on States to provide a first report on implementation if they have not already done so and encourages all States to provide additional information, at any time or upon the request of the 1540 Committee. Both resolutions are included in this section of the Resource Guide. The report of the first two years of the implementation of resolution 1540 is available at http://disarmament2.un.org/Committee1540. A new report is currently being prepared and will be submitted to the Security Council by 18 April 2008.

3.3 UN Secretary-General

As part of the ongoing process of UN reform and in acknowledgement of the challenges posed by changes in the geopolitical environment, the UN Secretary-General (UNSG) appointed a High-Level Panel on Threats, Challenges and Change in November 2003. The Panel, made up of 16 high-ranking experts submitted its report, A More Secure World: Our Shared Responsibility (A/59/565) to the UNSG in December 2004. The report includes a number of recommendations relating to the CWC and the UNSG’s mechanism for the investigation of allegations of CBW use. The relevant section of the report is included in this section of the Resource Guide and the full report is available at www.un.org/secureworld/.

In March 2005, the UNSG published In Larger Freedom: Towards Development, Security and Human Rights for All (A/59/2005) which was intended to contribute to the 2005 World Summit and which built upon some recommendations of the High-Level Panel. In the report, the UNSG calls for consolidation of the CWC, recommitment to the scheduled destruction of CW and CWC universality. It also proposes that the UN Security Council regularly invites the OPCW Director-General to brief it on the status of verification processes. This section of the Resource Guide includes the chapters of In Larger Freedom on “preventing catastrophic terrorism” and “nuclear, biological and chemical weapons”. The full report is available at www.un.org/largerfreedom/.

3.4 UN Secretary-General’s Investigative Mechanism

The UN Secretary-General has a long-standing authority to investigate activities that may constitute a violation of the 1925 Geneva Protocol “or other relevant rules of customary international law”. The first action to support such an authority was the adoption in 1980 of General Assembly resolution 35/144 C which decided to carry out an impartial investigation of allegations of the use of CW in South East Asia. These allegations were controversial and a number of States voted against the resolution. The “Group of Experts to Investigate Reports on the Alleged Use of Chemical Weapons” produced two reports in 1981 and 1982. The UNSG’s mechanism emerged in a form recognizable today from General Assembly resolution 37/98 D in 1982, but which was also subject to some of the earlier controversies and was also not adopted by consensus. Under this resolution, which is included in this section of the Resource Guide, the General Assembly requested the UNSG to investigate, with the assistance of qualified experts, allegations of violations of the Geneva Protocol. The resolution
instructed the UNSG to compile lists of qualified experts who could be sent at short notice on investigations and to devise procedures for timely and efficient investigations. The UNSG duly appointed a group of consultant experts that submitted its final report, including procedures for investigations, in 1984. Earlier in the same year, the UNSG also conducted the first investigation into allegations of the use of CW during the Iran-Iraq War, although not under the authority of resolution 37/98 D.

The experience of the numerous investigations that followed led to a reappraisal of the mechanism and in 1987 the General Assembly adopted by consensus resolution 42/37 C which called on the UNSG to update the technical guidelines and procedures for conducting investigations. The UNSG accordingly appointed another group of consultant experts which submitted its final report in 1989. The General Assembly endorsed the group's report in resolution 45/57 C adopted in 1990, which is included in this section of the Resource Guide. During the group's existence, the Security Council also passed resolution 620 in 1988 which endorsed the mechanism by encouraging the UNSG to investigate allegations “promptly”. A further two investigations were carried out in 1992, these being the most recent to have been conducted. The table below provides details on the investigations carried out:

<table>
<thead>
<tr>
<th>Date</th>
<th>Locations visited</th>
<th>Report reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 1984</td>
<td>Iran</td>
<td>S/16433, 26 March 1984 [also issued as A/39/210]</td>
</tr>
<tr>
<td>April 1985</td>
<td>European hospitals</td>
<td>S/17127, 24 April 1985</td>
</tr>
<tr>
<td>March 1986</td>
<td>Iran</td>
<td>S/17911, 12 March 1986</td>
</tr>
<tr>
<td>May 1987</td>
<td>Iran &amp; Iraq</td>
<td>S/18852, 8 May 1987</td>
</tr>
<tr>
<td>April 1988</td>
<td>Iran &amp; Iraq</td>
<td>S/19823, 25 April 1988</td>
</tr>
<tr>
<td>July 1988</td>
<td>Iran</td>
<td>S/20060, 20 July 1988 [released 1 August 1988]</td>
</tr>
<tr>
<td>August 1988</td>
<td>Iran</td>
<td>S/20134, 19 August 1988</td>
</tr>
<tr>
<td>March 1992</td>
<td>Mozambique</td>
<td>S/24065, 12 June 1992</td>
</tr>
</tbody>
</table>

During the 1990s, the mechanism was somewhat neglected as international attention was focused on the entry into force of the CWC and on the efforts to negotiate a protocol to the BWC. With the protocol negotiations coming to a halt in 2001, more attention has been paid to the mechanism, particularly in the reports released by the then UNSG, extracts of which are included in this section of the Resource Guide. Since the entry into force of the CWC, that treaty has become the main focus of activity for CW investigations and recent attention has therefore focused on the use of the mechanism to investigate BW allegations. The CWC contains detailed procedures for investigating the alleged use of CW and the OPCW maintains a list of qualified experts who can provide additional skills not found among OPCW inspectors. The UNSG’s mechanism could still be used for CW investigations in States not party to the CWC, but in such cases the CWC states that the OPCW should cooperate closely with the UNSG and could put its resources at his disposal. Given the OPCW’s expertise, it would likely undertake any future investigations. Under General Assembly resolution 60/288 adopted in 2006 States encouraged the UNSG to update the roster of experts and laboratories, as well as the technical guidelines and procedures. A working group, with OPCW participation, met in New York and Sweden, and submitted a proposal for updating the technical annexes to the UNSG in December 2007. Relevant extracts from all of the documents cited above are included in this section of the Resource Guide.
Resolution adopted by the General Assembly

[without reference to a Main Committee (A/60/L.62)]

60/288. The United Nations Global Counter-Terrorism Strategy

The General Assembly,

Guided by the purposes and principles of the Charter of the United Nations, and reaffirming its role under the Charter, including on questions related to international peace and security,

Reiterating its strong condemnation of terrorism in all its forms and manifestations, committed by whomever, wherever and for whatever purposes, as it constitutes one of the most serious threats to international peace and security,

Reaffirming the Declaration on Measures to Eliminate International Terrorism, contained in the annex to General Assembly resolution 49/60 of 9 December 1994, the Declaration to Supplement the 1994 Declaration on Measures to Eliminate International Terrorism, contained in the annex to General Assembly resolution 51/210 of 17 December 1996, and the 2005 World Summit Outcome, in particular its section on terrorism,

Recalling all General Assembly resolutions on measures to eliminate international terrorism, including resolution 46/51 of 9 December 1991, and Security Council resolutions on threats to international peace and security caused by terrorist acts, as well as relevant resolutions of the General Assembly on the protection of human rights and fundamental freedoms while countering terrorism,

Recalling also that, in the 2005 World Summit Outcome, world leaders rededicated themselves to support all efforts to uphold the sovereign equality of all States, respect their territorial integrity and political independence, to refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes and principles of the United Nations, to uphold the resolution of disputes by peaceful means and in conformity with the principles of justice and international law, the right to self-determination of peoples which remain under colonial domination or foreign occupation, non-interference in the internal affairs of States, respect for human rights and fundamental freedoms, respect for the equal rights of all without distinction as to race, sex, language or religion, international cooperation in solving international problems of an economic, social, cultural or

1 See resolution 60/1.
humanitarian character, and the fulfilment in good faith of the obligations assumed in accordance with the Charter,

Recalling further the mandate contained in the 2005 World Summit Outcome that the General Assembly should develop without delay the elements identified by the Secretary-General for a counter-terrorism strategy, with a view to adopting and implementing a strategy to promote comprehensive, coordinated and consistent responses, at the national, regional and international levels, to counter terrorism, which also takes into account the conditions conducive to the spread of terrorism,

Reaffirming that acts, methods and practices of terrorism in all its forms and manifestations are activities aimed at the destruction of human rights, fundamental freedoms and democracy, threatening territorial integrity, security of States and destabilizing legitimately constituted Governments, and that the international community should take the necessary steps to enhance cooperation to prevent and combat terrorism,

Reaffirming also that terrorism cannot and should not be associated with any religion, nationality, civilization or ethnic group,

Reaffirming further Member States’ determination to make every effort to reach an agreement on and conclude a comprehensive convention on international terrorism, including by resolving the outstanding issues related to the legal definition and scope of the acts covered by the convention, so that it can serve as an effective instrument to counter terrorism,

Continuing to acknowledge that the question of convening a high-level conference under the auspices of the United Nations to formulate an international response to terrorism in all its forms and manifestations could be considered,

Recognizing that development, peace and security, and human rights are interlinked and mutually reinforcing,

Bearing in mind the need to address the conditions conducive to the spread of terrorism,

Affirming Member States’ determination to continue to do all they can to resolve conflict, end foreign occupation, confront oppression, eradicate poverty, promote sustained economic growth, sustainable development, global prosperity, good governance, human rights for all and rule of law, improve intercultural understanding and ensure respect for all religions, religious values, beliefs or cultures,

1. Expresses its appreciation for the report entitled “Uniting against terrorism: recommendations for a global counter-terrorism strategy” submitted by the Secretary-General to the General Assembly;\(^2\)

2. Adopts the present resolution and its annex as the United Nations Global Counter-Terrorism Strategy (“the Strategy”);

3. Decides, without prejudice to the continuation of the discussion in its relevant committees of all their agenda items related to terrorism and counter-terrorism, to undertake the following steps for the effective follow-up of the Strategy:

\(^2\) A/60/825.
(a) To launch the Strategy at a high-level segment of its sixty-first session;

(b) To examine in two years progress made in the implementation of the Strategy, and to consider updating it to respond to changes, recognizing that many of the measures contained in the Strategy can be achieved immediately, some will require sustained work through the coming few years and some should be treated as long-term objectives;

(c) To invite the Secretary-General to contribute to the future deliberations of the General Assembly on the review of the implementation and updating of the Strategy;

(d) To encourage Member States, the United Nations and other appropriate international, regional and subregional organizations to support the implementation of the Strategy, including through mobilizing resources and expertise;

(e) To further encourage non-governmental organizations and civil society to engage, as appropriate, on how to enhance efforts to implement the Strategy;

4. Decides to include in the provisional agenda of its sixty-second session an item entitled “The United Nations Global Counter-Terrorism Strategy”.

Annex

Plan of action

We, the States Members of the United Nations, resolve:

1. To consistently, unequivocally and strongly condemn terrorism in all its forms and manifestations, committed by whomever, wherever and for whatever purposes, as it constitutes one of the most serious threats to international peace and security;

2. To take urgent action to prevent and combat terrorism in all its forms and manifestations and, in particular:

   (a) To consider becoming parties without delay to the existing international conventions and protocols against terrorism, and implementing them, and to make every effort to reach an agreement on and conclude a comprehensive convention on international terrorism;

   (b) To implement all General Assembly resolutions on measures to eliminate international terrorism and relevant General Assembly resolutions on the protection of human rights and fundamental freedoms while countering terrorism;

   (c) To implement all Security Council resolutions related to international terrorism and to cooperate fully with the counter-terrorism subsidiary bodies of the Security Council in the fulfilment of their tasks, recognizing that many States continue to require assistance in implementing these resolutions;

3. To recognize that international cooperation and any measures that we undertake to prevent and combat terrorism must comply with our obligations under international law, including the Charter of the United Nations and relevant international conventions and protocols, in particular human rights law, refugee law and international humanitarian law.
I. Measures to address the conditions conducive to the spread of terrorism

We resolve to undertake the following measures aimed at addressing the conditions conducive to the spread of terrorism, including but not limited to prolonged unresolved conflicts, dehumanization of victims of terrorism in all its forms and manifestations, lack of the rule of law and violations of human rights, ethnic, national and religious discrimination, political exclusion, socio-economic marginalization and lack of good governance, while recognizing that none of these conditions can excuse or justify acts of terrorism:

1. To continue to strengthen and make best possible use of the capacities of the United Nations in areas such as conflict prevention, negotiation, mediation, conciliation, judicial settlement, rule of law, peacekeeping and peacebuilding, in order to contribute to the successful prevention and peaceful resolution of prolonged unresolved conflicts. We recognize that the peaceful resolution of such conflicts would contribute to strengthening the global fight against terrorism;

2. To continue to arrange under the auspices of the United Nations initiatives and programmes to promote dialogue, tolerance and understanding among civilizations, cultures, peoples and religions, and to promote mutual respect for and prevent the defamation of religions, religious values, beliefs and cultures. In this regard, we welcome the launching by the Secretary-General of the initiative on the Alliance of Civilizations. We also welcome similar initiatives that have been taken in other parts of the world;

3. To promote a culture of peace, justice and human development, ethnic, national and religious tolerance and respect for all religions, religious values, beliefs or cultures by establishing and encouraging, as appropriate, education and public awareness programmes involving all sectors of society. In this regard, we encourage the United Nations Educational, Scientific and Cultural Organization to play a key role, including through inter-faith and intra-faith dialogue and dialogue among civilizations;

4. To continue to work to adopt such measures as may be necessary and appropriate and in accordance with our respective obligations under international law to prohibit by law incitement to commit a terrorist act or acts and prevent such conduct;

5. To reiterate our determination to ensure the timely and full realization of the development goals and objectives agreed at the major United Nations conferences and summits, including the Millennium Development Goals. We reaffirm our commitment to eradicate poverty and promote sustained economic growth, sustainable development and global prosperity for all;

6. To pursue and reinforce development and social inclusion agendas at every level as goals in themselves, recognizing that success in this area, especially on youth unemployment, could reduce marginalization and the subsequent sense of victimization that propels extremism and the recruitment of terrorists;

7. To encourage the United Nations system as a whole to scale up the cooperation and assistance it is already conducting in the fields of rule of law, human rights and good governance to support sustained economic and social development;

8. To consider putting in place, on a voluntary basis, national systems of assistance that would promote the needs of victims of terrorism and their families and facilitate the normalization of their lives. In this regard, we encourage States to request the relevant United Nations entities to help them to develop such national
systems. We will also strive to promote international solidarity in support of victims and foster the involvement of civil society in a global campaign against terrorism and for its condemnation. This could include exploring at the General Assembly the possibility of developing practical mechanisms to provide assistance to victims.

II. Measures to prevent and combat terrorism

We resolve to undertake the following measures to prevent and combat terrorism, in particular by denying terrorists access to the means to carry out their attacks, to their targets and to the desired impact of their attacks:

1. To refrain from organizing, instigating, facilitating, participating in, financing, encouraging or tolerating terrorist activities and to take appropriate practical measures to ensure that our respective territories are not used for terrorist installations or training camps, or for the preparation or organization of terrorist acts intended to be committed against other States or their citizens;

2. To cooperate fully in the fight against terrorism, in accordance with our obligations under international law, in order to find, deny safe haven and bring to justice, on the basis of the principle of extradite or prosecute, any person who supports, facilitates, participates or attempts to participate in the financing, planning, preparation or perpetration of terrorist acts or provides safe havens;

3. To ensure the apprehension and prosecution or extradition of perpetrators of terrorist acts, in accordance with the relevant provisions of national and international law, in particular human rights law, refugee law and international humanitarian law. We will endeavour to conclude and implement to that effect mutual judicial assistance and extradition agreements and to strengthen cooperation between law enforcement agencies;

4. To intensify cooperation, as appropriate, in exchanging timely and accurate information concerning the prevention and combating of terrorism;

5. To strengthen coordination and cooperation among States in combating crimes that might be connected with terrorism, including drug trafficking in all its aspects, illicit arms trade, in particular of small arms and light weapons, including man-portable air defence systems, money-laundering and smuggling of nuclear, chemical, biological, radiological and other potentially deadly materials;

6. To consider becoming parties without delay to the United Nations Convention against Transnational Organized Crime and to the three protocols supplementing it, and implementing them;

7. To take appropriate measures, before granting asylum, for the purpose of ensuring that the asylum-seeker has not engaged in terrorist activities and, after granting asylum, for the purpose of ensuring that the refugee status is not used in a manner contrary to the provisions set out in section II, paragraph 1, above;

8. To encourage relevant regional and subregional organizations to create or strengthen counter-terrorism mechanisms or centres. Should they require cooperation and assistance to this end, we encourage the Counter-Terrorism Committee and its Executive Directorate and, where consistent with their existing

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3 Resolution 55/25, annex I.
4 Resolution 55/25, annexes II and III; and resolution 55/255, annex.
mandates, the United Nations Office on Drugs and Crime and the International Criminal Police Organization, to facilitate its provision;

9. To acknowledge that the question of creating an international centre to fight terrorism could be considered, as part of international efforts to enhance the fight against terrorism;

10. To encourage States to implement the comprehensive international standards embodied in the Forty Recommendations on Money-Laundering and Nine Special Recommendations on Terrorist Financing of the Financial Action Task Force, recognizing that States may require assistance in implementing them;

11. To invite the United Nations system to develop, together with Member States, a single comprehensive database on biological incidents, ensuring that it is complementary to the biocrimes database contemplated by the International Criminal Police Organization. We also encourage the Secretary-General to update the roster of experts and laboratories, as well as the technical guidelines and procedures, available to him for the timely and efficient investigation of alleged use. In addition, we note the importance of the proposal of the Secretary-General to bring together, within the framework of the United Nations, the major biotechnology stakeholders, including industry, the scientific community, civil society and Governments, into a common programme aimed at ensuring that biotechnology advances are not used for terrorist or other criminal purposes but for the public good, with due respect for the basic international norms on intellectual property rights;

12. To work with the United Nations with due regard to confidentiality, respecting human rights and in compliance with other obligations under international law, to explore ways and means to:

(a) Coordinate efforts at the international and regional levels to counter terrorism in all its forms and manifestations on the Internet;

(b) Use the Internet as a tool for countering the spread of terrorism, while recognizing that States may require assistance in this regard;

13. To step up national efforts and bilateral, subregional, regional and international cooperation, as appropriate, to improve border and customs controls in order to prevent and detect the movement of terrorists and prevent and detect the illicit traffic in, inter alia, small arms and light weapons, conventional ammunition and explosives, and nuclear, chemical, biological or radiological weapons and materials, while recognizing that States may require assistance to that effect;

14. To encourage the Counter-Terrorism Committee and its Executive Directorate to continue to work with States, at their request, to facilitate the adoption of legislation and administrative measures to implement the terrorist travel-related obligations and to identify best practices in this area, drawing whenever possible on those developed by technical international organizations, such as the International Civil Aviation Organization, the World Customs Organization and the International Criminal Police Organization;

15. To encourage the Committee established pursuant to Security Council resolution 1267 (1999) to continue to work to strengthen the effectiveness of the travel ban under the United Nations sanctions regime against Al-Qaeda and the Taliban and associated individuals and entities, as well as to ensure, as a matter of priority, that fair and transparent procedures exist for placing individuals and entities on its lists, for removing them and for granting humanitarian exceptions. In
this regard, we encourage States to share information, including by widely distributing the International Criminal Police Organization/United Nations special notices concerning people subject to this sanctions regime;

16. To step up efforts and cooperation at every level, as appropriate, to improve the security of manufacturing and issuing identity and travel documents and to prevent and detect their alteration or fraudulent use, while recognizing that States may require assistance in doing so. In this regard, we invite the International Criminal Police Organization to enhance its database on stolen and lost travel documents, and we will endeavour to make full use of this tool, as appropriate, in particular by sharing relevant information;

17. To invite the United Nations to improve coordination in planning a response to a terrorist attack using nuclear, chemical, biological or radiological weapons or materials, in particular by reviewing and improving the effectiveness of the existing inter-agency coordination mechanisms for assistance delivery, relief operations and victim support, so that all States can receive adequate assistance. In this regard, we invite the General Assembly and the Security Council to develop guidelines for the necessary cooperation and assistance in the event of a terrorist attack using weapons of mass destruction;

18. To step up all efforts to improve the security and protection of particularly vulnerable targets, such as infrastructure and public places, as well as the response to terrorist attacks and other disasters, in particular in the area of civil protection, while recognizing that States may require assistance to this effect.

III. Measures to build States’ capacity to prevent and combat terrorism and to strengthen the role of the United Nations system in this regard

We recognize that capacity-building in all States is a core element of the global counter-terrorism effort, and resolve to undertake the following measures to develop State capacity to prevent and combat terrorism and enhance coordination and coherence within the United Nations system in promoting international cooperation in countering terrorism:

1. To encourage Member States to consider making voluntary contributions to United Nations counter-terrorism cooperation and technical assistance projects, and to explore additional sources of funding in this regard. We also encourage the United Nations to consider reaching out to the private sector for contributions to capacity-building programmes, in particular in the areas of port, maritime and civil aviation security;

2. To take advantage of the framework provided by relevant international, regional and subregional organizations to share best practices in counter-terrorism capacity-building, and to facilitate their contributions to the international community’s efforts in this area;

3. To consider establishing appropriate mechanisms to rationalize States’ reporting requirements in the field of counter-terrorism and eliminate duplication of reporting requests, taking into account and respecting the different mandates of the General Assembly, the Security Council and its subsidiary bodies that deal with counter-terrorism;

4. To encourage measures, including regular informal meetings, to enhance, as appropriate, more frequent exchanges of information on cooperation and technical assistance among Member States, United Nations bodies dealing with counter-terrorism, relevant specialized agencies, relevant international, regional and
subregional organizations and the donor community, to develop States’ capacities to implement relevant United Nations resolutions;

5. To welcome the intention of the Secretary-General to institutionalize, within existing resources, the Counter-Terrorism Implementation Task Force within the Secretariat in order to ensure overall coordination and coherence in the counter-terrorism efforts of the United Nations system;

6. To encourage the Counter-Terrorism Committee and its Executive Directorate to continue to improve the coherence and efficiency of technical assistance delivery in the field of counter-terrorism, in particular by strengthening its dialogue with States and relevant international, regional and subregional organizations and working closely, including by sharing information, with all bilateral and multilateral technical assistance providers;

7. To encourage the United Nations Office on Drugs and Crime, including its Terrorism Prevention Branch, to enhance, in close consultation with the Counter-Terrorism Committee and its Executive Directorate, its provision of technical assistance to States, upon request, to facilitate the implementation of the international conventions and protocols related to the prevention and suppression of terrorism and relevant United Nations resolutions;

8. To encourage the International Monetary Fund, the World Bank, the United Nations Office on Drugs and Crime and the International Criminal Police Organization to enhance cooperation with States to help them to comply fully with international norms and obligations to combat money-laundering and the financing of terrorism;

9. To encourage the International Atomic Energy Agency and the Organization for the Prohibition of Chemical Weapons to continue their efforts, within their respective mandates, in helping States to build capacity to prevent terrorists from accessing nuclear, chemical or radiological materials, to ensure security at related facilities and to respond effectively in the event of an attack using such materials;

10. To encourage the World Health Organization to step up its technical assistance to help States to improve their public health systems to prevent and prepare for biological attacks by terrorists;

11. To continue to work within the United Nations system to support the reform and modernization of border management systems, facilities and institutions at the national, regional and international levels;

12. To encourage the International Maritime Organization, the World Customs Organization and the International Civil Aviation Organization to strengthen their cooperation, work with States to identify any national shortfalls in areas of transport security and provide assistance, upon request, to address them;

13. To encourage the United Nations to work with Member States and relevant international, regional and subregional organizations to identify and share best practices to prevent terrorist attacks on particularly vulnerable targets. We invite the International Criminal Police Organization to work with the Secretary-General so that he can submit proposals to this effect. We also recognize the importance of developing public-private partnerships in this area.
IV. Measures to ensure respect for human rights for all and the rule of law as the fundamental basis of the fight against terrorism

We resolve to undertake the following measures, reaffirming that the promotion and protection of human rights for all and the rule of law is essential to all components of the Strategy, recognizing that effective counter-terrorism measures and the protection of human rights are not conflicting goals, but complementary and mutually reinforcing, and stressing the need to promote and protect the rights of victims of terrorism:

1. To reaffirm that General Assembly resolution 60/158 of 16 December 2005 provides the fundamental framework for the “Protection of human rights and fundamental freedoms while countering terrorism”;

2. To reaffirm that States must ensure that any measures taken to combat terrorism comply with their obligations under international law, in particular human rights law, refugee law and international humanitarian law;

3. To consider becoming parties without delay to the core international instruments on human rights law, refugee law and international humanitarian law, and implementing them, as well as to consider accepting the competence of international and relevant regional human rights monitoring bodies;

4. To make every effort to develop and maintain an effective and rule of law-based national criminal justice system that can ensure, in accordance with our obligations under international law, that any person who participates in the financing, planning, preparation or perpetration of terrorist acts or in support of such terrorist acts is brought to justice, on the basis of the principle to extradite or prosecute, with due respect for human rights and fundamental freedoms, and that such terrorist acts are established as serious criminal offences in domestic laws and regulations. We recognize that States may require assistance in developing and maintaining such effective and rule of law-based criminal justice systems, and we encourage them to resort to the technical assistance delivered, inter alia, by the United Nations Office on Drugs and Crime;

5. To reaffirm the important role of the United Nations system in strengthening the international legal architecture by promoting the rule of law, respect for human rights and effective criminal justice systems, which constitute the fundamental basis of our common fight against terrorism;

6. To support the Human Rights Council and to contribute, as it takes shape, to its work on the question of the promotion and protection of human rights for all in the fight against terrorism;

7. To support the strengthening of the operational capacity of the Office of the United Nations High Commissioner for Human Rights, with a particular emphasis on increasing field operations and presences. The Office should continue to play a lead role in examining the question of protecting human rights while countering terrorism, by making general recommendations on the human rights obligations of States and providing them with assistance and advice, in particular in the area of raising awareness of international human rights law among national law-enforcement agencies, at the request of States;

8. To support the role of the Special Rapporteur on the promotion and protection of human rights and fundamental freedoms while countering terrorism. The Special Rapporteur should continue to support the efforts of States and offer concrete advice by corresponding with Governments, making country visits, liaising with the United Nations and regional organizations and reporting on these issues.
Resolution adopted by the General Assembly

[on the report of the First Committee (A/62/391)]


The General Assembly,

Recalling its previous resolutions on the subject of chemical weapons, in particular resolution 61/68 of 6 December 2006, adopted without a vote, in which it noted with appreciation the ongoing work to achieve the objective and purpose of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction,1

Determined to achieve the effective prohibition of the development, production, acquisition, transfer, stockpiling and use of chemical weapons and their destruction,

Noting with satisfaction that, since the adoption of resolution 61/68, one additional State has acceded to the Convention, bringing the total number of States parties to the Convention to one hundred and eighty-two,

Reaffirming the importance of the outcome of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention, including the Political Declaration,2 in which the States parties reaffirmed their commitment to achieving the objective and purpose of the Convention, and the final report,3 which addressed all aspects of the Convention and made important recommendations on its continued implementation,

1. Emphasizes that the universality of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction1 is fundamental to the achievement of its objective and purpose, acknowledges progress made in the implementation of the action plan for the universality of the Convention, and calls upon all States that have not yet done so to become parties to the Convention without delay;

3 Ibid., document RC-1/5.
2. **Underlines** the fact that the Convention and its implementation contribute to enhancing international peace and security, and emphasizes that its full, universal and effective implementation will contribute further to that purpose by excluding completely, for the sake of all humankind, the possibility of the use of chemical weapons;

3. **Stresses** the importance to the Convention that all possessors of chemical weapons, chemical weapons production facilities or chemical weapons development facilities, including previously declared possessor States, should be among the States parties to the Convention, and welcomes progress to that end;

4. **Reaffirms** the obligation of the States parties to the Convention to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Convention;

5. **Stresses** that the full and effective implementation of all provisions of the Convention, including those on national implementation (article VII) and assistance and protection (article X), constitutes an important contribution to the efforts of the United Nations in the global fight against terrorism in all its forms and manifestations;

6. **Notes** that the effective application of the verification system builds confidence in compliance with the Convention by States parties;

7. **Stresses** the importance of the Organization for the Prohibition of Chemical Weapons in verifying compliance with the provisions of the Convention as well as in promoting the timely and efficient accomplishment of all its objectives;

8. **Urges** all States parties to the Convention to meet in full and on time their obligations under the Convention and to support the Organization for the Prohibition of Chemical Weapons in its implementation activities;

9. **Welcomes** progress made in the national implementation of article VII obligations, commends the States parties and the Technical Secretariat for assisting other States parties, on request, with the implementation of the follow-up to the plan of action regarding article VII obligations, and urges States parties that have not fulfilled their obligations under article VII to do so without further delay, in accordance with their constitutional processes;

10. **Reaffirms** the importance of article XI provisions relating to the economic and technological development of States parties, recalls that the full, effective and non-discriminatory implementation of those provisions contributes to universality, and also reaffirms the undertaking of the States parties to foster international cooperation for peaceful purposes in the field of chemical activities of the States parties and the importance of that cooperation and its contribution to the promotion of the Convention as a whole;

11. **Notes with appreciation** the ongoing work of the Organization for the Prohibition of Chemical Weapons to achieve the objective and purpose of the Convention, to ensure the full 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, and also notes with appreciation the substantial contribution of the Technical Secretariat and the Director-General to the continued development and success of the Organization;

12. **Welcomes** the ongoing preparatory work by the States parties on the substance of the Second Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention;
13. *Also welcomes* all the national and international events conducted throughout 2007 devoted to the tenth anniversary of the entry into force of the Convention, in particular the unveiling in The Hague, on 9 May 2007, of the Permanent Memorial to All Victims of Chemical Weapons as testimony to the international community’s commitment to peace and hope for the future;

14. *Notes with satisfaction* that the High-level Meeting on the Tenth Anniversary of the Entry into Force of the Convention, convened by Poland and the Netherlands at the United Nations in New York on 27 September 2007, provided a special occasion for the international community to remember all victims of chemical weapons and to reaffirm the commitment to multilateralism and to the object and purpose of the Convention;


16. *Decides* to include in the provisional agenda of its sixty-third session the item entitled “Implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction”.

61st plenary meeting
5 December 2007

[Adopted by the Security Council on 3 April 1991]

The Security Council


Welcoming the restoration to Kuwait of its sovereignty, independence and territorial integrity and the return of its legitimate Government,

Affirming the commitment of all Member States to the sovereignty, territorial integrity and political independence of Kuwait and Iraq, and noting the intention expressed by the Member States cooperating with Kuwait under paragraph 2 of resolution 678 (1990) to bring their military presence in Iraq to an end as soon as possible consistent with paragraph 8 of resolution 686 (1991),

Reaffirming the need to be assured of Iraq’s peaceful intentions in the light of its unlawful invasion and occupation of Kuwait,

Taking note of the letter sent by the Minister for Foreign Affairs of Iraq on 27 February 1991 and those sent pursuant to resolution 686 (1991),

Noting that Iraq and Kuwait, as independent sovereign States, signed at Baghdad on 4 October 1963 ‘Agreed Minutes Between the States of Kuwait and the Republic of Iraq Regarding the Restoration of Friendly Relations, Recognition and Related Matters’, thereby recognizing formally the boundary between Iraq and Kuwait and the allocation of islands, which were registered with the United Nations in accordance with Article 102 of the Charter of the United Nations and in which Iraq recognized the independence and complete sovereignty of the State of Kuwait within its borders as specified and accepted in the letter of the Prime Minister of Iraq dated 21 July 1932, and as accepted by the Ruler of Kuwait in his letter dated 10 August 1932,

Conscious of the need for demarcation of the said boundary,

Conscious also of the statements by Iraq threatening to use weapons in violation of its obligations under the Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, and of its prior use of chemical weapons and affirming that grave consequences would follow any further use by Iraq of such weapons,

Recalling that Iraq has subscribed to the Declaration adopted by all States participating in the Conference of States Parties to the 1925 Geneva Protocol and Other Interested States, held in Paris from 7 to 11 January 1989, establishing the objective of universal elimination of chemical and biological weapons,

Recalling also that Iraq has signed the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, of 10 April 1972,

Noting the importance of Iraq ratifying this Convention,

Noting moreover the importance of all States adhering to this Convention and encouraging its forthcoming Review Conference to reinforce the authority, efficiency and universal scope of the Convention,

Stressing the importance of an early conclusion by the Conference on Disarmament of its work on a Convention on the Universal Prohibition of Chemical Weapons and of universal adherance thereto,

Aware of the use by Iraq of ballistic missiles in unprovoked attacks and therefore of the need to take specific measures in regard to such missiles located in Iraq,

Concerned by the reports in the hands of Member States that Iraq has attempted to acquire materials for a nuclear-weapons programme contrary to its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968,

Recalling the objectives of the establishment of a nuclear-weapons-free zone in the region of the Middle East,

Conscious of the threat that all weapons of mass destruction pose to peace and security in the area and of the need to work towards the establishment in the Middle East of a zone free of such weapons,

Conscious also of the objective of achieving balanced and comprehensive control of armaments in the region,

Conscious further of the importance of achieving the objectives noted above using all available means, including dialogue among the States of the region,

Noting that resolution 686 (1991) marked the lifting of the measures imposed by resolution 661 (1990) in so far as they applied to Kuwait,

Noting that despite the progress being made in fulfilling the obligations of resolution 686 (1991), many Kuwait and third country nationals are still not accounted for and property remains unreturned,

Recalling the International Convention against the Taking of Hostages, opened for signature at New York on 18 December 1979, which categorizes all acts of taking hostages as manifestations of international terrorism,

Deploring threats made by Iraq during the recent conflict to make use of terrorism against targets outside Iraq and the taking of hostages by Iraq,

Taking note with grave concern of the reports of the Secretary-General of 20 March 1991 and 28 March 1991, and conscious of the necessity to meet urgently the humanitarian needs in Kuwait and Iraq,

Bearing in mind its objectives of restoring international peace and security in the area as set out in recent resolutions of the Security Council,

Conscious of the need to take the following measures acting under Chapter VII of the Charter,

1. Affirms all thirteen resolutions noted above, except as expressly changed below to achieve the goals of this resolution, including a formal cease-fire;

2. Demands that Iraq and Kuwait respect the inviolability of the international boundary and the

3. Calls upon the Secretary-General to lend his assistance to make arrangements with Iraq and Kuwait to demarcate the boundary between Iraq and Kuwait, drawing on appropriate material, including the map transmitted by Security Council document S/22412 and to report back to the Security Council within one month;

4. Decides to guarantee the inviolability of the above-mentioned international boundary and to take as appropriate all necessary measures to that end in accordance with the Charter of the United Nations;

B

5. Requests the Secretary-General, after consulting with Iraq and Kuwait, to submit within three days to the Security Council for its approval a plan for the immediate deployment of a United Nations observer unit to monitor the Khor Abdullah and a demilitarized zone, which is hereby established, extending ten kilometres into Iraq and five kilometres into Kuwait from the boundary referred to in the ‘Agreed Minutes Between the State of Kuwait and the Republic of Iraq Regarding the Restoration of Friendly Relations, Recognition and Related Matters’ of 4 October 1963; to deter violations of the boundary through its presence in and surveillance of the demilitarized zone; to observe any hostile or potentially hostile action mounted from the territory of one State to the other; and for the Secretary-General to report regularly to the Security Council on the operations of the unit, and immediately if there are serious violations of the zone or potential threats to peace;

6. Notes that as soon as the Secretary-General notifies the Security Council of the completion of the deployment of the United Nations observer unit, the conditions will be established for the Member States cooperating with Kuwait in accordance with resolution 678 (1990) to bring their military presence in Iraq to an end consistent with resolution 686 (1991);

C

7. Invites Iraq to reaffirm unconditionally its obligations under the Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, and to ratify the Convention of the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, of 10 April 1972;

8. Decides that Iraq shall unconditionally accept the destruction, removal, or rendering harmless, under international supervision, of:

(a) All chemical and biological weapons and all stocks of agents and all related subsystems and components and all research, development, support and manufacturing facilities;

(b) All ballistic missiles with a range greater than 150 kilometres and related major parts, and repair and production facilities;

9. Decides, for the implementation of paragraph 8 above, the following:

(a) Iraq shall submit to the Secretary-General, within fifteen days of the adoption of the present resolution, a declaration of the locations, amounts and types of all items specified in paragraph 8 and agree to urgent, on-site inspection as specified below;

(b) The Secretary-General, in consultation with the appropriate Governments and, where appropriate, with the Director General of the World Health Organization, within forty-five days of the passage of the present resolution, shall develop, and submit to the Council for approval, a plan calling for the completion of the following acts within forty-five days of such approval:

(i) The forming of a Special Commission, which shall carry out immediate on-site inspection of Iraq’s biological, chemical and missile capabilities, based on Iraq’s declarations and the designation of any additional locations by the Special Commission itself;

(ii) The yielding by Iraq of possession to the Special Commission for destruction, removal or rendering harmless, taking into account the requirements of public safety, of all items specified under paragraph 8(a) above, including items at the additional locations designated by the Special Commission under paragraph 9(b)(i) above and the destruction by Iraq, under the supervision of the Special Commission, of all its missile capabilities, including launchers, as specified under paragraph 8(b) above;

(iii) The provision by the Special Commission of the assistance and cooperation to the Director-General of the International Atomic Energy Agency required in paragraphs 12 and 13 below;

10. Decides that Iraq shall unconditionally undertake not to use, develop, construct or acquire any of the items specified in paragraphs 8 and 9 above and requests the Secretary-General, in consultation with the Special Commission, to develop a plan for the future ongoing monitoring and verification of Iraq’s compliance with this paragraph, to be submitted to the Security Council for approval within one hundred and twenty days of the passage of this resolution;

11. Invites Iraq to reaffirm unconditionally its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968;

12. Decides that Iraq shall unconditionally agree not to acquire or develop nuclear weapons or nuclear-weapons-usable material or any subsystems or components or any research, development, support or manufacturing facilities related to the above; to submit to the Secretary-General and the Director-General of the International Atomic Energy Agency within fifteen days of the adoption of the present resolution a declaration of the locations, amounts, and types of all items specified above; to place all of its nuclear-weapons-usable materials under the exclusive control, for custody and removal, of the International Atomic Energy Agency, with the assistance and cooperation of the Special Commission as provided for in the plan of the Secretary-General discussed in paragraph 9(b) above; to accept, in accordance with the arrangements provided for in paragraph 13 below, urgent on-site
inspection and the destruction, removal or rendering harmless as appropriate of all items specified above; and to accept the plan discussed in paragraph 13 below for the future ongoing monitoring and verification of its compliance with these undertakings;

13. Requests the Director-General of the International Atomic Energy Agency, through the Secretary-General, with the assistance and cooperation of the Special Commission as provided for in the plan of the Secretary-General in paragraph 9(b) above, to carry out immediate on-site inspection of Iraq’s nuclear capabilities based on Iraq’s declarations and the designations of any additional locations by the Special Commission; to develop a plan for submission to the Security Council within forty-five days calling for the destruction, removal, or rendering harmless as appropriate of all items listed in paragraph 12 above; to carry out the plan within forty-five days following approval by the Security Council; and to develop a plan, taking into account the rights and obligations of Iraq under the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968, for the future ongoing monitoring and verification of Iraq’s compliance with paragraph 13 above, including an inventory of all nuclear material in Iraq subject to the Agency’s verification and inspections of the International Atomic Energy Agency to confirm that the Agency’s safeguards cover all relevant nuclear activities in Iraq, to be submitted to the Security Council for approval within one hundred and twenty days of the passage of the present resolution;

14. Takes note that the actions to be taken by Iraq in paragraphs 8, 9, 10, 11, 12 and 13 of the present resolution represent steps towards the goal of establishing in the Middle East a zone free from weapons of mass destruction and all missiles for their delivery and the objective of a global ban on chemical weapons;

D

15. Requests the Secretary-General to report to the Security Council on the steps taken to facilitate the return of all Kuwaiti property seized by Iraq, including a list of any property that Kuwait claims has not been returned or which has not been returned intact;

E

16. Reaffirms that Iraq, without prejudice to the debts and obligations of Iraq arising prior to 2 August 1990, which will be addressed through the normal mechanisms, is liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq’s unlawful invasion and occupation of Kuwait;

17. Decides that all Iraqi statements made since 2 August 1990 repudiating its foreign debt are null and void, and demands that Iraq adhere scrupulously to all of its obligations concerning servicing and repayment of its foreign debt;

18. Decides also to create a fund to pay compensation for claims that fall within paragraph 16 above and to establish a Commission that will administer the fund;

19. Directs the Secretary-General to develop and present to the Security Council for decision, no later than thirty days following the adoption of the present resolution, recommendations for the fund to meet the requirement for the payment of claims established in accordance with paragraph 18 above and for a programme to implement the decisions in paragraphs 16, 17 and 18 above, including: administration of the fund; mechanisms for determining the appropriate level of Iraq’s contribution to the fund based on a percentage of the value of the exports of petroleum and petroleum products from Iraq not to exceed a figure to be suggested to the Council by the Secretary-General, taking into account the requirements of the people of Iraq, Iraq’s payment capacity as assessed in conjunction with the international financial institutions taking into consideration external debt service, and the needs of the Iraqi economy; arrangements for ensuring that payments are made to the fund; the process by which funds will be allocated and claims paid; appropriate procedures for evaluating losses, listing claims and verifying their validity and resolving disputed claims in respect of Iraq’s liability as specified in paragraph 16 above; and the composition of the Commission designated above;

F

20. Decides, effective immediately, that the prohibitions against the sale or supply to Iraq of commodities or products, other than medicine and health supplies, and prohibitions against financial transactions related thereto contained in resolution 661 (1990) shall not apply to foodstuffs notified to the Security Council Committee established by resolution 661 (1990) concerning the situation between Iraq and Kuwait or, with the approval of that Committee, under the simplified and accelerated ‘no-objection’ procedure, to materials and supplies for essential civilian needs as identified in the report of the Secretary-General dated 20 March 1991, and in any further findings of humanitarian need by the Committee;

21. Decides that the Security Council shall review the provisions of paragraph 20 above every sixty days in the light of the policies and practices of the Government of Iraq, including the implementation of all relevant resolutions of the Security Council, for the purpose of determining whether to reduce or lift the prohibitions referred to therein;

22. Decides that upon the approval by the Security Council of the programme called for in paragraph 19 above and upon Council agreement that Iraq has completed all actions contemplated in paragraphs 8, 9, 10, 11, 12 and 13 above, the prohibitions against the import of commodities and products originating in Iraq and the prohibitions against financial transactions related thereto contained in resolution 661 (1990) shall have no further force or effect;

23. Decides that, pending action by the Security Council under paragraph 22 above, the Security Council Committee established by resolution 661 (1990) shall be empowered to approve, when required to assure adequate financial resources on the part of Iraq to carry out the activities under paragraph 20 above, exceptions to the prohibition against the import of commodities and products originating in Iraq;

24. Decides that, in accordance with resolution 661 (1990) and subsequent related resolutions and until a further decision is taken by the Security Council, all States
shall continue to prevent the sale or supply, or the promotion or facilitation of such sale or supply, to Iraq by their nationals, or from their territories or using their flag vessels or aircraft, of:

(a) Arms and related matériel of all types, specifically including the sale or transfer through other means of all forms of conventional military equipment, including for paramilitary forces, and spare parts and components and their means of production, for such equipment;

(b) Items specified and defined in paragraphs 8 and 12 above not otherwise covered above;

(c) Technology under licensing or other transfer arrangements used in the production, utilization or stockpiling of items specified in subparagraphs (a) and (b) above;

(d) Personnel or materials for training or technical support services relating to the design, development, manufacture, use, maintenance or support of items specified in subparagraphs (a) and (b) above;

25. Calls upon all States and international organizations to act strictly in accordance with paragraph 24 above, notwithstanding the existence of any contracts, agreements, licences or any other arrangements;

26. Requests the Secretary-General, in consultation with appropriate Governments, to develop within sixty days, for the approval of the Security Council, guidelines to facilitate full international implementation of paragraphs 24 and 26 above and paragraph 27 below, and to make them available to all States and to establish a procedure for updating these guidelines periodically;

27. Calls upon all States to maintain such national controls and procedures and to take such other actions consistent with the guidelines to be established by the Security Council under paragraph 26 above as may be necessary to ensure compliance with the terms of paragraph 24 above, and calls upon international organizations to take all appropriate steps to assist in ensuring such full compliance;

28. Agrees to review its decisions in paragraphs 22, 23, 24 and 25 above, except for the items specified and defined in paragraphs 8 and 12 above, on a regular basis and in any case one hundred and twenty days following passage of the present resolution, taking into account Iraq’s compliance with the resolution and general progress towards the control of armaments in the region;

29. Decides that all States, including Iraq, shall take the necessary measures to ensure that no claim shall lie at the instance of the Government of Iraq, or of any person or body in Iraq, or of any person claiming through or for the benefit of any such person or body, in connection with any contract or other transaction where its performance was affected by reason of the measures taken by the Security Council in resolution 661 (1990) and related resolutions;

G

30. Decides that, in furtherance of its commitment to facilitate the repatriation of all Kuwaiti and third country nationals, Iraq shall extend all necessary cooperation to the International Committee of the Red Cross, providing lists of such persons, facilitating the access of the International Committee of the Red Cross to all such persons wherever located or detained and facilitating the search by the International Committee of the Red Cross for those Kuwaiti and third country nationals or their remains present in Iraq on or after 2 August 1990;

31. Invites the International Committee of the Red Cross to keep the Secretary-General apprised as appropriate of all activities undertaken in connection with facilitating the repatriation or return of all Kuwaiti and third country nationals or their remains present in Iraq on or after 2 August 1990;

32. Requires Iraq to inform the Security Council that it will not commit or support any act of international terrorism or allow any organization directed towards commission of such acts to operate within its territory and to condemn unequivocally and renounce all acts, methods and practices of terrorism;

33. Declares that, upon official notification by Iraq to the Secretary-General and to the Security Council of its acceptance of the provisions above, a formal cease-fire is effective between Iraq and Kuwait and the Member States cooperating with Kuwait in accordance with resolution 678 (1990);

34. Decides to remain seized of the matter and to take such further steps as may be required for the implementation of the present resolution and to secure peace and security in the area.
NOTE BY THE PRESIDENT OF THE SECURITY COUNCIL

At the conclusion of the 3046th meeting of the Security Council, held at the level of Heads of State and Government on 31 January 1992 in connection with the item entitled "The responsibility of the Security Council in the maintenance of international peace and security", the President of the Security Council made the following statement on behalf of the members of the Council.

"The members of the Security Council have authorized me to make the following statement on their behalf.


1/ The meeting was chaired by the Prime Minister of the United Kingdom of Great Britain and Northern Ireland as the President of the Security Council for January. Statements were made by His Excellency Dr. Franz Vranitzky, Federal Chancellor of Austria, His Excellency Mr. Wilfried Martens, Prime Minister of Belgium, His Excellency Dr. Carlos Alberto Wahnon de Carvalho Veiga, Prime Minister of Cape Verde, His Excellency Mr. Li Peng, Premier of the State Council of China, His Excellency Dr. Rodrigo Borja-Cevallos, Constitutional President of Ecuador, His Excellency Mr. François Mitterrand, President of France, His Excellency Dr. Géza Jeszenszky, Minister for Foreign Affairs and Personal Emissary of the Prime Minister of Hungary, His Excellency Mr. P. V. Narasimha Rao, Prime Minister of India, His Excellency Mr. Kiichi Miyazawa, Prime Minister of Japan, His Majesty Hassan II, King of Morocco, His Excellency Mr. Boris N. Yeltsin, President of the Russian Federation, His Excellency the Rt. Hon. John Major MP, Prime Minister of the United Kingdom of Great Britain and Northern Ireland, His Excellency Mr. George Bush, President of the United States of America, His Excellency Dr. Carlos Andrés Pérez, President of Venezuela and His Excellency Dr. Nathan Shamuyarira, Minister of Foreign Affairs and Personal Emissary of the President of Zimbabwe, as well as by the Secretary-General, His Excellency Dr. Boutros Boutros-Ghali.

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"The members of the Security Council consider that their meeting is a timely recognition of the fact that there are new favourable international circumstances under which the Security Council has begun to fulfill more effectively its primary responsibility for the maintenance of international peace and security.

"A time of change

"This meeting takes place at a time of momentous change. The ending of the Cold War has raised hopes for a safer, more equitable and more humane world. Rapid progress has been made, in many regions of the world, towards democracy and responsive forms of government, as well as towards achieving the Purposes set out in the Charter. The completion of the dismantling of apartheid in South Africa would constitute a major contribution to these Purposes and positive trends, including to the encouragement of respect for human rights and fundamental freedoms.

"Last year, under the authority of the United Nations, the international community succeeded in enabling Kuwait to regain its sovereignty and territorial integrity, which it had lost as a result of Iraqi aggression. The resolutions adopted by the Security Council remain essential to the restoration of peace and stability in the region and must be fully implemented. At the same time the members of the Council are concerned by the humanitarian situation of the innocent civilian population of Iraq.

"The members of the Council support the Middle East peace process, facilitated by the Russian Federation and the United States, and hope that it will be brought to a successful conclusion on the basis of Council resolutions 242 (1967) and 338 (1973).

"They welcome the role the United Nations has been able to play under the Charter in progress towards settling long-standing regional disputes, and will work for further progress towards their resolution. They applaud the valuable contribution being made by United Nations peace-keeping forces now operating in Asia, Africa, Latin America and Europe.

"The members of the Council note that United Nations peace-keeping tasks have increased and broadened considerably in recent years. Election monitoring, human rights verification and the repatriation of refugees have in the settlement of some regional conflicts, at the request or with the agreement of the parties concerned, been integral parts of the Security Council's effort to maintain international peace and security. They welcome these developments.

"The members of the Council also recognize that change, however welcome, has brought new risks for stability and security. Some of the most acute problems result from changes to State structures. The members of the Council will encourage all efforts to help achieve peace, stability and cooperation during these changes.
"The international community therefore faces new challenges in the search for peace. All Member States expect the United Nations to play a central role at this crucial stage. The members of the Council stress the importance of strengthening and improving the United Nations to increase its effectiveness. They are determined to assume fully their responsibilities within the United Nations Organization in the framework of the Charter.

"The absence of war and military conflicts amongst States does not in itself ensure international peace and security. The non-military sources of instability in the economic, social, humanitarian and ecological fields have become threats to peace and security. The United Nations membership as a whole, working through the appropriate bodies, needs to give the highest priority to the solution of these matters.

"Commitment to collective security

"The members of the Council pledge their commitment to international law and to the United Nations Charter. All disputes between States should be peacefully resolved in accordance with the provisions of the Charter.

"The members of the council reaffirm their commitment to the collective security system of the Charter to deal with threats to peace and to reverse acts of aggression.

"The members of the Council express their deep concern over acts of international terrorism and emphasize the need for the international community to deal effectively with all such acts.

"Peacemaking and peace-keeping

"To strengthen the effectiveness of these commitments, and in order that the Security Council should have the means to discharge its primary responsibility under the Charter for the maintenance of international peace and security, the members of the Council have decided on the following approach.

"They invite the Secretary-General to prepare, for circulation to the Members of the United Nations by 1 July 1992, his analysis and recommendations on ways of strengthening and making more efficient within the framework and provisions of the Charter the capacity of the United Nations for preventive diplomacy, for peacemaking and for peace-keeping.

"The Secretary-General's analysis and recommendations could cover the role of the United Nations in identifying potential crises and areas of instability as well as the contribution to be made by regional organizations in accordance with Chapter VIII of the United Nations Charter in helping the work of the Council. They could also cover the need for adequate resources, both material and financial. The
Secretary-General might draw on lessons learned in recent United Nations peace-keeping missions to recommend ways of making more effective Secretariat planning and operations. He could also consider how greater use might be made of his good offices, and of his other functions under the United Nations Charter.

*Disarmament, arms control and weapons of mass destruction*

"The members of the Council, while fully conscious of the responsibilities of other organs of the United Nations in the fields of disarmament, arms control and non-proliferation, reaffirm the crucial contribution which progress in these areas can make to the maintenance of international peace and security. They express their commitment to take concrete steps to enhance the effectiveness of the United Nations in these areas.

"The members of the Council underline the need for all Member States to fulfil their obligations in relation to arms control and disarmament; to prevent the proliferation in all its aspects of all weapons of mass destruction; to avoid excessive and destabilizing accumulations and transfers of arms; and to resolve peacefully in accordance with the Charter any problems concerning these matters threatening or disrupting the maintenance of regional and global stability. They emphasize the importance of the early ratification and implementation by the States concerned of all international and regional arms control arrangements, especially the START and CFE Treaties.

"The proliferation of all weapons of mass destruction constitutes a threat to international peace and security. The members of the Council commit themselves to working to prevent the spread of technology related to the research for or production of such weapons and to take appropriate action to that end.

"On nuclear proliferation, they note the importance of the decision of many countries to adhere to the Non-Proliferation Treaty and emphasize the integral role in the implementation of that Treaty of fully effective IAEA safeguards, as well as the importance of effective export controls. The members of the Council will take appropriate measures in the case of any violations notified to them by the IAEA.

"On chemical weapons, they support the efforts of the Geneva Conference with a view to reaching agreement on the conclusion, by the end of 1992, of a universal convention, including a verification regime, to prohibit chemical weapons.

"On conventional armaments, they note the General Assembly's vote in favour of a United Nations register of arms transfers as a first step, and in this connection recognize the importance of all States providing all the information called for in the General Assembly's resolution.

* * *
"In conclusion, the members of the Security Council affirm their determination to build on the initiative of their meeting in order to secure positive advances in promoting international peace and security. They agree that the United Nations Secretary-General has a crucial role to play. The members of the Council express their deep appreciation to the outgoing Secretary-General, His Excellency Mr. Javier Pérez de Cuéllar, for his outstanding contribution to the work of the United Nations, culminating in the signature of the El Salvador peace agreement. They welcome the new Secretary-General, His Excellency Dr. Boutros Boutros-Ghali, and note with satisfaction his intention to strengthen and improve the functioning of the United Nations. They pledge their full support to him, and undertake to work closely with him and his staff in fulfilment of their shared objectives, including a more efficient and effective United Nations system.

"The members of the Council agree that the world now has the best chance of achieving international peace and security since the foundation of the United Nations. They undertake to work in close cooperation with other United Nations Member States in their own efforts to achieve this, as well as to address urgently all the other problems, in particular those of economic and social development, requiring the collective response of the international community. They recognize that peace and prosperity are indivisible and that lasting peace and stability require effective international cooperation for the eradication of poverty and the promotion of a better life for all in larger freedom."
RESOLUTION 1284 (1999)

Adopted by the Security Council at its 4084th meeting, on 17 December 1999

The Security Council,


Recalling the approval by the Council in its resolution 715 (1991) of the plans for future ongoing monitoring and verification submitted by the Secretary-General and the Director General of the International Atomic Energy Agency (IAEA) in pursuance of paragraphs 10 and 13 of resolution 687 (1991),

Welcoming the reports of the three panels on Iraq (S/1999/356), and having held a comprehensive consideration of them and the recommendations contained in them,

Stressing the importance of a comprehensive approach to the full implementation of all relevant Security Council resolutions regarding Iraq and the need for Iraqi compliance with these resolutions,

Recalling the goal of establishing in the Middle East a zone free from weapons of mass destruction and all missiles for their delivery and the objective of a global ban on chemical weapons as referred to in paragraph 14 of resolution 687 (1991),

Concerned at the humanitarian situation in Iraq, and determined to improve that situation,

Recalling with concern that the repatriation and return of all Kuwaiti and third country nationals or their remains, present in Iraq on or after 2 August 1990, pursuant to paragraph 2 (c) of resolution 686 (1991) of
2 March 1991 and paragraph 30 of resolution 687 (1991), have not yet been fully carried out by Iraq,

Recalling that in its resolutions 686 (1991) and 687 (1991) the Council demanded that Iraq return in the shortest possible time all Kuwaiti property it had seized, and noting with regret that Iraq has still not complied fully with this demand,

Acknowledging the progress made by Iraq towards compliance with the provisions of resolution 687 (1991), but noting that, as a result of its failure to implement the relevant Council resolutions fully, the conditions do not exist which would enable the Council to take a decision pursuant to resolution 687 (1991) to lift the prohibitions referred to in that resolution,

Reiterating the commitment of all Member States to the sovereignty, territorial integrity and political independence of Kuwait, Iraq and the neighbouring States,

Acting under Chapter VII of the Charter of the United Nations, and taking into account that operative provisions of this resolution relate to previous resolutions adopted under Chapter VII of the Charter,

A.

1. Decides to establish, as a subsidiary body of the Council, the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) which replaces the Special Commission established pursuant to paragraph 9 (b) of resolution 687 (1991);

2. Decides also that UNMOVIC will undertake the responsibilities mandated to the Special Commission by the Council with regard to the verification of compliance by Iraq with its obligations under paragraphs 8, 9 and 10 of resolution 687 (1991) and other related resolutions, that UNMOVIC will establish and operate, as was recommended by the panel on disarmament and current and future ongoing monitoring and verification issues, a reinforced system of ongoing monitoring and verification, which will implement the plan approved by the Council in resolution 715 (1991) and address unresolved disarmament issues, and that UNMOVIC will identify, as necessary in accordance with its mandate, additional sites in Iraq to be covered by the reinforced system of ongoing monitoring and verification;

3. Reaffirms the provisions of the relevant resolutions with regard to the role of the IAEA in addressing compliance by Iraq with paragraphs 12 and 13 of resolution 687 (1991) and other related resolutions, and requests the Director General of the IAEA to maintain this role with the assistance and cooperation of UNMOVIC;

4. Reaffirms its resolutions 687 (1991), 699 (1991), 707 (1991), 715 (1991), 1051 (1996), 1154 (1998) and all other relevant resolutions and statements of its President, which establish the criteria for Iraqi compliance, affirms that the obligations of Iraq referred to in those resolutions and statements with regard to cooperation with the Special Commission, unrestricted access and provision of information will apply in respect of UNMOVIC, and
decides in particular that Iraq shall allow UNMOVIC teams immediate, unconditional and unrestricted access to any and all areas, facilities, equipment, records and means of transport which they wish to inspect in accordance with the mandate of UNMOVIC, as well as to all officials and other persons under the authority of the Iraqi Government whom UNMOVIC wishes to interview so that UNMOVIC may fully discharge its mandate;

5. **Requests** the Secretary-General, within 30 days of the adoption of this resolution, to appoint, after consultation with and subject to the approval of the Council, an Executive Chairman of UNMOVIC who will take up his mandated tasks as soon as possible, and, in consultation with the Executive Chairman and the Council members, to appoint suitably qualified experts as a College of Commissioners for UNMOVIC which will meet regularly to review the implementation of this and other relevant resolutions and provide professional advice and guidance to the Executive Chairman, including on significant policy decisions and on written reports to be submitted to the Council through the Secretary-General;

6. **Requests** the Executive Chairman of UNMOVIC, within 45 days of his appointment, to submit to the Council, in consultation with and through the Secretary-General, for its approval an organizational plan for UNMOVIC, including its structure, staffing requirements, management guidelines, recruitment and training procedures, incorporating as appropriate the recommendations of the panel on disarmament and current and future ongoing monitoring and verification issues, and recognizing in particular the need for an effective, cooperative management structure for the new organization, for staffing with suitably qualified and experienced personnel, who would be regarded as international civil servants subject to Article 100 of the Charter of the United Nations, drawn from the broadest possible geographical base, including as he deems necessary from international arms control organizations, and for the provision of high quality technical and cultural training;

7. **Decides** that UNMOVIC and the IAEA, not later than 60 days after they have both started work in Iraq, will each draw up, for approval by the Council, a work programme for the discharge of their mandates, which will include both the implementation of the reinforced system of ongoing monitoring and verification, and the key remaining disarmament tasks to be completed by Iraq pursuant to its obligations to comply with the disarmament requirements of resolution 687 (1991) and other related resolutions, which constitute the governing standard of Iraqi compliance, and **further decides** that what is required of Iraq for the implementation of each task shall be clearly defined and precise;

8. **Requests** the Executive Chairman of UNMOVIC and the Director General of the IAEA, drawing on the expertise of other international organizations as appropriate, to establish a unit which will have the responsibilities of the joint unit constituted by the Special Commission and the Director General of the IAEA under paragraph 16 of the export/import mechanism approved by resolution 1051 (1996), and also **requests** the Executive Chairman of UNMOVIC, in consultation with the Director General of the IAEA, to resume the revision and updating of the lists of items and technology to which the mechanism applies;
9. Decides that the Government of Iraq shall be liable for the full costs of UNMOVIC and the IAEA in relation to their work under this and other related resolutions on Iraq;

10. Requests Member States to give full cooperation to UNMOVIC and the IAEA in the discharge of their mandates;

11. Decides that UNMOVIC shall take over all assets, liabilities and archives of the Special Commission, and that it shall assume the Special Commission’s part in agreements existing between the Special Commission and Iraq and between the United Nations and Iraq, and affirms that the Executive Chairman, the Commissioners and the personnel serving with UNMOVIC shall have the rights, privileges, facilities and immunities of the Special Commission;

12. Requests the Executive Chairman of UNMOVIC to report, through the Secretary-General, to the Council, following consultation with the Commissioners, every three months on the work of UNMOVIC, pending submission of the first reports referred to in paragraph 33 below, and to report immediately when the reinforced system of ongoing monitoring and verification is fully operational in Iraq;

B.

13. Reiterates the obligation of Iraq, in furtherance of its commitment to facilitate the repatriation of all Kuwaiti and third country nationals referred to in paragraph 30 of resolution 687 (1991), to extend all necessary cooperation to the International Committee of the Red Cross, and calls upon the Government of Iraq to resume cooperation with the Tripartite Commission and Technical Subcommittee established to facilitate work on this issue;

14. Requests the Secretary-General to report to the Council every four months on compliance by Iraq with its obligations regarding the repatriation or return of all Kuwaiti and third country nationals or their remains, to report every six months on the return of all Kuwaiti property, including archives, seized by Iraq, and to appoint a high-level coordinator for these issues;

C.

15. Authorizes States, notwithstanding the provisions of paragraphs 3 (a), 3 (b) and 4 of resolution 661 (1990) and subsequent relevant resolutions, to permit the import of any volume of petroleum and petroleum products originating in Iraq, including financial and other essential transactions directly relating thereto, as required for the purposes and on the conditions set out in paragraph 1 (a) and (b) and subsequent provisions of resolution 986 (1995) and related resolutions;

16. Underlines, in this context, its intention to take further action, including permitting the use of additional export routes for petroleum and petroleum products, under appropriate conditions otherwise consistent with the purpose and provisions of resolution 986 (1995) and related resolutions;

17. Directs the Committee established by resolution 661 (1990) to approve, on the basis of proposals from the Secretary-General, lists of humanitarian
items, including foodstuffs, pharmaceutical and medical supplies, as well as basic or standard medical and agricultural equipment and basic or standard educational items, decides, notwithstanding paragraph 3 of resolution 661 (1990) and paragraph 20 of resolution 687 (1991), that supplies of these items will not be submitted for approval of that Committee, except for items subject to the provisions of resolution 1051 (1996), and will be notified to the Secretary-General and financed in accordance with the provisions of paragraph 8 (a) and 8 (b) of resolution 986 (1995), and requests the Secretary-General to inform the Committee in a timely manner of all such notifications received and actions taken;

18. Requests the Committee established by resolution 661 (1990) to appoint, in accordance with resolutions 1175 (1998) and 1210 (1998), a group of experts, including independent inspection agents appointed by the Secretary-General in accordance with paragraph 6 of resolution 986 (1995), decides that this group will be mandated to approve speedily contracts for the parts and the equipments necessary to enable Iraq to increase its exports of petroleum and petroleum products, according to lists of parts and equipments approved by that Committee for each individual project, and requests the Secretary-General to continue to provide for the monitoring of these parts and equipments inside Iraq;

19. Encourages Member States and international organizations to provide supplementary humanitarian assistance to Iraq and published material of an educational character to Iraq;

20. Decides to suspend, for an initial period of six months from the date of the adoption of this resolution and subject to review, the implementation of paragraph 8 (g) of resolution 986 (1995);

21. Requests the Secretary-General to take steps to maximize, drawing as necessary on the advice of specialists, including representatives of international humanitarian organizations, the effectiveness of the arrangements set out in resolution 986 (1995) and related resolutions including the humanitarian benefit to the Iraqi population in all areas of the country, and further requests the Secretary-General to continue to enhance as necessary the United Nations observation process in Iraq, ensuring that all supplies under the humanitarian programme are utilized as authorized, to bring to the attention of the Council any circumstances preventing or impeding effective and equitable distribution and to keep the Council informed of the steps taken towards the implementation of this paragraph;

22. Requests also the Secretary-General to minimize the cost of the United Nations activities associated with the implementation of resolution 986 (1995) as well as the cost of the independent inspection agents and the certified public accountants appointed by him, in accordance with paragraphs 6 and 7 of resolution 986 (1995);

23. Requests further the Secretary-General to provide Iraq and the Committee established by resolution 661 (1990) with a daily statement of the status of the escrow account established by paragraph 7 of resolution 986 (1995);
24. **Requests** the Secretary-General to make the necessary arrangements, subject to Security Council approval, to allow funds deposited in the escrow account established by resolution 986 (1995) to be used for the purchase of locally produced goods and to meet the local cost for essential civilian needs which have been funded in accordance with the provisions of resolution 986 (1995) and related resolutions, including, where appropriate, the cost of installation and training services;

25. **Directs** the Committee established by resolution 661 (1990) to take a decision on all applications in respect of humanitarian and essential civilian needs within a target of two working days of receipt of these applications from the Secretary-General, and to ensure that all approval and notification letters issued by the Committee stipulate delivery within a specified time, according to the nature of the items to be supplied, and **requests** the Secretary-General to notify the Committee of all applications for humanitarian items which are included in the list to which the export/import mechanism approved by resolution 1051 (1996) applies;

26. **Decides** that Hajj pilgrimage flights which do not transport cargo into or out of Iraq are exempt from the provisions of paragraph 3 of resolution 661 (1990) and resolution 670 (1990), provided timely notification of each flight is made to the Committee established by resolution 661 (1990), and **requests** the Secretary-General to make the necessary arrangements, for approval by the Security Council, to provide for reasonable expenses related to the Hajj pilgrimage to be met by funds in the escrow account established by resolution 986 (1995);

27. **Calls upon** the Government of Iraq:

(i) to take all steps to ensure the timely and equitable distribution of all humanitarian goods, in particular medical supplies, and to remove and avoid delays at its warehouses;

(ii) to address effectively the needs of vulnerable groups, including children, pregnant women, the disabled, the elderly and the mentally ill among others, and to allow freer access, without any discrimination, including on the basis of religion or nationality, by United Nations agencies and humanitarian organizations to all areas and sections of the population for evaluation of their nutritional and humanitarian condition;

(iii) to prioritize applications for humanitarian goods under the arrangements set out in resolution 986 (1995) and related resolutions;

(iv) to ensure that those involuntarily displaced receive humanitarian assistance without the need to demonstrate that they have resided for six months in their places of temporary residence;

(v) to extend full cooperation to the United Nations Office for Project Services mine-clearance programme in the three northern Governorates of Iraq and to consider the initiation of the demining efforts in other Governorates;
28. **Requests** the Secretary-General to report on the progress made in meeting the humanitarian needs of the Iraqi people and on the revenues necessary to meet those needs, including recommendations on necessary additions to the current allocation for oil spare parts and equipment, on the basis of a comprehensive survey of the condition of the Iraqi oil production sector, not later than 60 days from the date of the adoption of this resolution and updated thereafter as necessary;

29. **Expresses** its readiness to authorize additions to the current allocation for oil spare parts and equipment, on the basis of the report and recommendations requested in paragraph 28 above, in order to meet the humanitarian purposes set out in resolution 986 (1995) and related resolutions;

30. **Requests** the Secretary-General to establish a group of experts, including oil industry experts, to report within 100 days of the date of adoption of this resolution on Iraq’s existing petroleum production and export capacity and to make recommendations, to be updated as necessary, on alternatives for increasing Iraq’s petroleum production and export capacity in a manner consistent with the purposes of relevant resolutions, and on the options for involving foreign oil companies in Iraq’s oil sector, including investments, subject to appropriate monitoring and controls;

31. **Notes** that in the event of the Council acting as provided for in paragraph 33 of this resolution to suspend the prohibitions referred to in that paragraph, appropriate arrangements and procedures will need, subject to paragraph 35 below, to be agreed by the Council in good time beforehand, including suspension of provisions of resolution 986 (1995) and related resolutions;

32. **Requests** the Secretary-General to report to the Council on the implementation of paragraphs 15 to 30 of this resolution within 30 days of the adoption of this resolution;

D.

33. **Expresses** its intention, upon receipt of reports from the Executive Chairman of UNMOVIC and from the Director General of the IAEA that Iraq has cooperated in all respects with UNMOVIC and the IAEA in particular in fulfilling the work programmes in all the aspects referred to in paragraph 7 above, for a period of 120 days after the date on which the Council is in receipt of reports from both UNMOVIC and the IAEA that the reinforced system of ongoing monitoring and verification is fully operational, to suspend with the fundamental objective of improving the humanitarian situation in Iraq and securing the implementation of the Council’s resolutions, for a period of 120 days renewable by the Council, and subject to the elaboration of effective financial and other operational measures to ensure that Iraq does not acquire prohibited items, prohibitions against the import of commodities and products originating in Iraq, and prohibitions against the sale, supply and delivery to Iraq of civilian commodities and products other than those referred to in paragraph 24 of resolution 687 (1991) or those to which the mechanism established by resolution 1051 (1996) applies;
34. Decides that in reporting to the Council for the purposes of paragraph 33 above, the Executive Chairman of UNMOVIC will include as a basis for his assessment the progress made in completing the tasks referred to in paragraph 7 above;

35. Decides that if at any time the Executive Chairman of UNMOVIC or the Director General of the IAEA reports that Iraq is not cooperating in all respects with UNMOVIC or the IAEA or if Iraq is in the process of acquiring any prohibited items, the suspension of the prohibitions referred to in paragraph 33 above shall terminate on the fifth working day following the report, unless the Council decides to the contrary;

36. Expresses its intention to approve arrangements for effective financial and other operational measures, including on the delivery of and payment for authorized civilian commodities and products to be sold or supplied to Iraq, in order to ensure that Iraq does not acquire prohibited items in the event of suspension of the prohibitions referred to in paragraph 33 above, to begin the elaboration of such measures not later than the date of the receipt of the initial reports referred to in paragraph 33 above, and to approve such arrangements before the Council decision in accordance with that paragraph;

37. Further expresses its intention to take steps, based on the report and recommendations requested in paragraph 30 above, and consistent with the purpose of resolution 986 (1995) and related resolutions, to enable Iraq to increase its petroleum production and export capacity, upon receipt of the reports relating to the cooperation in all respects with UNMOVIC and the IAEA referred to in paragraph 33 above;

38. Reaffirms its intention to act in accordance with the relevant provisions of resolution 687 (1991) on the termination of prohibitions referred to in that resolution;

39. Decides to remain actively seized of the matter and expresses its intention to consider action in accordance with paragraph 33 above no later than 12 months from the date of the adoption of this resolution provided the conditions set out in paragraph 33 above have been satisfied by Iraq.
Resolution 1540 (2004)

Adopted by the Security Council at its 4956th meeting, on 28 April 2004

The Security Council,

Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery,* constitutes a threat to international peace and security,

Reaffirming, in this context, the Statement of its President adopted at the Council’s meeting at the level of Heads of State and Government on 31 January 1992 (S/23500), including the need for all Member States to fulfil their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction,

Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,

Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, chemical and biological weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter,

Affirming its support for the multilateral treaties whose aim is to eliminate or prevent the proliferation of nuclear, chemical or biological weapons and the importance for all States parties to these treaties to implement them fully in order to promote international stability,

* Definitions for the purpose of this resolution only:

Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use.

Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution.

Related materials: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.

* 0432843*
Welcoming efforts in this context by multilateral arrangements which contribute to non-proliferation,

Affirming that prevention of proliferation of nuclear, chemical and biological weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes while goals of peaceful utilization should not be used as a cover for proliferation,

Gravely concerned by the threat of terrorism and the risk that non-State actors* such as those identified in the United Nations list established and maintained by the Committee established under Security Council resolution 1267 and those to whom resolution 1373 applies, may acquire, develop, traffic in or use nuclear, chemical and biological weapons and their means of delivery,

Gravely concerned by the threat of illicit trafficking in nuclear, chemical, or biological weapons and their means of delivery, and related materials,* which adds a new dimension to the issue of proliferation of such weapons and also poses a threat to international peace and security,

Recognizing the need to enhance coordination of efforts on national, subregional, regional and international levels in order to strengthen a global response to this serious challenge and threat to international security,

Recognizing that most States have undertaken binding legal obligations under treaties to which they are parties, or have made other commitments aimed at preventing the proliferation of nuclear, chemical or biological weapons, and have taken effective measures to account for, secure and physically protect sensitive materials, such as those required by the Convention on the Physical Protection of Nuclear Materials and those recommended by the IAEA Code of Conduct on the Safety and Security of Radioactive Sources,

Recognizing further the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, chemical or biological weapons and their means of delivery,

Encouraging all Member States to implement fully the disarmament treaties and agreements to which they are party,

Reaffirming the need to combat by all means, in accordance with the Charter of the United Nations, threats to international peace and security caused by terrorist acts,

Determined to facilitate henceforth an effective response to global threats in the area of non-proliferation,

Acting under Chapter VII of the Charter of the United Nations,

1. Decides that all States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery;

2. Decides also that all States, in accordance with their national procedures, shall 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, in particular for
terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;

3. Decides also that all States shall 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 materials and to this end shall:

(a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;

(b) Develop and maintain appropriate effective physical protection measures;

(c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;

(d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

4. Decides to establish, in accordance with rule 28 of its provisional rules of procedure, for a period of no longer than two years, a Committee of the Security Council, consisting of all members of the Council, which will, calling as appropriate on other expertise, report to the Security Council for its examination, on the implementation of this resolution, and to this end calls upon States to present a first report no later than six months from the adoption of this resolution to the Committee on steps they have taken or intend to take to implement this resolution;

5. Decides that none of the obligations set forth in this resolution shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons;

6. Recognizes the utility in implementing this resolution of effective national control lists and calls upon all Member States, when necessary, to pursue at the earliest opportunity the development of such lists;

7. Recognizes that some States may require assistance in implementing the provisions of this resolution within their territories and invites States in a position to do so to offer assistance as appropriate in response to specific requests to the States lacking the legal and regulatory infrastructure, implementation experience and/or resources for fulfilling the above provisions;
8. **Calls upon** all States:

   (a) To promote the universal adoption and full implementation, and, where necessary, strengthening of multilateral treaties to which they are parties, whose aim is to prevent the proliferation of nuclear, biological or chemical weapons;

   (b) To adopt national rules and regulations, where it has not yet been done, to ensure compliance with their commitments under the key multilateral non-proliferation treaties;

   (c) To renew and fulfil their commitment to multilateral cooperation, in particular within the framework of the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons and the Biological and Toxic Weapons Convention, as important means of pursuing and achieving their common objectives in the area of non-proliferation and of promoting international cooperation for peaceful purposes;

   (d) To develop appropriate ways to work with and inform industry and the public regarding their obligations under such laws;

9. **Calls upon** all States to promote dialogue and cooperation on non-proliferation so as to address the threat posed by proliferation of nuclear, chemical, or biological weapons, and their means of delivery;

10. Further to counter that threat, **calls upon** all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials;

11. **Expresses** its intention to monitor closely the implementation of this resolution and, at the appropriate level, to take further decisions which may be required to this end;

12. **Decides** to remain seized of the matter.
Resolution 1673 (2006)

Adopted by the Security Council at its 5429th meeting, on
27 April 2006

The Security Council,

Having considered the report of the Security Council Committee established pursuant to resolution 1540 (2004), hereafter the 1540 Committee (S/2006/257), and reaffirming its resolution 1540 (2004) of 28 April 2004,

Reaffirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security,

Endorsing the work already carried out by the 1540 Committee, particularly in its consideration of the national reports submitted by States pursuant to resolution 1540 (2004),

Recalling that not all States have presented to the 1540 Committee their reports on the steps they have taken or intend to take to implement resolution 1540 (2004),

Reaffirming its decision that none of the obligations in resolution 1540 (2004) shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons,

Noting that the full implementation of resolution 1540 (2004) by all States, including the adoption of national laws and measures to ensure the implementation of these laws, is a long-term task that will require continuous efforts at national, regional and international levels,

Acting under Chapter VII of the Charter of the United Nations,

1. Reiterates its decisions in and the requirements of resolution 1540 (2004) and emphasizes the importance for all States to implement fully that resolution;

2. Calls upon all States that have not yet presented a first report on steps they have taken or intend to take to implement resolution 1540 (2004) to submit such a report to the 1540 Committee without delay;
3. Encourages all States that have submitted such reports to provide, at any time or upon the request of the 1540 Committee, additional information on their implementation of resolution 1540 (2004);

4. Decides to extend the mandate of the 1540 Committee for a period of two years, with the continued assistance of experts, until 27 April 2008;

5. Decides that the 1540 Committee shall intensify its efforts to promote the full implementation by all States of resolution 1540 (2004) through a work programme which shall include the compilation of information on the status of States’ implementation of all aspects of resolution 1540 (2004), outreach, dialogue, assistance and cooperation, and which shall address in particular all aspects of paragraphs 1 and 2 of that resolution, as well as of paragraph 3 which encompasses (a) accountability, (b) physical protection, (c) border controls and law enforcement efforts and (d) national export and trans-shipment controls including controls on providing funds and services such as financing to such export and trans-shipment, and in that regard:

(a) encourages the pursuit of the ongoing dialogue between the 1540 Committee and States on the full implementation of resolution 1540 (2004), including on further actions needed from States to that end and on technical assistance needed and offered;

(b) invites the 1540 Committee to explore with States and international, regional and subregional organizations experience-sharing and lessons learned in the areas covered by resolution 1540 (2004), and the availability of programmes which might facilitate the implementation of resolution 1540 (2004);

6. Decides that the 1540 Committee will submit to the Security Council a report no later than 27 April 2008 on compliance with resolution 1540 (2004) through the achievement of the implementation of its requirements;

7. Decides to remain seized of the matter.
Resolution 1762 (2007)

Adopted by the Security Council at its 5710th meeting, on 29 June 2007

The Security Council,


Expressing gratitude to the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) and the International Atomic Energy Agency (IAEA) for their important and comprehensive contributions under the relevant resolutions, noting the accumulation of expertise, experience and maintenance of a roster of experts during UNMOVIC’s mandate, and encouraging Member States to maintain similar expertise for the future,

Acknowledging that a democratically elected and constitutionally based Government of Iraq is now in place, noting the Government of Iraq’s declaration of support for the international non-proliferation regime, and welcoming the concrete steps taken in this regard, including the commitment enshrined in the Permanent Constitution and the establishment of the National Monitoring Directorate with responsibility for import/export control,

Recalling Iraq’s disarmament obligations under relevant resolutions, its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons, its IAEA Safeguards Agreement, The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction and the Geneva Protocol, noting Iraq’s commitment to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in nuclear, chemical and biological weapons and their means of delivery and related materials, in accordance with its legal authorities and legislation and consistent with international law, and urging its adherence to all applicable disarmament and non-proliferation treaties, notably the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, and an Additional Protocol to the IAEA Safeguards Agreement,
Noting disarmament efforts regarding Iraq since 1991, and further noting the joint US-UK letter dated 28 June 2007 and the Government of Iraq letter to the Security Council dated 8 April 2007 annexed to this resolution,

Recognizing that the continued operations of UNMOVIC and the IAEA’s Iraq Nuclear Verification Office (INVO) are no longer necessary to verify Iraqi compliance with its obligations under the relevant resolutions,

Acting under Chapter VII of the Charter of the United Nations,

1. Decides to terminate immediately the mandates of UNMOVIC and the IAEA under the relevant resolutions;

2. Reaffirms Iraq’s disarmament obligations under relevant resolutions, acknowledges Iraq’s constitutional commitment to the non-proliferation, non-development, non-production and non-use of nuclear, chemical, and biological weapons and associated equipment, material, and technologies for use in the development, manufacture, production and use of such weapons, as well as delivery systems, and urges Iraq to continue to implement this commitment and to adhere to all applicable disarmament and non-proliferation treaties and related international agreements;

3. Invites the Government of Iraq to report to the Security Council within one year on progress made in adhering to all applicable disarmament and non-proliferation treaties and related international agreements, notably the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, an Additional Protocol to its Safeguards Agreement, and on progress made by the National Monitoring Directorate and the Government of Iraq with regard to dual-use controls and harmonizing Iraqi export legislation with international standards;

4. Takes note of the summary briefings provided by UNMOVIC/UNSCOM and IAEA on their respective activities in Iraq since 1991, and expresses appreciation for their dedicated work;

5. Requests the Secretary-General to take all necessary measures to provide for the appropriate disposition of UNMOVIC’s archives and other property under arrangements ensuring, in particular, that sensitive proliferation information or information provided in confidence by Member States is kept under strict control, and further requests that the Secretary-General inform the Security Council within three months on steps taken in this regard;

6. Requests the Secretary-General to transfer to the Government of Iraq through the Development Fund for Iraq not later than three months from the date of this resolution, all remaining unencumbered funds in the account established pursuant to paragraph 8 (e) of resolution 986 (1995), after returning to Member States at their request contributions made by them pursuant to paragraph 4 of resolution 699 (1991);

7. Decides to remain actively seized of the matter.
Annex I

Letter from the Secretary of State for Foreign and Commonwealth Affairs of the United Kingdom of Great Britain and Northern Ireland and Secretary of State of the United States of America to the United Nations addressed to the President of the Security Council

The United States of America and the United Kingdom of Great Britain and Northern Ireland wish to inform the Security Council of the steps that have been taken with regard to ensuring Iraqi compliance with its disarmament obligations, as called for in Council resolution 1483 (2003).

Together with the Government of Iraq and other Member States, the United States and the United Kingdom, pursuant to the letter dated 8 May 2003 from their Permanent Representatives to the United Nations addressed to the President of the Security Council (S/2003/538), have been working since March 2003 with the objective of locating and securing, removing, disabling, rendering harmless, eliminating or destroying weapons of mass destruction, ballistic missiles and related delivery systems and programmes in Iraq developed under the regime of Saddam Hussein.

We wish to inform the Security Council that all appropriate steps have been taken to secure, remove, disable, render harmless, eliminate or destroy (a) all of Iraq’s known weapons of mass destruction and ballistic missiles with a range of greater than 150 kilometres and (b) all known elements of Iraq’s programmes established to research, develop, design, manufacture, produce, support, assemble and employ such weapons and delivery systems, subsystems and components thereof.

Furthermore, we wish to draw the attention of the Security Council to the conclusions of the report issued by the Special Advisor to the United States Director of Central Intelligence on Iraq’s Weapons of Mass Destruction (“the Duelfer Report”) following a review of Iraq’s weapons of mass destruction programmes, undertaken by drawing upon information received from former Iraqi officials, other Iraqi citizens, suspected weapon sites and both technical and procurement-related documents. In the course of their investigation, Iraq Survey Group analysts visited suspected weapons-related sites and searched through documents. The report and its addenda are available from the following website: https://www.cia.gov/library/reports/general-reports-1/iraq_wmd_2004/index.html.

The letter dated 24 April 2007 from the Minister for Foreign Affairs of Iraq to the President of the Security Council (S/2007/236, annex) outlines additional actions that Iraq has taken and other actions that it intends to take in the near future to demonstrate and affirm to the international community its belief that it is now in full compliance with its disarmament obligations under the relevant Council resolutions.

(Signed) Condoleezza Rice
Secretary of State
United States of America
Signed 27 June 2007

(Signed) Margaret Beckett
Secretary of State for
Foreign and Commonwealth Affairs
United Kingdom of Great Britain and Northern Ireland
Signed 22 June 2007
Annex II

Letter dated 8 April 2007 from the Minister for Foreign Affairs of Iraq addressed to the President of the Security Council

[Original: Arabic]

I have the honour to address the present letter to you, and through you to the other members of the Security Council, requesting, on behalf of the Government of Iraq, that the Council consider terminating the mandates of the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) and the Iraq Action Team of the International Atomic Energy Agency (IAEA) established by the Security Council resolutions on the elimination and removal of former Iraqi weapons of mass destruction, as there are no longer any legal or technical grounds for continuing their mandate and we are certain that Iraq currently has none of the programmes or weapons in question. In this connection, please note the following:

1. Today Iraq has a democratically elected Government and a new Parliament in addition to a Constitution that has been approved by the Iraqis. Today it declares that it is joining the global democratic community in its support for the international non-proliferation regime.

2. Article 9 (e) of the Permanent Constitution of the Government of Iraq states that: “The Iraqi Government shall respect and implement Iraq’s international obligations regarding the non-proliferation, non-development, non-production and non-utilization of nuclear, chemical and biological weapons, and shall prohibit associated equipment, materiel, technologies and communication systems for use in the development, manufacture, production and utilization of such weapons”. This Constitution was approved by the Iraqi people in the national referendum held in 2005.

3. As Security Council members know, the Iraqi Government has cooperated fully with the Iraq Survey Group (ISG) in respect of the former regime’s weapons programme.

4. Today the Iraqi Government affirms its full commitment to the relevant Security Council resolutions and, in that connection, reiterates the request that it made to the President of the Council in March 2005, as well as the letter from the Iraqi Prime Minister of 11 November 2006 calling for the termination of the mandates of UNMOVIC and the IAEA Iraq Action Team.

5. The Iraqi Government reiterates its commitment to the Treaty on the Non-Proliferation of Nuclear Weapons, the safeguards agreement of the International Atomic Energy Agency, the Biological Weapons Convention and the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare. The provisional Iraqi Government announced previously in July 2004 its commitment to all the agreements and conventions on the prevention of proliferation. The Iraqi technical authorities have elaborated a draft law on Iraq’s accession to the Chemical Weapons Convention, which is currently before the Parliament — the country’s legislative branch — with a view to its adoption and preparations are under way for
accession to the Model Additional Protocol of the International Atomic Energy Agency’s safeguards regime.

6. With regard to coordination with IAEA on a code of conduct on the safety and security of radioactive sources in Iraq, Iraq has set up an agency responsible for identifying radioactive sources in Iraq and guaranteeing their security, namely, the Iraqi Radioactive Sources Regulatory Authority. Since the fall of the previous regime, IAEA has made four successful verification visits to the Tuwaitha site — in June 2003, August 2004, September 2005 and, most recently, in November 2006.

7. The Iraqi National Monitoring Directorate is overseeing the transfer of dual-use substances and is now making every effort to harmonize Iraqi export legislation with international standards. Iraq has submitted its national report in accordance with its obligations under Security Council resolution 1540 (2004).

8. The Iraqi Government has undertaken to guarantee the security of its borders by strengthening controls in cooperation with the multinational force.

The Government and people of my country hope that the Security Council will make a serious and objective assessment of the situation in Iraq — namely, the absence of weapons of mass destruction and related programmes — and take the appropriate decision to terminate the mandate of UNMOVIC and the IAEA Iraq Action Team and transfer the balance in the Iraq account opened by the United Nations to the Development Fund for Iraq, for the purposes of investment.

I should be grateful if you would have the text of the present letter circulated to the members of the Security Council as a document of the Security Council.

(Signed) Hoshyar Zebari
Minister for Foreign Affairs of Iraq
8 April 2007
A more secure world: 
Our shared responsibility*

Report of the High-level Panel on Threats, 
Challenges and Change

*with endnotes

United Nations 
2004
3. Chemical and biological weapons

114. Chemical and biological materials also pose a growing threat: they share with nuclear weapons the awful potential of being used in a single attack to inflict mass casualties. Chemical agents are widespread and relatively easy to acquire and weaponize. There are almost 6,000 industrial chemical facilities worldwide,\(^8\) posing potential targets and opportunities for the acquisition of materials. Chemical-weapon States have lagged behind in the destruction of chemical weapons scheduled by the Chemical Weapons Convention: of the 70,000 metric tons of declared weapons agents, the Organization for the Prohibition of Chemical Weapons (OPCW) has verified the destruction of only 9,600, and if the current pace persists, the Convention’s goal of the complete destruction of chemical weapons agents will not be met even by the agreed extended deadline of 2012.

115. While rapid growth and scientific advances in the biotechnology sector hold out the prospect of prevention and cure for many diseases, they also increase opportunities for the development of deadly new ones. Dramatic advances in recombinant DNA technology and direct genetic manipulation raise the spectre of “designer bugs”, which may be developed to reconstruct eradicated diseases and to resist existing vaccinations, antibiotics and other treatments.\(^6\) There are countless fermentation, medical and research facilities equipped to produce biological agents. Meanwhile, the biological toxin ricin has been discovered in several terrorist workshops. Unlike anthrax, which can be treated by antibiotics, ricin has no antidote and is lethal to humans in quantities smaller than the size of a pinhead.\(^7\) Use of similar materials to cause deliberate outbreaks of infectious disease could prove equally if not more lethal than a nuclear detonation. Under worst-case assumptions, an attack using only one gram of weaponized smallpox could produce between 100,000 and 1,000,000 fatalities.\(^8\)

116. That a high-damage attack has not occurred is not a cause for complacency but a call for urgent prevention.

B. Meeting the challenge of prevention

117. Multilayered action is required. The first layer of an effective strategy to prevent the proliferation of nuclear, radiological, chemical and biological weapons should feature global instruments that reduce the demand for them. The second layer should contain global instruments that operate on the supply side - to limit the capacity of both States and non-State actors to acquire weapons and
the materials and expertise needed to build them. The third layer must consist of Security Council enforcement activity underpinned by credible, shared information and analysis. The fourth layer must comprise national and international civilian and public health defence.

1. Better strategies to reduce demand

118. Lacklustre disarmament by the nuclear-weapon States weakens the diplomatic force of the non-proliferation regime and thus its ability to constrain proliferation. Despite Security Council commitment to the contrary (resolution 984 (1995)), these nuclear-weapon States are increasingly unwilling to pledge assurances of non-use (negative security assurances) and they maintain the right to retaliate with nuclear weapons against chemical or biological attack.

119. Despite the end of the cold war, nuclear-weapon States earn only a mixed grade in fulfilling their disarmament commitments. While the United States and the Russian Federation have dismantled roughly half of their nuclear weapons, committed to large reductions in deployed strategic warheads and eliminated most of their non-strategic nuclear weapons, such progress has been overshadowed by recent reversals. In 2000, the nuclear-weapon States committed to 13 practical steps towards nuclear disarmament, which were all but renounced by them at the 2004 meeting of the Preparatory Committee for the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

120. The nuclear-weapon States must take several steps to restart disarmament:

(a) They must honour their commitments under article VI of the Treaty on the Non-Proliferation of Nuclear Weapons to move towards disarmament and be ready to undertake specific measures in fulfilment of those commitments;

(b) They should reaffirm their previous commitments not to use nuclear weapons against non-nuclear-weapon States, to further diminish the perceived value of nuclear weapons, and secure robust international cooperation to staunch proliferation, formalizing such commitments in pending and future nuclear-weapon-free zones agreements.

121. The United States and the Russian Federation, other nuclear-weapon States and States not party to the Treaty on the Non-Proliferation of Nuclear Weapons should commit to practical measures to reduce the risk of accidental nuclear war, including, where appropriate, a progressive schedule for de-alerting their strategic nuclear weapons.
122. In addition, we believe it would be valuable if the Security Council explicitly pledged to take collective action in response to a nuclear attack or the threat of such attack on a non-nuclear-weapon State.

123. Given the challenge to the nuclear non-proliferation regime posed by States not party to the Treaty on the Non-Proliferation of Nuclear Weapons, and recognizing the impact of that challenge on regional insecurity, we recommend that negotiations to resolve regional conflicts include confidence-building measures and steps towards disarmament.

124. States not party to the Treaty on the Non-Proliferation of Nuclear Weapons should pledge a commitment to non-proliferation and disarmament, demonstrating their commitment by ratifying the Comprehensive Nuclear-Test-Ban Treaty and supporting negotiations for a fissile material cut-off treaty, both of which are open to nuclear-weapon and non-nuclear-weapon States alike. We recommend that peace efforts in the Middle East and South Asia launch nuclear disarmament talks that could lead to the establishment of nuclear-weapon-free zones in those regions similar to those established for Latin America and the Caribbean, Africa, the South Pacific and South-East Asia.

125. For biological and chemical weapons, there is both an obligation and a historic opportunity to fully eliminate all declared chemical weapons stockpiles: all chemical-weapon States should expedite the scheduled destruction of all existing chemical weapons stockpiles by the agreed target date of 2012.

126. Verification of the Chemical Weapons Convention should also be further strengthened, and the long-standing impasse over a verification mechanism for the Biological and Toxin Weapons Convention, which has undermined confidence in the overall regime, should be overcome. States parties to the Biological and Toxin Weapons Convention should without delay return to negotiations for a credible verification protocol, inviting the active participation of the biotechnology industry. States parties to the Biological and Toxin Weapons Convention and the Chemical Weapons Convention must increase bilateral diplomatic pressure to universalize membership.

2. Better strategies to reduce supply

127. We recognize that nuclear energy, in the view of many, is an important source of power for civilian uses and may become even more crucial in the context of a worldwide effort to reduce dependency on fossil fuels and emissions of greenhouse gases. At the same time, the mounting tension between the goals of
achieving a more effective non-proliferation regime and the right of all signatories of the Treaty on the Non-Proliferation of Nuclear Weapons to develop civilian nuclear industries needs to be addressed and defused.

128. Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons guarantees States parties’ rights to develop the research, production and use of nuclear energy for peaceful purposes; this right must be preserved. The Treaty also specifies that this right must be used in conformity with its articles I and II; this obligation also must be respected. In recent years, it has become clear that the proliferation risks from the enrichment of uranium and from the reprocessing of spent fuel are great and increasing. These two processes in particular provide a route by which Treaty signatories can (and in some cases have) clandestinely pursued activities not in conformity with the Treaty and designed to give them the option of acquiring a nuclear-weapon capability.

129. Two remedies are required. First, the inspection and verification rules that have governed IAEA through the mid-1990s have proven increasingly inadequate. IAEA initiated more stringent inspection rules in the Model Additional Protocol, but as yet only one third of the States parties to the Treaty on the Non-Proliferation of Nuclear Weapons have ratified the Protocol. The IAEA Board of Governors should recognize the Model Additional Protocol as today's standard for IAEA safeguards, and the Security Council should be prepared to act in cases of serious concern over non-compliance with non-proliferation and safeguards standards.

130. Second, we urge that negotiations be engaged without delay and carried forward to an early conclusion on an arrangement, based on the existing provisions of articles III and IX of the IAEA statute, which would enable IAEA to act as a guarantor for the supply of fissile material to civilian nuclear users. Such an arrangement would need to put the Agency in a position to meet, through suppliers it authorized, demands for nuclear fuel supplies of low enriched uranium and for the reprocessing of spent fuel at market rates and to provide a guarantee of uninterrupted supply of these services, as long as there was no breach of safeguard or inspection procedures at the facilities in question.

131. While that arrangement is being negotiated, States should, without surrendering the right under the Treaty on the Non-Proliferation of Nuclear Weapons to construct such facilities, voluntarily institute a time-limited moratorium on the construction of any further enrichment or reprocessing facilities, with a commitment to the moratorium matched by a guarantee of the supply of fissile materials by the current suppliers at market rates.
132. Recent experience of the activities of the A.Q. Khan network has demonstrated the need for and the value of measures taken to interdict the illicit and clandestine trade in components for nuclear programmes. This problem is currently being addressed on a voluntary basis by the Proliferation Security Initiative. We believe that all States should be encouraged to join this voluntary initiative.

133. In order to reinforce international legal provisions against the illicit trafficking of nuclear, biological and chemical weapons and materials, ongoing negotiations at the International Maritime Organization (IMO) to amend the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation should be completed in a timely manner. The Security Council may need to be prepared to consider mandatory action if progress in the Convention negotiations is unsatisfactory.

134. While the Treaty on the Non-Proliferation of Nuclear Weapons provides the right of withdrawal from the Treaty, States should be urged not to do so. Those who withdraw should be held responsible for violations committed while still a party to the Treaty. A State’s notice of withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons should prompt immediate verification of its compliance with the Treaty, if necessary mandated by the Security Council. The IAEA Board of Governors should resolve that, in the event of violations, all assistance provided by IAEA should be withdrawn.

135. Urgent short-term action is needed to defend against the possible terrorist use of nuclear, radiological, chemical and biological weapons. High priority must be accorded to consolidating, securing, and when possible eliminating potentially hazardous materials, and implementing effective export controls. To that end, we welcome the Global Threat Reduction Initiative, which facilitates (a) the reduction of global highly enriched uranium stockpiles, (b) the conversion of HEU research reactors to “proliferation-resistant” reactors, and (c) the “downblending” of existing HEU. The proposed timeline for implementing the Global Threat Reduction Initiative should be halved from 10 to 5 years.


137. States parties to the Biological and Toxin Weapons Convention should also negotiate a new bio-security protocol to classify dangerous biological agents and establish binding international standards for the export of...
such agents. Within a designated time frame, States parties to the Convention should refrain from participating in such biotechnology commerce with non-members.

138. IAEA member States should increase funding for its programmes that help to locate and secure radioactive sources and that assist States in establishing pertinent domestic legislation. Moreover, the Conference on Disarmament should move without further delay to negotiate a verifiable fissile material cut-off treaty that, on a designated schedule, ends the production of highly enriched uranium for non-weapon as well as weapons purposes.

3. Better enforcement capability

139. The Security Council today has few arrows in its quiver other than sanctions and military force to enforce non-proliferation agreements. Moreover, a special referral to the Security Council that results in no action is worse than no referral. The ability of the Security Council to generate credible information about potential instances of proliferation should be strengthened.

140. To that end, links between IAEA and OPCW and the Security Council must also be strengthened. The Directors-General of IAEA and OPCW should be invited by the Security Council to report to it twice-yearly on the status of safeguards and verification processes, as well as on any serious concerns they have which might fall short of an actual breach of the Treaty on the Non-Proliferation of Nuclear Weapons and the Chemical Weapons Convention.

141. The Security Council should also be prepared to deploy inspection capacities for suspected nuclear and chemical violations, drawing on the capacities of IAEA and OPCW. Until multilateral negotiations yield a Biological and Toxin Weapons Convention verification mechanism, the Security Council should avail itself of the Secretary-General’s roster of inspectors for biological weapons, who should remain independent and work under United Nations staff codes. This roster of inspectors should also be available to advise the Council and liaise with WHO authorities in the event of a suspicious disease outbreak, as discussed below.

4. Better public health defences

142. Scientific advancements in biotechnology and the ubiquity of facilities capable of producing biological agents circumscribe prospects for the elimination of biological weapons and complicate verification efforts. But unlike nuclear weapons, many (though not all) biological agents can be countered by vaccinations and effective responses (including rapid diagnosis, quarantines and treat-
ment). Well-prepared societies may thus be able to avoid the worst-case scenarios of biological attacks.

143. However, at present, international aid for infectious disease monitoring, detection and response is lacking, security planning and spending are poorly coordinated with health-care policies and budgets, and there is insufficient understanding that an inevitable, new biological future makes active bio-defence the most viable option against the likelihood of attack.

144. Given the potential international security threat posed by the intentional release of an infectious biological agent or an overwhelming natural outbreak of an infectious disease, there is a need for the WHO Director-General, through the Secretary-General, to keep the Security Council informed during any suspicious or overwhelming outbreak of infectious disease. In such an event, the Security Council should be prepared to support the work of WHO investigators or to deploy experts reporting directly to the Council, and if existing International Health Regulations do not provide adequate access for WHO investigations and response coordination, the Security Council should be prepared to mandate greater compliance. In the event that a State is unable to adequately quarantine large numbers of potential carriers, the Security Council should be prepared to support international action to assist in cordon operations. The Security Council should consult with the WHO Director-General to establish the necessary procedures for working together in the event of a suspicious or overwhelming outbreak of infectious disease.

VI. Terrorism

A. The threat we face

145. Terrorism attacks the values that lie at the heart of the Charter of the United Nations: respect for human rights; the rule of law; rules of war that protect civilians; tolerance among peoples and nations; and the peaceful resolution of conflict. Terrorism flourishes in environments of despair, humiliation, poverty, political oppression, extremism and human rights abuse; it also flourishes in contexts of regional conflict and foreign occupation; and it profits from weak State capacity to maintain law and order.

146. Two new dynamics give the terrorist threat greater urgency. Al-Qaida is the first instance - not likely to be the last - of an armed non-State network with global reach and sophisticated capacity. Attacks against more than 10 Member States on four continents in the past five years have demonstrated that Al-Qaida and associated entities pose a universal threat to the membership of the United Nations and the United Nations itself. In public statements, Al-Qaida has sin-
Fifty-ninth session
Agenda items 45 and 55

Integrated and coordinated implementation of and follow-up
to the outcomes of the major United Nations conferences and
summits in the economic, social and related fields

Follow-up to the outcome of the Millennium Summit

In larger freedom: towards development, security and
human rights for all

Report of the Secretary-General

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B. Preventing catastrophic terrorism

Transnational terrorism

87. Terrorism is a threat to all that the United Nations stands for: respect for human rights, the rule of law, the protection of civilians, tolerance among peoples and nations, and the peaceful resolution of conflict. It is a threat that has grown more urgent in the last five years. Transnational networks of terrorist groups have global reach and make common cause to pose a universal threat. Such groups profess a desire to acquire nuclear, biological and chemical weapons and to inflict mass casualties. Even one such attack and the chain of events it might set off could change our world forever.

88. Our strategy against terrorism must be comprehensive and should be based on five pillars: it must aim at dissuading people from resorting to terrorism or supporting it; it must deny terrorists access to funds and materials; it must deter States from sponsoring terrorism; it must develop State capacity to defeat terrorism; and it must defend human rights. I urge Member States and civil society organizations everywhere to join in that strategy.

89. Several steps are urgently required, as described below.

90. We must convince all those who may be tempted to support terrorism that it is neither an acceptable nor an effective way to advance their cause. But the moral authority of the United Nations and its strength in condemning terrorism have been hampered by the inability of Member States to agree on a comprehensive convention that includes a definition.

91. It is time to set aside debates on so-called “State terrorism”. The use of force by States is already thoroughly regulated under international law. And the right to resist occupation must be understood in its true meaning. It cannot include the right to deliberately kill or maim civilians. I endorse fully the High-level Panel’s call for a definition of terrorism, which would make it clear that, in addition to actions already proscribed by existing conventions, any action constitutes terrorism if it is intended to cause death or serious bodily harm to civilians or non-combatants with the purpose of intimidating a population or compelling a Government or an international organization to do or abstain from doing any act. I believe this proposal has clear moral force, and I strongly urge world leaders to unite behind it and to conclude a comprehensive convention on terrorism before the end of the sixtieth session of the General Assembly.

92. It is vital that we deny terrorists access to nuclear materials. This means consolidating, securing and, when possible, eliminating hazardous materials and
implementing effective export controls. While the Group of Eight Major Industrialized Countries (G8) and the Security Council have taken important steps to do this, we need to make sure that these measures are fully enforced and that they reinforce each other. I urge Member States to complete, without delay, an international convention for the suppression of acts of nuclear terrorism.

93. The threat of biological terrorism differs from that of nuclear terrorism. There will soon be thousands of laboratories around the world capable of producing designer bugs with awesome lethal potential. Our best defence against this danger lies in strengthening public health, and the recommendations to this end contained in section II above have a double merit: they would both help to address the scourge of naturally occurring infectious disease and contribute to our safety against manmade outbreaks. As we commit ourselves to strengthen local health systems — a task that will take us a generation — we must also ensure that our existing global response is adequate. The World Health Organization Global Outbreak Alert and Response Network has done an impressive job in monitoring and responding to outbreaks of deadly infectious disease, whether natural or suspicious. But it has done so on a shoestring. I urge Member States to give it the resources it needs to do the job thoroughly, in all our interests.

94. Terrorists are accountable to no one. We, on the other hand, must never lose sight of our accountability to citizens all around the world. In our struggle against terrorism, we must never compromise human rights. When we do so we facilitate achievement of one of the terrorist’s objectives. By ceding the moral high ground we provoke tension, hatred and mistrust of Governments among precisely those parts of the population where terrorists find recruits. I urge Member States to create a special rapporteur who would report to the Commission on Human Rights on the compatibility of counter-terrorism measures with international human rights laws.
C. Nuclear, biological and chemical weapons

97. Multilateral efforts to bridle the dangers of nuclear technology while harnessing its promise are nearly as old as the United Nations itself. The Treaty on the Non-Proliferation of Nuclear Weapons, 35 years old this month, has proved indispensable: it has not only diminished nuclear peril but has also demonstrated the value of multilateral agreements in safeguarding international peace and security. But today, the Treaty has suffered the first withdrawal of a party to the Treaty and faces a crisis of confidence and compliance born of a growing strain on verification and enforcement. The Conference on Disarmament, for its part, faces a crisis of relevance resulting in part from dysfunctional decision-making procedures and the paralysis that accompanies them.

98. Progress in both disarmament and non-proliferation is essential and neither should be held hostage to the other. Recent moves towards disarmament by the nuclear-weapon States should be recognized. Bilateral agreements, including the 2002 Strategic Offensive Reductions Treaty signed by the United States and the Russian Federation, have led to the dismantlement of thousands of nuclear weapons, accompanied by commitments to further sharp reductions in stockpiles. However, the unique status of nuclear-weapon States also entails a unique responsibility, and they must do more, including but not limited to further reductions in their arsenals of non-strategic nuclear weapons and pursuing arms control agreements that entail not just dismantlement but irreversibility. They should also reaffirm their commitment to negative security assurances. Swift negotiation of a fissile material cut-off treaty is essential. The moratorium on nuclear test explosions must also be upheld until we can achieve the entry into force of the Comprehensive Nuclear Test-Ban Treaty. I strongly encourage States parties to the Treaty on the Non-Proliferation of Nuclear Weapons to endorse these measures at the 2005 Review Conference.

99. The spread of nuclear technology has exacerbated a long-standing tension within the nuclear regime, arising from the simple fact that the technology required for civilian nuclear fuel can also be used to develop nuclear weapons. Measures to mitigate this tension must confront the dangers of nuclear proliferation but must also take into account the important environmental, energy, economic and research applications of nuclear technology. First, the verification authority of the International Atomic Energy Agency (IAEA) must be strengthened through universal adoption of the Model Additional Protocol. Second, while the access of non-nuclear weapon States to the benefits of nuclear technology should not be curtailed, we should focus on creating incentives for States to voluntarily forego the development of domestic uranium enrichment and plutonium separation capacities, while guaranteeing their supply of the fuel necessary to develop peaceful uses. One option is an arrangement in which IAEA would act as a guarantor for the supply of fissile material to civilian nuclear users at market rates.

100. While the Treaty on the Non-Proliferation of Nuclear Weapons remains the foundation of the non-proliferation regime, we should welcome recent efforts to supplement it. These include Security Council resolution 1540 (2004), designed to prevent non-State actors from gaining access to nuclear, chemical and biological weapons, technology and materials, and their means of delivery; and the voluntary Proliferation Security Initiative, under which more and more States are cooperating to prevent illicit trafficking in nuclear, biological and chemical weapons.
101. The availability of ballistic missiles with extended range and greater accuracy is of growing concern to many States, as is the spread of shoulder-fired missiles which could be used by terrorists. **Member States should adopt effective national export controls covering missiles and other means of delivery for nuclear, biological and chemical weapons, rockets and shoulder-fired missiles, as well as a ban on transferring any of them to non-State actors.** The Security Council should also consider adopting a resolution aimed at making it harder for terrorists to acquire or use shoulder-fired missiles.

102. Where progress has been made, it should be consolidated. The 1997 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction\(^\text{13}\) calls for the complete elimination and destruction of chemical weapons by all States parties, thus offering a historic opportunity to complete a task begun more than a century ago. **States parties to the Convention on Chemical Weapons should recommit themselves to achieving the scheduled destruction of declared chemical weapons stockpiles. I call upon all States to accede immediately to the Convention.**

103. The 1975 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction\(^\text{14}\) has enjoyed a remarkable degree of support and adherence, and has been strengthened further through recent annual meetings. **States parties should consolidate the results of these meetings at the 2006 Review Conference and commit themselves to further measures to strengthen the Biological and Toxin Weapons Convention. I also call upon all States to accede immediately to the Convention and to increase the transparency of bio-defence programmes.**

104. Further efforts are needed to bolster the biological security regime. The capability of the Secretary-General to investigate suspected use of biological agents, as authorized by the General Assembly in its resolution 42/37, should be strengthened to incorporate the latest technology and expertise; and the Security Council should make use of that capability, consistent with Security Council resolution 620 (1988).

105. Indeed, the Security Council must be better informed on all matters relevant to nuclear, chemical and biological threats. I encourage the Council to regularly invite the Director-General of IAEA and the Director-General of the Organization for the Prohibition of Chemical Weapons to brief the Council on the status of safeguards and verification processes. And I myself stand ready, in consultation with the Director-General of the World Health Organization, to use my powers under Article 99 of the Charter of the United Nations to call to the attention of the Security Council any overwhelming outbreak of infectious disease that threatens international peace and security.
D

PROVISIONAL PROCEDURES TO UPHOLD THE AUTHORITY OF THE 1925 GENEVA PROTOCOL.

The General Assembly,

Recalling the provisions of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods in Warfare, signed at Geneva on 17 June 1925,88 which entered into force on 8 February 1928,

Noting that States parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction89 have reaffirmed their adherence to the principles and objectives of that Protocol and called upon all States to comply with them,

Noting also that the Protocol does not provide for the establishment of procedures for investigating reports concerning activities prohibited by the Protocol,

Noting further that the Committee on Disarmament is currently engaged in the negotiation of a convention on the prohibition of chemical weapons, which should contain provisions to ensure its effective verification,

Believing it conducive to the continued authority of the Protocol that, pending eventual formal arrangements, procedures be established to make possible the prompt and impartial investigation of information concerning possible violations of the provisions of the Protocol,

1. Calls upon all States that have not yet done so to accede to the 1925 Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare;

2. Calls upon all States to comply with the provisions of the Protocol;

3. Calls upon the Committee on Disarmament to expedite its negotiations on a convention on the prohibition of chemical weapons with a view to its submission to the General Assembly with the shortest possible delay;

4. Requests the Secretary-General to investigate, with the assistance of qualified experts, information that may be brought to his attention by any Member State concerning activities that may constitute a violation of the Protocol or of the relevant rules of customary international law in order to ascertain thereby the facts of the matter, and promptly to report the results of any such investigation to all Member States and to the General Assembly;

5. Requests the Secretary-General, with the co-operation of Member States, to compile, as a matter of priority, and maintain lists of qualified experts whose services could be made available at short notice to undertake such investigations, and of laboratories with the capability to undertake testing for the presence of agents the use of which is prohibited;

6. Requests the Secretary-General, in meeting the objectives of paragraph 4 above:
   (a) To appoint, as necessary, groups of experts selected from the above-mentioned list to undertake urgent investigation of possible violations;
   (b) To make the necessary arrangements for the experts to collect and examine evidence, including on-site, with the co-operation of the countries concerned, to the extent relevant to the investigation, and for such testing as may be required;
   (c) To seek, in any such investigation, appropriate assistance and relevant information from all Governments and international organizations concerned, as well as from other appropriate sources;

7. Further requests the Secretary-General, with the assistance of qualified consultant experts, to devise procedures for the timely and efficient investigation of information concerning activities that may constitute a violation of the Geneva Protocol or of the relevant rules of customary international law and to assemble and organize systematically documentation relating to the identification of signs and symptoms associated with the use of such agents as a means of facilitating such investigations and the medical treatment that may be required;

8. Requests Governments, national and international organizations, as well as scientific and research institutions, to co-operate fully with the Secretary-General in this work;

9. Requests the Secretary-General to report to the General Assembly at its thirty-eighth session on the implementation of the present resolution.

101st plenary meeting
13 December 1982

E

CHEMICAL AND BACTERIOLOGICAL (BIOLOGICAL) WEAPONS

The General Assembly,

Having considered the report of the Secretary-General90 to which was annexed the report of the Group of Experts to Investigate Reports on the Alleged Use of Chemical Weapons, appointed by the Secretary-General pursuant to General Assembly resolutions 35/144 C of 12 December 1980 and 36/96 C of 9 December 1981,

Taking note of the final conclusion of the Group of Experts that, while it could not state that the allegations had been proven, nevertheless it could not disregard the circumstantial evidence suggestive of the possible use of some sort of toxic chemical substance in some instances,91

Recalling that the use of chemical and biological weapons has been declared incompatible with the accepted norms of civilization,

1. Takes note of the report of the Secretary-General and expresses its appreciation to the Group of Experts to Investigate Reports on the Alleged Use of Chemical Weapons for the work it has accomplished, as well as to the Member States that co-operated with the Group in fulfilling its mandate;

2. Calls anew for strict observance by all States of the principles and objectives of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare88 and condemns all actions that are contrary to those objectives.

101st plenary meeting
13 December 1982

37/99. General and complete disarmament

A

NON-STATIONING OF NUCLEAR WEAPONS ON THE TERRITORIES OF STATES WHERE THERE ARE NO SUCH WEAPONS AT PRESENT

The General Assembly,

Conscious that a nuclear war would have devastating consequences for the whole of mankind,

Recalling its resolution 33/91 F of 16 December 1978, which contains an appeal to all nuclear-weapon States to
the consent of the Council, to appoint Major-General Slavko Jović, of Yugoslavia, as Chief Military Observer of the United Nations Iran-Iraq Military Observer Group. In a letter dated 11 August 1988, the President of the Council informed the Secretary-General as follows:

"I have the honour to inform you that your letter dated 10 August 1988 concerning your proposal to appoint Major-General Slavko Jović of Yugoslavia as the Chief Military Observer of the United Nations Iran-Iraq Military Observer Group has been brought to the attention of the members of the Security Council. They considered the matter in informal consultations held on 11 August 1988 and agreed with the proposal contained in your letter."

In a letter dated 23 August 1988, the Secretary-General informed the President of the Council of his intention to add Peru and Uruguay to the list of contingents included in the United Nations Iran-Iraq Military Observer Group. In a letter dated 26 August 1988, the President of the Council informed the Secretary-General as follows:

"I have the honour to inform you that your letter dated 23 August 1988 concerning the additional contingents for the United Nations Iran-Iraq Military Observer Group has been brought to the attention of the members of the Security Council. They considered the matter in informal consultations held on 26 August and agreed with the proposal contained in your letter."

At its 2825th meeting, on 26 August 1988, the Council proceeded with the discussion of the item entitled "The situation between Iran and Iraq: reports of the missions dispatched by the Secretary-General to investigate allegations of the use of chemical weapons in the conflict between the Islamic Republic of Iran and Iraq (S/20060 and Add.1, S/20063 and Add.1 and S/20134)."

Resolution 620 (1988)
of 26 August 1988

The Security Council,
Recalling its resolution 612 (1988) of 9 May 1988,
Having considered the reports of 20 and 25 July and of 2 and 19 August 1988 of the missions dispatched by the Secretary-General to investigate allegations of the use of chemical weapons in the conflict between the Islamic Republic of Iran and Iraq,

Deeply dismayed by the missions' conclusions that there had been continued use of chemical weapons in the conflict between the Islamic Republic of Iran and Iraq and that such use against Iranians had become more intense and frequent,

Profoundly concerned by the danger of possible use of chemical weapons in the future,

Bearing in mind the current negotiations in the Conference on Disarmament on the complete and effective prohibition of the development, production and stockpiling of chemical weapons and on their destruction,

Determined to intensify its efforts to end all use of chemical weapons in violation of international obligations now and in the future,

1. Condemns resolutely the use of chemical weapons in the conflict between the Islamic Republic of Iran and Iraq, in violation of obligations under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, and in defiance of its resolution 612 (1988);

2. Encourages the Secretary-General to carry out promptly investigations in response to allegations brought to his attention by any Member State concerning the possible use of chemical and bacteriological (biological) or toxic weapons that may constitute a violation of the 1925 Geneva Protocol or other relevant rules of customary international law, in order to ascertain the facts of the matter, and to report the results;

3. Calls upon all States to continue to apply, to establish or to strengthen strict control of the export of chemical products serving for the production of chemical weapons, in particular to parties to a conflict, when it is established or when there is substantial reason to believe that they have used chemical weapons in violation of international obligations;

4. Decides to consider immediately, taking into account the investigations of the Secretary-General, appropriate and effective measures in accordance with the Charter of the United Nations, should there be any future use of chemical weapons in violation of international law, wherever and by whomever committed.

Adopted unanimously at the 2825th meeting.
be required for the Third Review Conference and its preparation;

3. Recalls in that regard the decision taken at the Second Review Conference that the Third Review Conference should consider, inter alia, the issues set out in article XII of the Final Declaration of the Second Review Conference;

4. Reiterates its call upon all States parties to the Convention to participate in the exchange of information and data agreed to in the Final Declaration of the Second Review Conference and to provide such information and data in conformity with the standardized procedure to the Secretary-General on an annual basis and not later than 15 April;

5. Also recalls its request in resolution 44/115 C of 15 December 1989 that the Secretary-General should render the necessary assistance and should provide such services as may be required for the implementation of the relevant parts of the Final Declaration of the Second Review Conference;

6. Further recalls its request in resolution 44/115 C that the Secretary-General should circulate to the States parties to the Convention not later than four months prior to the convening of the Third Review Conference a report on the implementation of these confidence-building measures;

7. Calls upon all States that have not ratified or acceded to the Convention to do so without delay, thus contributing to the achievement of universal adherence to the Convention and to the strengthening of international confidence.

54th plenary meeting
4 December 1990

C

CHEMICAL AND BACTERIOLOGICAL (BIOLOGICAL) WEAPONS: MEASURES TO UPHOLD THE AUTHORITY OF THE 1925 GENEVA PROTOCOL

The General Assembly,

Recalling its previous resolutions, and those adopted by the Security Council, on the use of chemical weapons,

Reaffirming its resolution 44/115 B of 15 December 1989 on measures to uphold the authority of the 1925 Geneva Protocol and to support the conclusion of a chemical weapons convention,

Bearing in mind the reaffirmation in the Final Declaration of the Conference of States Parties to the 1925 Geneva Protocol and Other Interested States, held in Paris from 7 to 11 January 1989, of the importance and the continuing validity of the 1925 Protocol,

Deploring the use and threat of use of chemical weapons,

1. Condemns vigorously all actions that violate or threaten to violate the obligations assumed under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, and other relevant provisions of international law;

2. Renews its call to all States to observe strictly the principles and objectives of the 1925 Geneva Protocol, and reaffirms the vital necessity of upholding its provisions;

3. Endorses the proposals of the group of qualified experts established in pursuance of its resolution 42/37 C of 30 November 1987 concerning technical guidelines and procedures to guide the Secretary-General in the conduct of timely and efficient investigation of the reports of use of chemical and bacteriological (biological) or toxin weapons;

4. Notes the continuing significance of the Security Council decision to consider immediately, taking into account the investigations of the Secretary-General, appropriate and effective measures in accordance with the Charter of the United Nations, should there be any future use of chemical weapons in violation of international law.

54th plenary meeting
4 December 1990

45/58. General and complete disarmament

A

RELATIONSHIP BETWEEN DISARMAMENT AND DEVELOPMENT

The General Assembly,

Recalling the provisions of the Final Document of the Tenth Special Session of the General Assembly related to the relationship between disarmament and development,

Recalling also the adoption on 11 September 1987 of the Final Document of the International Conference on the Relationship between Disarmament and Development,

Stressing the growing importance of the relationship between disarmament and development in current international relations,

1. Welcomes the report of the Secretary-General and actions undertaken in accordance with the Final Document of the International Conference on the Relationship between Disarmament and Development;

2. Requests the Secretary-General to continue to take action, through the appropriate organs and within available resources, for the implementation of the action programme adopted at the International Conference;

3. Also requests the Secretary-General to submit a report to the General Assembly at its forty-sixth session;

4. Decides to include in the provisional agenda of its forty-sixth session the item entitled “Relationship between disarmament and development”.

54th plenary meeting
4 December 1990

41 A/44/561, annex.
43 United Nations publication, Sales No. E.87.IX.8.
44 A/45/592.
45 United Nations publication, Sales No. E.87.IX.8, para. 35.
4. Documents from International Organizations (IOs)

States Parties to the CWC are joined in their efforts to govern CW by other international organizations. Documents emanating from these organizations are included in this section. The activities and initiatives of these organizations also serve to strengthen the international norm against the misuse of chemistry and promote the sound management of chemicals.

4.1 International Maritime Organization

The International Maritime Organization (IMO) is a specialized agency of the United Nations responsible for improving maritime safety and preventing pollution from ships. The IMO was established in 1948 and is headquartered in London. Prompted by reports of crews being kidnapped and ships being hijacked, deliberately run aground or blown up by explosives, in 1985 the UN General Assembly urged states to cooperate in contributing to the elimination of causes underlying terrorism (resolution 40/61). The IMO was invited to study the problem of terrorism aboard or against ships with a view to making recommendations on appropriate measures. This resulted in the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (known as the SUA Convention) which entered into force in March 1992.

After the terrorist attacks in the USA on 11 September 2001, IMO Member States became increasingly concerned about the terrorist risk to maritime navigation and the possibility of WMD being transported by ship. In response, IMO Member States negotiated a protocol to the 1988 SUA Convention which was adopted at a diplomatic conference in London in October 2005. The Protocol provides the first international treaty framework for combating and prosecuting anyone who uses a ship as a weapon or as a means to carry out a terrorist attack, or who transports by ship terrorists or cargo (including associated delivery systems and related materials) destined to support WMD programmes. Article 2 contains the CWC definition of a chemical weapon and Article 3 states that nothing in the Protocol affects States Parties’ rights, obligations and responsibilities under the CWC. The Protocol was opened for signature in February 2006 and will enter into force after it has been ratified by 12 IMO Member States. The text is included in this section of the Resource Guide.

4.2 United Nations Environment Programme

The United Nations Environment Programme (UNEP) is the designated authority of the UN system for environmental issues at the global and regional level. Its mandate is to coordinate the development of environmental policy consensus by keeping the global environment under review and bringing emerging issues to the attention of governments and the international community for action. The mandate and objectives of UNEP emanate from UN General Assembly resolution 2997 (XXVII) of December 1972 and subsequent amendments adopted at the 1992 United Nations Conference on Environment and Development, the Nairobi Declaration on the Role and Mandate of UNEP, adopted in 1997 and the Malmö Ministerial Declaration of May 2000.


The International Conference on Chemicals Management in Dubai in February 2006 adopted the Strategic Approach to International Chemicals Management (SAICM). The Strategic Approach was mandated by UNEP and endorsed by the World Summit on Sustainable Development in 2002 and the World Summit in 2005. Developed by a multi-stakeholder and multi-sectoral Preparatory Committee,
the Strategic Approach supports the achievement of the goal agreed at the World Summit on Sustainable Development of ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.

UNEP also coordinates the Green Customs Initiative in which many other international organizations (including the OPCW, the World Customs Organization and Interpol) participate. The initiative offers information and training materials for customs officials to combat illegal trade in commodities of environmental concern, such as ozone depleting substances, toxic chemicals, hazardous wastes and endangered species.

This section of the Resource Guide includes a UNEP report detailing activities under these various initiatives.

4.3 World Health Organization

The World Health Organization (WHO) is the United Nations specialized agency for health established in April 1948 and based in Geneva. It is governed by its 193 Member States through the World Health Assembly. The WHO has long been concerned with preventing the hostile exploitation of chemistry and biology. In 1969, the World Health Assembly, requested the WHO Director-General to continue to cooperate with the United Nations Secretary-General on the issue of chemical and biological weapons and the consequences of their possible use. The 1970 WHO report on Health Aspects of Chemical and Biological Weapons: Report of a WHO Group of Consultants was the result of that work.

In May 2002, the World Health Assembly adopted resolution WHA 55.16 defining a role for WHO in responding to the “natural occurrence, accidental release or deliberate use of biological and chemical agents or radionuclear material that affect health.” The WHO Secretariat also established a Chemical and Biological Weapons Working Group. In 2004, the WHO published Public Health Response to Biological and Chemical Weapons—WHO Guidance (see www.who.int/csr/delibepidemics/biochemguide/en/index.html), a revised and updated version of its 1970 report. This volume includes a useful description of toxins which is included in this section of the Resource Guide.

The WHO also acts as the Executing Agency of the International Programme on Chemical Safety. The IPCS was established in 1980 as a joint programme of three cooperating organizations – the WHO, the International Labour Organization and UNEP. Its main roles are to establish the scientific basis for safe use of chemicals and to strengthen national capabilities and capacities for chemical safety.
CONSIDERATION OF A DRAFT PROTOCOL OF 2005 TO THE CONVENTION FOR THE SUPPRESSION OF UNLAWFUL ACTS AGAINST THE SAFETY OF MARITIME NAVIGATION

Texts examined and approved by the Drafting Committee

Preamble

THE STATES PARTIES to this Protocol,

BEING PARTIES to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation done at Rome on 10 March 1988,

ACKNOWLEDGING that terrorist acts threaten international peace and security,

MINDFUL of resolution A.924(22) of the Assembly of the International Maritime Organization requesting the revision of existing international legal and technical measures and the consideration of new measures in order to prevent and suppress terrorism against ships and to improve security aboard and ashore, and thereby to reduce the risk to passengers, crews and port personnel on board ships and in port areas and to vessels and their cargoes,

CONSCIOUS of the Declaration on Measures to Eliminate International Terrorism, annexed to United Nations General Assembly resolution 49/60 of 9 December 1994, in which, inter alia, the States Members of the United Nations solemnly reaffirm their unequivocal condemnation of all acts, methods and practices of terrorism as criminal and unjustifiable, wherever and by whomever committed, including those which jeopardize the friendly relations among States and peoples and threaten the territorial integrity and security of States,

NOTING United Nations General Assembly resolution 51/210 of 17 December 1996 and the Declaration to Supplement the 1994 Declaration on Measures to Eliminate International Terrorism annexed thereto,

RECALLING resolutions 1368 (2001) and 1373 (2001) of the United Nations Security Council, which reflect international will to combat terrorism in all its forms and manifestations, and which assigned tasks and responsibilities to States, and taking into account the continued threat from terrorist attacks,
RECALLING ALSO resolution 1540 (2004) of the United Nations Security Council, which recognizes the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, chemical or biological weapons and their means of delivery,


BEARING IN MIND the importance of the United Nations Convention on the Law of the Sea done at Montego Bay, on 10 December 1982, and of the customary international law of the sea,

CONSIDERING resolution 59/46 of the United Nations General Assembly, which reaffirmed that international co-operation as well as actions by States to combat terrorism should be conducted in conformity with the principles of the Charter of the United Nations, international law and relevant international conventions, and resolution 59/24 of the United Nations General Assembly, which urged States to become parties to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation and its Protocol, invited States to participate in the review of those instruments by the Legal Committee of the International Maritime Organization to strengthen the means of combating such unlawful acts, including terrorist acts, and also urged States to take appropriate measures to ensure the effective implementation of those instruments, in particular through the adoption of legislation, where appropriate, aimed at ensuring that there is a proper framework for responses to incidents of armed robbery and terrorist acts at sea,

CONSIDERING ALSO the importance of the amendments to the International Convention for the Safety of Life at Sea, 1974 and the International Ship and Port Facility Security (ISPS) Code both adopted by the 2002 Conference of Contracting Governments to that Convention in establishing an appropriate international technical framework involving co-operation between Governments, Government agencies, national and local administrations and the shipping and port industries to detect security threats and take preventative measures against security incidents affecting ships or port facilities used in international trade,
CONSIDERING FURTHER resolution 58/187 of the United Nations General Assembly, which reaffirmed that States must ensure that any measure taken to combat terrorism complies with their obligations under international law, in particular international human rights, refugee and humanitarian law,

BELIEVING that it is necessary to adopt provisions supplementary to those of the Convention, to suppress additional terrorist acts of violence against the safety and security of international maritime navigation and to improve its effectiveness,

HAVE AGREED as follows:

ARTICLE 1

For the purposes of this Protocol:


2 “Organization” means the International Maritime Organization (IMO); and

3 “Secretary-General” means the Secretary-General of the Organization.

ARTICLE 2

Article 1 of the Convention is amended to read as follows:

Article 1

1 For the purposes of this Convention,

(a) “ship” means a vessel of any type whatsoever not permanently attached to the sea-bed, including dynamically supported craft, submersibles, or any other floating craft;

(b) “transport” means to initiate, arrange or exercise effective control, including decision-making authority, over the movement of a person or item;

(c) “serious injury or damage” means

(i) serious bodily injury; or

(ii) extensive destruction of a place of public use, State or government facility, infrastructure facility, or public transportation system, resulting in major economic loss; or

(iii) substantial damage to the environment, including air, soil, water, fauna, or flora.
(d) “BCN weapon” means

(i) “biological weapons”, which are:

(1) microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes; or

(2) weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

(ii) “chemical weapons”, which are, together or separately:

(1) toxic chemicals and their precursors, except where intended for:

(A) industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes; or

(B) protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons; or

(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; or

(D) law enforcement including domestic riot control purposes;

as long as the types and quantities are consistent with such purposes;

(2) munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (ii)(1), which would be released as a result of the employment of such munitions and devices;

(3) any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (ii)(2).

(iii) nuclear weapons and other nuclear explosive devices.
(e) “toxic chemical” means any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.

(f) “precursor” means any chemical reactant which takes part at any stage in the production by whatever method of a toxic chemical. This includes any key component of a binary or multicomponent chemical system.

(g) “Organization” means the International Maritime Organization (IMO).

(h) “Secretary-General” means the Secretary-General of the Organization.

2 For the purposes of this Convention,

(a) the terms “place of public use”, “State or government facility”, “infrastructure facility”, and “public transportation system” have the same meaning as given to those terms in the International Convention for the Suppression of Terrorist Bombings, done at New York on 15 December 1997, and

(b) the terms “source material” and “special fissionable material” have the same meaning as given to those terms in the Statute of the International Atomic Energy Agency (IAEA), done at New York on 26 October 1956.

ARTICLE 3

The following text is added as article 2bis of the Convention:

**Article 2bis**

1 Nothing in this Convention shall affect other rights, obligations and responsibilities of States and individuals under international law, in particular the purposes and principles of the Charter of the United Nations and international human rights, refugee and humanitarian law.

2 This Convention does not apply to the activities of armed forces during an armed conflict, as those terms are understood under international humanitarian law, which are governed by that law, and the activities undertaken by military forces of a State in the exercise of their official duties, inasmuch as they are governed by other rules of international law.

3 Nothing in this Convention shall affect the rights, obligations and responsibilities under the Treaty on the Non-Proliferation of Nuclear Weapons, done at Washington, London and Moscow on 1 July 1968, the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, done at Washington, London and Moscow on 10 April 1972 or the Convention on the Prohibition of the
Development, Production, Stockpiling and Use of Chemical Weapons and on their
Destruction, done at Paris on 13 January 1993, of States Parties to such treaties.

ARTICLE 4

1 The chapeau of Article 3, paragraph 1 of the Convention is replaced by the following
text:

Any person commits an offence within the meaning of this Convention if that
person unlawfully and intentionally:

2 Article 3, paragraph 1(f) of the Convention is replaced by the following text:

(f) communicates information which that person knows to be false, thereby
endangering the safe navigation of a ship.

3 Article 3, paragraph 1(g) of the Convention is deleted.

4 Article 3, paragraph 2 of the Convention is replaced by the following text:

2 Any person also commits an offence if that person threatens, with or without a
condition, as is provided for under national law, aimed at compelling a physical or
juridical person to do or refrain from doing any act, to commit any of the offences
set forth in paragraph 1, subparagraphs (b), (c), and (e), if that threat is likely to
endanger the safe navigation of the ship in question.

5 The following text is added as article 3bis of the Convention:

Article 3bis

1 Any person commits an offence within the meaning of this Convention if that
person unlawfully and intentionally:

(a) when the purpose of the act, by its nature or context, is to intimidate a
population, or to compel a Government or an international organization to
do or to abstain from doing any act:

(i) uses against or on a ship or discharges from a ship any explosive,
radioactive material or BCN weapon in a manner that causes or is
likely to cause death or serious injury or damage; or

(ii) discharges, from a ship, oil, liquefied natural gas, or other
hazardous or noxious substance, which is not covered by
subparagraph (i), in such quantity or concentration that causes or is
likely to cause death or serious injury or damage; or

(iii) uses a ship in a manner that causes death or serious injury or
damage; or
(iv) threatens, with or without a condition, as is provided for under national law, to commit an offence set forth in subparagraph (i), (ii) or (iii); or

(b) transports on board a ship:

(i) any explosive or radioactive material, knowing that it is intended to be used to cause, or in a threat to cause, with or without a condition, as is provided for under national law, death or serious injury or damage for the purpose of intimidating a population, or compelling a Government or an international organization to do or to abstain from doing any act; or

(ii) any BCN weapon, knowing it to be a BCN weapon as defined in article 1; or

(iii) any source material, special fissionable material, or equipment or material especially designed or prepared for the processing, use or production of special fissionable material, knowing that it is intended to be used in a nuclear explosive activity or in any other nuclear activity not under safeguards pursuant to an IAEA comprehensive safeguards agreement; or

(iv) any equipment, materials or software or related technology that significantly contributes to the design, manufacture or delivery of a BCN weapon, with the intention that it will be used for such purpose.

2 It shall not be an offence within the meaning of this Convention to transport an item or material covered by subparagraph 1(b)(iii) or, insofar as it relates to a nuclear weapon or other nuclear explosive device, subparagraph 1(b)(iv), if such item or material is transported to or from the territory of, or is otherwise transported under the control of, a State Party to the Treaty on the Non-Proliferation of Nuclear Weapons where:

(a) the resulting transfer or receipt, including internal to a State, of the item or material is not contrary to such State Party's obligations under the Treaty on the Non-Proliferation of Nuclear Weapons and,

(b) if the item or material is intended for the delivery system of a nuclear weapon or other nuclear explosive device of a State Party to the Treaty on the Non-Proliferation of Nuclear Weapons, the holding of such weapon or device is not contrary to that State Party's obligations under that Treaty.

6 The following text is added as Article 3ter of the Convention:

Article 3ter

Any person commits an offence within the meaning of this Convention if that person unlawfully and intentionally transports another person on board a ship
knowing that the person has committed an act that constitutes an offence set forth in articles 3, 3bis or 3quater or an offence set forth in any treaty listed in the Annex, and intending to assist that person to evade criminal prosecution.

7 The following text is added as Article 3quater of the Convention:

Article 3quater

Any person also commits an offence within the meaning of this Convention if that person:

(a) unlawfully and intentionally injures or kills any person in connection with the commission of any of the offences set forth in article 3, paragraph 1, article 3bis, or article 3ter; or

(b) attempts to commit an offence set forth in article 3, paragraph 1, article 3bis, subparagraph 1(a)(i), (ii) or (iii), or subparagraph (a) of this article; or

(c) participates as an accomplice in an offence set forth in article 3, article 3bis, article 3ter or subparagraph (a) or (b) of this article; or

(d) organizes or directs others to commit an offence set forth in article 3, article 3bis, article 3ter or subparagraph (a) or (b) of this article; or

(e) contributes to the commission of one or more offences set forth in article 3, article 3bis, article 3ter or subparagraph (a) or (b) of this article by a group of persons acting with a common purpose, intentionally and either:

(i) with the aim of furthering the criminal activity or criminal purpose of the group, where such activity or purpose involves the commission of an offence set forth in article 3, article 3bis or article 3ter; or

(ii) in the knowledge of the intention of the group to commit an offence set forth in article 3, article 3bis or article 3ter.

ARTICLE 5

1 Article 5 of the Convention is replaced by the following text:

Each State Party shall make the offences set forth in articles 3, 3bis, 3ter and 3quater punishable by appropriate penalties which take into account the grave nature of those offences.

2 The following text is added as Article 5bis of the Convention:

Article 5bis

1 Each State Party, in accordance with its domestic legal principles, shall take the necessary measures to enable a legal entity located in its territory or organized under its laws to be held liable when a person responsible for management or control of that legal entity has, in that capacity, committed an offence set forth in this Convention. Such liability may be criminal, civil or administrative.
2 Such liability is incurred without prejudice to the criminal liability of individuals having committed the offences.

3 Each State Party shall ensure, in particular, that legal entities liable in accordance with paragraph 1 are subject to effective, proportionate and dissuasive criminal, civil or administrative sanctions. Such sanctions may include monetary sanctions.

ARTICLE 6

1 The *chapeau* of Article 6, paragraph 1 of the Convention is replaced by the following text:

1 Each State Party shall take such measures as may be necessary to establish its jurisdiction over the offences set forth in articles 3, *3bis*, *3ter* and *3quater* when the offence is committed:

2 Article 6, paragraph 3 of the Convention is replaced by the following text:

3 Any State Party which has established jurisdiction mentioned in paragraph 2 shall notify the Secretary-General. If such State Party subsequently rescinds that jurisdiction, it shall notify the Secretary-General.

3 Article 6, paragraph 4 of the Convention is replaced by the following text:

4 Each State Party shall take such measures as may be necessary to establish its jurisdiction over the offences set forth in articles 3, *3bis*, *3ter* and *3quater* in cases where the alleged offender is present in its territory and it does not extradite the alleged offender to any of the States Parties which have established their jurisdiction in accordance with paragraphs 1 and 2 of this article.

ARTICLE 7

The following text is added as an Annex to the Convention:

ANNEX


**ARTICLE 8**

1 Article 8, paragraph 1 of the Convention is replaced by the following text:

   The master of a ship of a State Party (the “flag State”) may deliver to the authorities of any other State Party (the “receiving State”) any person who the master has reasonable grounds to believe has committed an offence set forth in article 3, 3bis, 3ter, or 3quater.

2 The following text is added as Article 8bis of the Convention:

   **Article 8bis**

   1 States Parties shall co-operate to the fullest extent possible to prevent and suppress unlawful acts covered by this Convention, in conformity with international law, and shall respond to requests pursuant to this article as expeditiously as possible.

   2 Each request pursuant to this article should, if possible, contain the name of the suspect ship, the IMO ship identification number, the port of registry, the ports of origin and destination, and any other relevant information. If a request is conveyed orally, the requesting Party shall confirm the request in writing as soon as possible. The requested Party shall acknowledge its receipt of any written or oral request immediately.

   3 States Parties shall take into account the dangers and difficulties involved in boarding a ship at sea and searching its cargo, and give consideration to whether other appropriate measures agreed between the States concerned could be more safely taken in the next port of call or elsewhere.

   4 A State Party that has reasonable grounds to suspect that an offence set forth in article 3, 3bis, 3ter or 3quater has been, is being or is about to be committed involving a ship flying its flag, may request the assistance of other States Parties in preventing or suppressing that offence. The States Parties so requested shall use their best endeavours to render such assistance within the means available to them.
Whenever law enforcement or other authorized officials of a State Party (“the requesting Party”) encounter a ship flying the flag or displaying marks of registry of another State Party (“the first Party”), located seaward of any State’s territorial sea, and the requesting Party has reasonable grounds to suspect that the ship or a person on board the ship has been, is or is about to be involved in the commission of an offence set forth in article 3, 3bis, 3ter or 3quater, and the requesting Party desires to board,

(a) it shall request, in accordance with paragraphs 1 and 2 that the first Party confirm the claim of nationality, and

(b) if nationality is confirmed, the requesting Party shall ask the first Party (hereinafter referred to as, “the flag State”) for authorization to board and to take appropriate measures with regard to that ship which may include stopping, boarding and searching the ship, its cargo and persons on board, and questioning the persons on board in order to determine if an offence set forth in article 3, 3bis, 3ter or 3quater has been, is being or is about to be committed, and

(c) the flag State shall either:

(i) authorize the requesting Party to board and to take appropriate measures set out in subparagraph 5(b), subject to any conditions it may impose in accordance with paragraph 7; or

(ii) conduct the boarding and search with its own law enforcement or other officials; or

(iii) conduct the boarding and search together with the requesting Party, subject to any conditions it may impose in accordance with paragraph 7; or

(iv) decline to authorize a boarding and search.

The requesting Party shall not board the ship or take measures set out in subparagraph 5(b) without the express authorization of the flag State.

(d) Upon or after depositing its instrument of ratification, acceptance, approval or accession, a State Party may notify the Secretary-General that, with respect to ships flying its flag or displaying its mark of registry, the requesting Party is granted authorization to board and search the ship, its cargo and persons on board, and to question the persons on board in order to locate and examine documentation of its nationality and determine if an offence set forth in article 3, 3bis, 3ter or 3quater has been, is being or is about to be committed, if there is no response from the first Party within four hours of acknowledgement of receipt of a request to confirm nationality.
(e) Upon or after depositing its instrument of ratification, acceptance, approval or accession, a State Party may notify the Secretary-General that, with respect to ships flying its flag or displaying its mark of registry, the requesting Party is authorized to board and search a ship, its cargo and persons on board, and to question the persons on board in order to determine if an offence under article 3, 3bis, 3ter or 3quater has been, is being or is about to be committed.

The notifications made pursuant to this paragraph can be withdrawn at any time.

6 When evidence of conduct described in article 3, 3bis, 3ter or 3quater is found as the result of any boarding conducted pursuant to this article, the flag State may authorize the requesting Party to detain the ship, cargo and persons on board pending receipt of disposition instructions from the flag State. The requesting Party shall inform promptly the flag State of the results of a boarding, search, and detention conducted pursuant to this article. The requesting Party shall also inform promptly the flag State of the discovery of evidence of illegal conduct that is not subject to this Convention.

7 The flag State, consistent with the other provisions of this Convention, may subject its authorization under paragraph 5 or 6 to conditions, including obtaining additional information from the requesting Party, and conditions relating to responsibility for and the extent of measures to be taken. No additional measures may be taken without the express authorization of the flag State, except when necessary to relieve imminent danger to the lives of persons or where those measures derive from relevant bilateral or multilateral agreements.

8 For all boardings pursuant to this article, the flag State has the right to exercise jurisdiction over a detained ship, cargo or other items and persons on board, including seizure, forfeiture, arrest and prosecution. However, the flag State may, subject to its constitution and laws, consent to the exercise of jurisdiction by another State having jurisdiction under article 6.

9 When carrying out the authorized actions under this article, the use of force shall be avoided except when necessary to ensure the safety of its officials and persons on board, or where the officials are obstructed in the execution of the authorized actions. Any use of force pursuant to this article shall not exceed the minimum degree of force which is necessary and reasonable in the circumstances.

10 Safeguards:

(a) Where a State Party takes measures against a ship in accordance with this article, it shall:

(i) take due account of the need not to endanger the safety of life at sea;

(ii) ensure that all persons on board are treated in a manner which preserves their basic human dignity, and in compliance with the applicable provisions of international law, including international law of human rights;
(iii) ensure that a boarding and search pursuant to this article shall be conducted in accordance with applicable international law;

(iv) take due account of the safety and security of the ship and its cargo;

(v) take due account of the need not to prejudice the commercial or legal interests of the flag State;

(vi) ensure, within available means, that any measure taken with regard to the ship or its cargo is environmentally sound under the circumstances;

(vii) ensure that persons on board against whom proceedings may be commenced in connection with any of the offences set forth in article 3, 3bis, 3ter or 3quater are afforded the protections of paragraph 2 of article 10, regardless of location;

(viii) ensure that the master of a ship is advised of its intention to board, and is, or has been, afforded the opportunity to contact the ship’s owner and the flag State at the earliest opportunity; and

(ix) take reasonable efforts to avoid a ship being unduly detained or delayed.

(b) Provided that authorization to board by a flag State shall not per se give rise to its liability, States Parties shall be liable for any damage, harm or loss attributable to them arising from measures taken pursuant to this article when:

(i) the grounds for such measures prove to be unfounded, provided that the ship has not committed any act justifying the measures taken; or

(ii) such measures are unlawful or exceed that reasonably required in light of available information to implement the provisions of this article.

States Parties shall provide effective recourse in respect of such damage, harm or loss.

(c) Where a State Party takes measures against a ship in accordance with this Convention, it shall take due account of the need not to interfere with or to affect:

(i) the rights and obligations and the exercise of jurisdiction of coastal States in accordance with the international law of the sea; or

(ii) the authority of the flag State to exercise jurisdiction and control in administrative, technical and social matters involving the ship.
(d) Any measure taken pursuant to this article shall be carried out by law enforcement or other authorized officials from warships or military aircraft, or from other ships or aircraft clearly marked and identifiable as being on government service and authorized to that effect and, notwithstanding articles 2 and 2bis, the provisions of this article shall apply.

(e) For the purposes of this article “law enforcement or other authorized officials” means uniformed or otherwise clearly identifiable members of law enforcement or other government authorities duly authorized by their government. For the specific purpose of law enforcement under this Convention, law enforcement or other authorized officials shall provide appropriate government-issued identification documents for examination by the master of the ship upon boarding.

11 This article does not apply to or limit boarding of ships, conducted by any State Party in accordance with international law, seaward of any State’s territorial sea, including boardings based upon the right of visit, the rendering of assistance to persons, ships and property in distress or peril, or an authorization from the flag State to take law enforcement or other action.

12 States Parties are encouraged to develop standard operating procedures for joint operations pursuant to this article and consult, as appropriate, with other States Parties with a view to harmonizing such standard operating procedures for the conduct of operations.

13 States Parties may conclude agreements or arrangements between them to facilitate law enforcement operations carried out in accordance with this article.

14 Each State Party shall take appropriate measures to ensure that its law enforcement or other authorized officials, and law enforcement or other authorized officials of other States Parties acting on its behalf, are empowered to act pursuant to this article.

15 Upon or after depositing its instrument of ratification, acceptance, approval or accession, each State Party shall designate the authority, or, where necessary, authorities to receive and respond to requests for assistance, for confirmation of nationality, and for authorization to take appropriate measures. Such designation, including contact information, shall be notified to the Secretary-General within one month of becoming a Party, who shall inform all other States Parties within one month of the designation. Each State Party is responsible for providing prompt notice through the Secretary-General of any changes in the designation or contact information.

ARTICLE 9

Article 10, paragraph 2 is replaced by the following text:

2 Any person who is taken into custody or regarding whom any other measures are taken or proceedings are being carried out pursuant to this Convention shall be
guaranteed fair treatment, including enjoyment of all rights and guarantees in conformity with the law of the State in the territory of which that person is present and applicable provisions of international law, including international human rights law.

**ARTICLE 10**

1 **Article 11, paragraphs 1, 2, 3 and 4 are replaced by the following text:**

   1 The offences set forth in articles 3, 3*bis*, 3*ter* and 3*quater* shall be deemed to be included as extraditable offences in any extradition treaty existing between any of the States Parties. States Parties undertake to include such offences as extraditable offences in every extradition treaty to be concluded between them.

   2 If a State Party which makes extradition conditional on the existence of a treaty receives a request for extradition from another State Party with which it has no extradition treaty, the requested State Party may, at its option, consider this Convention as a legal basis for extradition in respect of the offences set forth in articles 3, 3*bis*, 3*ter* and 3*quater*. Extradition shall be subject to the other conditions provided by the law of the requested State Party.

   3 States Parties which do not make extradition conditional on the existence of a treaty shall recognize the offences set forth in articles 3, 3*bis*, 3*ter* and 3*quater* as extraditable offences between themselves, subject to the conditions provided by the law of the requested State Party.

   4 If necessary, the offences set forth in articles 3, 3*bis*, 3*ter* and 3*quater* shall be treated, for the purposes of extradition between States Parties, as if they had been committed not only in the place in which they occurred but also in a place within the jurisdiction of the State Party requesting extradition.

2 **The following text is added as Article 11*bis*, of the Convention:**

   **Article 11*bis***

   None of the offences set forth in article 3, 3*bis*, 3*ter* or 3*quater* shall be regarded for the purposes of extradition or mutual legal assistance as a political offence or as an offence connected with a political offence or as an offence inspired by political motives. Accordingly, a request for extradition or for mutual legal assistance based on such an offence may not be refused on the sole ground that it concerns a political offence or an offence connected with a political offence or an offence inspired by political motives.

3 **The following text is added as Article 11*ter* of the Convention:**

   **Article 11*ter***

   Nothing in this Convention shall be interpreted as imposing an obligation to extradite or to afford mutual legal assistance, if the requested State Party has substantial grounds for believing that the request for extradition for offences set forth in article 3, 3*bis*, 3*ter* or 3*quater* or for mutual legal assistance with respect
to such offences has been made for the purpose of prosecuting or punishing a person on account of that person’s race, religion, nationality, ethnic origin, political opinion or gender, or that compliance with the request would cause prejudice to that person’s position for any of these reasons.

ARTICLE 11

1 Article 12, paragraph 1 of the Convention is replaced by the following text:

States Parties shall afford one another the greatest measure of assistance in connection with criminal proceedings brought in respect of the offences set forth in articles 3, 3bis, 3ter and 3quater, including assistance in obtaining evidence at their disposal necessary for the proceedings.

2 The following text is added as Article 12bis of the Convention:

Article 12bis

1 A person who is being detained or is serving a sentence in the territory of one State Party whose presence in another State Party is requested for purposes of identification, testimony or otherwise providing assistance in obtaining evidence for the investigation or prosecution of offences set forth in article 3, 3bis, 3ter or 3quater may be transferred if the following conditions are met:

(a) the person freely gives informed consent; and

(b) the competent authorities of both States agree, subject to such conditions as those States may deem appropriate.

2 For the purposes of the present article:

(a) the State to which the person is transferred shall have the authority and obligation to keep the person transferred in custody, unless otherwise requested or authorized by the State from which the person was transferred;

(b) the State to which the person is transferred shall without delay implement its obligation to return the person to the custody of the State from which the person was transferred as agreed beforehand, or as otherwise agreed, by the competent authorities of both States;

(c) the State to which the person is transferred shall not require the State from which the person was transferred to initiate extradition proceedings for the return of the person;

(d) the person transferred shall receive credit for service of the sentence being served in the State from which the person was transferred for time spent in the custody of the State to which the person was transferred.
3 Unless the State Party from which a person is to be transferred in accordance with the present article so agrees, that person, whatever that person’s nationality, shall not be prosecuted or detained or subjected to any other restriction of personal liberty in the territory of the State to which that person is transferred in respect of acts or convictions anterior to that person’s departure from the territory of the State from which such person was transferred.

ARTICLE 12

Article 13 of the Convention is replaced by the following text:

1 States Parties shall co-operate in the prevention of the offences set forth in articles 3, 3bis, 3ter and 3quater, particularly by:

(a) taking all practicable measures to prevent preparation in their respective territories for the commission of those offences within or outside their territories;

(b) exchanging information in accordance with their national law, and co-ordinating administrative and other measures taken as appropriate to prevent the commission of offences set forth in articles 3, 3bis, 3ter and 3quater.

2 When due to the commission of an offence set forth in article 3, 3bis, 3ter or 3quater, the passage of a ship has been delayed or interrupted, any State Party in whose territory the ship or passengers or crew are present shall be bound to exercise all possible efforts to avoid a ship, its passengers, crew or cargo being unduly detained or delayed.

ARTICLE 13

Article 14 of the Convention is replaced by the following text:

Any State Party having reason to believe that an offence set forth in article 3, 3bis, 3ter or 3quater will be committed shall, in accordance with its national law, furnish as promptly as possible any relevant information in its possession to those States which it believes would be the States having established jurisdiction in accordance with article 6.

ARTICLE 14

Article 15, paragraph 3 of the Convention is replaced by the following text:

3 The information transmitted in accordance with paragraphs 1 and 2 shall be communicated by the Secretary-General to all States Parties, to Members of the Organization, to other States concerned, and to the appropriate international intergovernmental organizations.
ARTICLE 15

Interpretation and application

1 The Convention and this Protocol shall, as between the Parties to this Protocol, be read and interpreted together as one single instrument.

2 Articles 1 to 16 of the Convention, as revised by this Protocol, together with articles 17 to 24 of this Protocol and the annex thereto, shall constitute and be called the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 2005 (2005 SUA Convention).

ARTICLE 16

The following text is added as article 16bis of the Convention:


FINAL CLAUSES

ARTICLE 17

Signature, ratification, acceptance, approval and accession

1 This Protocol shall be open for signature at the Headquarters of the Organization from 14 February 2006 to 13 February 2007 and shall thereafter remain open for accession.

2 States may express their consent to be bound by this Protocol by:

(a) signature without reservation as to ratification, acceptance or approval; or

(b) signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or

(c) accession.

3 Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General.

4 Only a State which has signed the Convention without reservation as to ratification, acceptance or approval, or has ratified, accepted, approved or acceded to the Convention may become a Party to this Protocol.
ARTICLE 18

Entry into force

1 This Protocol shall enter into force ninety days following the date on which twelve States have either signed it without reservation as to ratification, acceptance or approval, or have deposited an instrument of ratification, acceptance, approval or accession with the Secretary-General.

2 For a State which deposits an instrument of ratification, acceptance, approval or accession in respect of this Protocol after the conditions in paragraph 1 for entry into force thereof have been met, the ratification, acceptance, approval or accession shall take effect ninety days after the date of such deposit.

ARTICLE 19

Denunciation

1 This Protocol may be denounced by any State Party at any time after the date on which this Protocol enters into force for that State.

2 Denunciation shall be effected by the deposit of an instrument of denunciation with the Secretary-General.

3 A denunciation shall take effect one year, or such longer period as may be specified in the instrument of denunciation, after the deposit of the instrument with the Secretary-General.

ARTICLE 20

Revision and amendment

1 A conference for the purpose of revising or amending this Protocol may be convened by the Organization.

2 The Secretary-General shall convene a conference of States Parties to this Protocol for revising or amending the Protocol, at the request of one third of the States Parties, or ten States Parties, whichever is the higher figure.

3 Any instrument of ratification, acceptance, approval or accession deposited after the date of entry into force of an amendment to this Protocol shall be deemed to apply to the Protocol as amended.
ARTICLE 21

Declarations

1 Upon depositing its instrument of ratification, acceptance, approval or accession, a State Party which is not a party to a treaty listed in the Annex may declare that, in the application of this Protocol to the State Party, the treaty shall be deemed not to be included in article 3ter. The declaration shall cease to have effect as soon as the treaty enters into force for the State Party, which shall notify the Secretary-General of this fact.

2 When a State Party ceases to be a party to a treaty listed in the Annex, it may make a declaration as provided for in this article, with respect to that treaty.

3 Upon depositing its instrument of ratification, acceptance, approval or accession, a State Party may declare that it will apply the provisions of article 3ter in accordance with the principles of its criminal law concerning family exemptions of liability.

ARTICLE 22

Amendments to the Annex

1 The Annex may be amended by the addition of relevant treaties that:

   (a) are open to the participation of all States;

   (b) have entered into force; and

   (c) have been ratified, accepted, approved or acceded to by at least twelve States Parties to this Protocol.

2 After the entry into force of this Protocol, any State Party thereto may propose such an amendment to the Annex. Any proposal for an amendment shall be communicated to the Secretary-General in written form. The Secretary-General shall circulate any proposed amendment that meets the requirements of paragraph 1 to all members of the Organization and seek from States Parties to this Protocol their consent to the adoption of the proposed amendment.

3 The proposed amendment to the Annex shall be deemed adopted after more than twelve of the States Parties to this Protocol consent to it by written notification to the Secretary-General.

4 The adopted amendment to the Annex shall enter into force thirty days after the deposit with the Secretary-General of the twelfth instrument of ratification, acceptance or approval of such amendment for those States Parties to this Protocol that have deposited such an instrument. For each State Party to this Protocol ratifying, accepting or approving the amendment after the deposit of the twelfth instrument with the Secretary-General, the amendment shall enter into force on the thirtieth day after deposit by such State Party of its instrument of ratification, acceptance or approval.
ARTICLE 23

Depositary

1 This Protocol and any amendments adopted under articles 20 and 22 shall be deposited with the Secretary-General.

2 The Secretary-General shall:

(a) inform all States which have signed this Protocol or acceded to this Protocol of:
   (i) each new signature or deposit of an instrument of ratification, acceptance, approval or accession together with the date thereof;
   (ii) the date of the entry into force of this Protocol;
   (iii) the deposit of any instrument of denunciation of this Protocol together with the date on which it is received and the date on which the denunciation takes effect;
   (iv) any communication called for by any article of this Protocol;
   (v) any proposal to amend the Annex which has been made in accordance with article 22, paragraph 2;
   (vi) any amendment deemed to have been adopted in accordance with article 22, paragraph 3;
   (vii) any amendment ratified, accepted or approved in accordance with article 22, paragraph 4, together with the date on which that amendment shall enter into force; and

(b) transmit certified true copies of this Protocol to all States which have signed or acceded to this Protocol.

3 As soon as this Protocol enters into force, a certified true copy of the text shall be transmitted by the Secretary-General to the Secretary-General of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

ARTICLE 24

Languages

This Protocol is established in a single original in the Arabic, Chinese, English, French, Russian and Spanish languages, each text being equally authentic.
DONE AT LONDON this fourteenth day of October two thousand and five.

IN WITNESS WHEREOF the undersigned being duly authorized by their respective Governments for that purpose have signed this Protocol.

__________
Conference of the Parties of the Stockholm Convention on Persistent Organic Pollutants
Second meeting
Geneva, 1–5 May 2006
Item 8 of the provisional agenda*
Other matters

Report on United Nations Environment Programme activities in the areas of chemicals and administrative support

Note by the Secretariat

Set forth in the annex to the present note is a report on United Nations Environment Programme (UNEP) activities in the areas of chemicals and administrative support, prepared by the UNEP Division on Environmental Conventions. The report has not been formally edited by the Secretariat to the Stockholm Convention.
Annex

Report on
United Nations Environment Programme (UNEP)
activities in the areas of chemicals and administrative support

Prepared by the UNEP Division on Environmental Conventions
I. Introduction

Purpose

1. This report has been prepared for the second meeting of the Conference of the Parties (COP2) to the Stockholm Convention on Persistent Organic Pollutants. It reports on UNEP’s activities in the areas of chemicals and administrative support during the period of January 2004 to December 2005. It also reports on ongoing and planned activities for the period January 2006 to December 2007.

2. In addition to this report, supplemental information will be presented in publications and documents that UNEP will make available at the second meeting of the Conference of the Parties.

Guidance from the Conference of the Parties to the Stockholm Convention on Persistent Organic Pollutants (POPs)

3. The first meeting of the Conference of the Parties to the Stockholm Convention adopted one decision specifically related to UNEP. In addition, the second meeting of the Conference of the Parties to the Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for certain Hazardous Chemicals and Pesticides in International Trade also provided guidance to UNEP of direct relevance to the Stockholm Convention. These decisions relate to a supplementary analysis of financial and administrative arrangements that would be needed to implement any changes proposed to enhance synergies and cooperation between the secretariats of the chemicals and waste conventions.

UNEP Activities on the Promotion of Synergies between the Stockholm, Rotterdam and Basel Conventions

4. The last part of this report provides an update on UNEP activities relevant to the promotion of synergies between the Stockholm, Rotterdam and Basel Conventions, in particular covering POPs, enforcement, the Strategic Approach to International Chemicals Management (SAICM) and capacity building.

II. Stockholm Convention COP1 decision and Rotterdam Convention COP2 decision (directly relevant to the Stockholm Convention) for UNEP action

5. This part of the report outlines UNEP’s response to a decision adopted by Stockholm COP1 and a decision adopted by Rotterdam COP2 that is directly relevant to the Stockholm Convention, both of which make specific requests to UNEP. The activities described here cover those undertaken by UNEP during the 2004–2005 biennium as well as those planned for the present 2006–2007 biennium.

6. As requested in Decision RC-2/6 on “Enhancing synergies between the secretariats of the chemicals and waste conventions” and Decision SC-1/18 on “Enhancing synergies within the chemicals and wastes cluster”, UNEP has undertaken, in consultation with the United Nations Office at Nairobi (UNON) and other relevant entities, a review of the administrative arrangements between UNEP and the Basel, Stockholm and Rotterdam Secretariats. This supplementary analysis of administrative arrangements is being made available for the consideration of the Conferences of the Parties to the Stockholm, Rotterdam and Basel Conventions (see document UNEP/POPS/COP.2/INF/18).

1 During the reporting period, UNEP, as has been the practice in previous years, continued to provide support to the Stockholm Convention Secretariat. UNEP is strongly committed to further strengthening the quality and timeliness of its support and services to the UNEP administered MEAs, including the Stockholm Convention Secretariat. The UNEP Executive Director established with effect from 1 September 2005 a new unit within the Division of Environmental Conventions (DEC) entitled Administrative Support to Conventions Unit. This Unit is different from the Administrative Support Centre (ASC) office currently located in Geneva. The Unit will provide support to the UNEP administered MEAs as required and upon request with no additional costs to the MEAs.
III. Report of UNEP activities on the promotion of synergies between the Stockholm, Rotterdam and Basel Conventions

Persistent Organic Pollutants

7. In 2004-2005, UNEP actively promoted the enhancement of synergies between the multilateral trade and environment systems, including by encouraging cooperation between the secretariats of multilateral environmental agreements (MEAs) and the World Trade Organization and between their governing bodies, in accordance with World Summit recommendations. During this period, UNEP assessed the impact of chemicals, especially persistent toxics, on people and the environment globally. UNEP will undertake follow-up actions, including the activities on the global mercury assessment requested by UNEP Governing Council decision GC-21/5. UNEP also provided advisory information through a clearing-house service on persistent organic pollutants, heavy metals (including mercury and lead) and other chemicals. In addition, UNEP provided policy and technical advisory services to countries on implementing obligations under the Stockholm and Rotterdam Conventions, including identifying, managing and disposing of persistent organic pollutants, and, where appropriate, selecting alternatives to these pollutants.

Enforcement

8. The Green Customs Initiative aims at strengthening compliance with and enforcement of MEAs. Its objective is to facilitate the monitoring of legal trade in environmentally-sensitive items while combating illegal trade. Green Customs promotes awareness of MEA enforcement and compliance issues and offers an integrated strategy for awareness raising and introductory training on MEAs. In this way it seeks to strengthen the role of Customs Officers in the “enforcement chain”.

9. Illegal trade in ‘environmentally-sensitive’ commodities such as ozone-depleting substances (ODS), toxic chemicals, hazardous wastes and endangered species is an international problem with serious consequences. The Secretariats of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Stockholm Convention, the Rotterdam Convention, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Montreal Protocol on Substances that Deplete the Ozone Layer, together with UNEP Divisions and Regional Offices, Interpol and the World Customs Organization (WCO), are partners in this cross-cutting initiative. The role of this project is to operationalize this concept through integrated capacity building for customs officers within the MEA enforcement chain. It is coordinated by UNEP’s Division of Technology, Industry and Economics (DTIE) through its OzonAction Branch. The Organisation for the Prohibition of Chemical Weapons (OPCW) is also contributing to the workshops, as is UNEP’s Division of Environmental Conventions.

10. UNEP will develop distance- and Internet-learning techniques for integrated training in order to reach as many customs officials as possible and ensure that the highest possible level of training is maintained. This effort will draw on the experiences of the World Customs Organization and CITES. UNEP is also developing a compliance and enforcement manual that it plans to use for training enforcement personnel, including Customs officials. The endorsement of the governing bodies of partner organizations and the provision of adequate funding will be critical to the long-term success of this integrated training programme.

11. The Green Customs web site (www.greencustoms.org) provides regular updates on ongoing activities as well as links to available support documents. The plan for the second phase of the Green Customs Initiative will be approved at a Partners Meeting in the first half of 2006. It will aim to replicate activities in sub-regions not covered by the first phase. Among the main themes that emerged in the first phase of the workshops are health and safety issues for customs officers handling environmentally-sensitive items; Free Trade Zones, transit and transhipment; the need to strengthen the whole chain of enforcement for MEAs, including capacity-building for prosecutors and/or judges; linkages with other crime and security issues; presentation of the harmonized code’s modifications as they relate to MEAs; and opportunities for Green Customs training at the national level and for e-learning modules for customs officers. These themes will be taken into account when activities for the second phase are approved. Please also refer to paragraph 21 below.
12. The governing bodies of Green Customs partner organizations have encouraged Parties to participate in this initiative. For example, Decision XVII/16, Paragraph 7, of the 17th Meeting of the Parties to the Montreal Protocol refers to the need “To encourage further work on the Green Customs initiative of the United Nations Environment Programme in combating illegal trade in controlled ozone-depleting substances as well as further networking and twinning activities in the framework of regional networks aimed at the exchange of information and experience on both licit and illicit trade in controlled ozone-depleting substances between the Parties, including enforcement agencies.”

13. During 2006-2007, UNEP intends to provide advisory and information (clearing house) services on persistent organic pollutants, heavy metals and other chemicals. It also plans to provide policy and technical advisory services to assist countries with implementing their obligations under the Stockholm and Rotterdam Conventions. These services will address how to identify, manage and dispose of persistent organic pollutants and, where appropriate, how to select non-persistent organic pollutant practices to replace them.

SAICM

14. At its seventh Special Session in February 2002 the UNEP Governing Council adopted Decision SS.VII/3 on a “Strategic Approach to International Chemicals Management” (SAICM). The Governing Council decided that there was a need to further develop a strategic approach. It endorsed as a foundation for such an approach the International Forum for Chemical Safety’s (IFCS) Bahia Declaration and Priorities for Action Beyond 2000. The initiative was subsequently endorsed by the World Summit on Sustainable Development in Johannesburg in September 2002 and by the World Summit in New York in September 2005. In February 2003, UNEP’s Governing Council considered a progress report and adopted decision GC-22/4 IV endorsing the concept of an international conference to be held around the end of 2005.

15. A first preparatory meeting, “SAICM PrepCom1”, was held in Bangkok from 9 to 13 November 2003 immediately after the IFCS Forum IV meeting. SAICM PrepCom2 was held in Nairobi, Kenya, from 4 to 8 October 2004. SAICM PrepCom3 took place in Vienna, Austria, from 19 to 24 September 2005.

16. SAICM was finalized and adopted at the “International Conference on Chemicals Management” (ICCM), which was held in Dubai, United Arab Emirates, from 4 to 6 February 2006, immediately before the 9th Special Session of the UNEP Governing Council and Global Ministerial Environment Forum.

17. SAICM is a voluntary policy framework that will guide efforts to achieve the goal set out by the Johannesburg Plan of Implementation goal that chemicals are used and produced by the year 2020 in ways that minimize significant adverse effects on human health and the environment. SAICM comprises three documents. The “Dubai Declaration on International Chemicals Management” expresses political commitment to SAICM’s implementation. The “Overarching Policy Strategy” setting out the scope and needs addressed by SAICM; its objectives in the areas of risk reduction, knowledge and information, governance, capacity-building and illegal traffic; as well as the principles and approaches underpinning SAICM and the financial and implementation arrangements. The “Global Plan of Action” lists work areas and over 270 potential activities with timeframes and progress indicators to be undertaken, as appropriate, by stakeholders.

18. In their adoption of SAICM, governments also gave support to a ‘Quick Start Programme’, including a trust fund and bilateral, multilateral and other forms of cooperation. The Programme seeks to support initial SAICM implementation activities in developing countries and countries with economies in transition.

Capacity Building

19. In 2004-2005, UNEP undertook capacity-building activities to assist countries in promoting the sound management of chemicals, in particular by implementing their obligations under the Stockholm and Rotterdam Conventions. It has also provided support for efforts by Governments regarding coherent chemicals policy development and implementation.
20. UNEP has also assisted in the development of harmonized national legislation for the implementation of chemicals- and wastes-related MEAs for Tonga. A review report was prepared together with draft legislation. The Basel Convention Secretariat has contributed to this process by, for example, reviewing the draft legislation.

21. Under the Green Customs Initiative, UNEP also supported six regional training workshops for customs officials on implementing trade-related MEAs, including the Stockholm, Rotterdam and Basel Conventions as well as CITES, the Montreal Protocol and related regional MEAs. These workshops were held for South Asia, the Caribbean, East Africa, the Caucasus, West Asia and Central Asia. The first national workshop for customs officials was held in February 2006 in Mauritius; additional workshops in other countries will be organized in 2006. A Training Guide for customs officials on implementing MEAs has been developed, tested and reviewed in these workshops. This Guide includes a specific session on implementing the Basel Convention, which was led by the Basel Convention Secretariat.

22. In collaboration with the secretariats of the chemicals and wastes-related MEAs, UNEP prepared a “Manual on Guidelines for the Compliance with and Enforcement of MEAs”. UNEP also worked with these MEA Secretariats in eight regional capacity-building workshops to review and test the draft Manual.

23. With the financial support of the Government of Switzerland, UNEP has organized a series of regional and sub-regional workshops on how to exploit synergies amongst the Basel, Rotterdam and Stockholm Conventions at the national and regional levels. Working in close collaboration with the three convention secretariats, UNEP organized three such workshops in 2004: in Montevideo, Uruguay; Riga, Latvia; and Damascus, Syria. The participants consisted mostly of the national focal points of the three conventions. Each workshop produced a set of regional recommendations, which were summarized together in a brief booklet produced by UNEP entitled “A Guide to Cooperation on the Basel, Rotterdam and Stockholm Conventions”.

24. UNEP will also provide assistance to the secretariats of UNEP’s Regional Seas Programme and to participating countries on the coordinated implementation of MEAs, such as the Convention on Biological Diversity and the Basel Convention, in the context of the regional seas conventions and activities. UNEP is also assisting the Regional Seas Programme with the joint development and coordinated implementation of capacity-building programmes, projects and activities with the global conventions.

25. As agreed with the Basel Convention Secretariat, and in cooperation with the Rotterdam and Stockholm Convention secretariats, UNEP also intends to develop and facilitate a joint outreach campaign. A project team consisting of staff from UNEP and the secretariats will develop an agreed common strategy for 2006 - 2007. A joint outreach toolkit, containing fact sheets and other appropriate materials, will be developed and published in various languages. A regional workshop will be organized to explore the benefits of an integrated approach to chemicals and wastes outreach at the national and regional levels. Based on the results of this first phase, UNEP will work with the secretariats to develop a longer term strategy.

26. UNEP Governing Council Decision GC/SS/VII/1 of February 2002 concerning the strengthening of international environmental governance contains, among other components, a particular focus on the urgent need to develop a strategic plan for providing technology support and capacity building to developing countries and countries with economies in transition. Pursuant to this, the UNEP Governing Council adopted the Bali Intergovernmental Strategic Plan for Technology Support and Capacity Building in Decision GC-23/1-I. The management of chemicals and wastes forms one of the thematic areas of intervention. UNEP has put into place an implementation plan for realizing the objectives of the Bali Strategic Plan, including setting up a database of its capacity building and technology support activities in various regions and countries.
Global public health response to natural occurrence, accidental release or deliberate use of biological and chemical agents or radionuclear material that affect health

The Fifty-fifth World Health Assembly,

Underlining that the World Health Organization focuses on the possible public health consequences of an incident involving biological and chemical agents and radionuclear material, regardless of whether it is characterized as a natural occurrence, accidental release or a deliberate act;

Having reviewed the report on the deliberate use of biological and chemical agents to cause harm: public health response;¹

Seriously concerned about threats against civilian populations, including those caused by natural occurrence or accidental release of biological or chemical agents or radionuclear material as well as their deliberate use to cause illness and death in target populations;

Noting that such agents can be disseminated through a range of mechanisms, including the food- and water-supply chains, thereby threatening the integrity of public health systems;

Acknowledging that natural occurrence or accidental release of biological, chemical agents and radionuclear material could have serious global public health implications and jeopardise the public health achievements of the past decades;

Acknowledging also that the local release of biological, chemical and radionuclear material designed to cause harm could have serious global public health implications and jeopardize the public health achievements of the past decades;

Recalling resolution WHA54.14 on global health security: epidemic alert and response, which stresses the need for all Member States to work together, with WHO and with other technical partners, in addressing health emergencies of international concern, and resolution WHA45.32 on the International Programme on Chemical Safety, which emphasized the need to establish or strengthen national and local capacities to respond to chemical incidents;

¹ Document A55/20.
Recognizing that one of the most effective methods of preparing for deliberately caused disease is to strengthen public health surveillance and response activities for naturally or accidentally occurring diseases,

1. URGES Member States:
   
   (1) to ensure they have in place national disease-surveillance plans which are complementary to regional and global disease-surveillance mechanisms, and to collaborate in the rapid analysis and sharing of surveillance data of international humanitarian concern;

   (2) to collaborate and provide mutual support in order to enhance national capacity in field epidemiology, laboratory diagnoses, toxicology and case management;

   (3) to treat any deliberate use, including local, of biological and chemical agents and radionuclear attack to cause harm also as a global public health threat, and to respond to such a threat in other countries by sharing expertise, supplies and resources in order rapidly to contain the event and mitigate its effects;

2. REQUESTS the Director-General:

   (1) to continue, in consultation with relevant intergovernmental agencies and other international organizations, to strengthen global surveillance of infectious diseases, water quality, and food safety, and related activities such as revision of the International Health Regulations and development of WHO’s food safety strategy, by coordinating information gathering on potential health risks and disease outbreaks, data verification, analysis and dissemination, by providing support to laboratory networks, and by making a strong contribution to any international humanitarian response, as required;

   (2) to provide tools and support for Member States, particularly developing countries, in strengthening their national health systems, notably with regard to emergency preparedness and response plans, including disease surveillance and toxicology, risk communication, and psychosocial consequences of emergencies;

   (3) to continue to issue international guidance and technical information on recommended public health measures to deal with the deliberate use of biological and chemical agents to cause harm, and to make this information available on WHO’s web site;

   (4) to examine the possible development of new tools, within the mandate of WHO, including modelling of possible scenarios of natural occurrence, accidental release or deliberate use of biological, chemical agents and radionuclear material that affect health, and collective mechanisms concerning the global public health response to contain or mitigate the effects of natural occurrence, accidental release or deliberate use of biological, chemical agents and radionuclear material that affect health.

Ninth plenary meeting, 18 May 2002
A55/VR/9
Public health response to biological and chemical weapons

WHO guidance

Second edition of
Health aspects of chemical and biological weapons:
report of a WHO Group of Consultants,
Geneva, World Health Organization, 1970

World Health Organization
Geneva, 2004
ANNEX 2: TOXINS

1. Introduction

As a category, toxins have recently acquired greater prominence in the literature on biological warfare (1, 2), though not because of any increase in their potential for weaponization, despite their being among the most toxic substances known today. It is, however, true that some toxins are becoming more accessible to quantity production than they once were.

"Toxin" is a word that has no commonly accepted meaning in the scientific literature. This may be of little account to the health authorities of Member States unless they become obliged to seek international assistance because of a toxin-warfare attack, whether actual or threatened. It may then be important to understand how toxins are treated in the Biological and Chemical Weapons Conventions since, to differing degrees, these two international treaties are potential sources of such assistance.

The 1972 Biological and Toxin Weapons Convention covers “toxins whatever their origin or method of production”. It does not define toxins, but its travaux préparatoires show that the term is intended to mean toxic chemicals produced by living organisms. The actions of the United States are important in this connection. On 14 February 1970, during the negotiation of the Convention, the United States announced that it had decided to renounce offensive preparations for the use of toxins as a method of warfare. Shortly afterwards, it informed the treaty-negotiating body that toxins “are poisonous substances produced by biological organisms, including microbes, animals, and plants” (3), and it has since reiterated and even expanded that definition in the legislation implementing the Convention in United States law. This states that:

- the term “toxin” means the toxic material of plants, animals, microorganisms, viruses, fungi, or infectious substances, or a recombinant molecule, whatever its origin or method of production, including - (A) any poisonous substance or biological product
that may be engineered as a result of biotechnology produced by a living organism; or (B) any poisonous isomer or biological product, homolog, or derivative of such a substance (4).

The essence of this definition evidently found favour with all the other States Parties to the Convention, for the Final Declaration of the Second Biological Weapons Convention Review Conference states that “toxins (both proteinaceous and non-proteinaceous) of a microbial, animal or vegetable nature and their synthetically produced analogues are covered” by the treaty (5).

Inasmuch as toxins are both toxic and chemical in nature, they also automatically fall within the scope of the 1993 Chemical Weapons Convention, which states that:

“toxic chemical” means any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.

So, although there is no consensus on the term among scientists, international law regards a wide range of substances as “toxins”. At one end of the range are the bacterial toxins, such as botulinum toxin and staphylococcal enterotoxin, both of which have in the past been stockpiled for weapons purposes. They are high-molecular-weight proteins that can at present be produced on a significant scale only by the methods of industrial microbiology. In the middle of the range are the snake poisons, insect venoms, plant alkaloids and a host of other such substances, some of which are becoming accessible to chemical synthesis and others, e.g. curare, batrachotoxin and ricin, have been used as weapons. At the other end of the range are small molecules such as potassium fluoroacetate (found in the plant Dicephalatum cymosum), which are typically synthesized by chemical processes when they are needed even though they are also produced by certain living organisms, thereby falling within the legal definition of “toxin”. Hydrogen cyanide is another such toxin. It occurs in some 400 varieties of plant, in certain animals, and is synthesized by at least one bacterium (Bacillus pyocyaneus).
In the sense of the Biological and Toxin Weapons Convention, “toxin” includes substances to which scientists would not normally apply the term. For example, there are chemicals that occur naturally in the human body that would have toxic effects if administered in large enough quantity. Where a scientist might see a bioregulator, say, the treaty would see a poisonous substance produced by a living organism, in other words a toxin – nor is this unreasonable. Wasp venom, for example, is clearly a toxin, yet its active principle is histamine, which is also a human bioregulator. Although histamine might not itself be made into an effective weapon, the same cannot necessarily be said for other bioregulators.

Indeed, now that large-scale production processes for biologically active peptides and similar substances are undergoing rapid commercial development, bioregulators and other toxins constitute a field rich in potential weapons as well as pharmaceuticals, and in particular weapons of intense disabling or incapacitating power. It is fortunate, therefore, that this advance in biotechnology should have coincided with the adoption of the Chemical Weapons Convention, since it places its States Parties under the express obligation to ensure that bioregulators and other toxins, like all other toxic chemicals, are used only for the purposes that the Convention does not prohibit.

Some of the toxins that have been weaponized in the past are described below. Others, such as hydrogen cyanide and its derivative cyanogen chloride, are covered in the annex on chemical agents (Annex 1), as is a toxin that is finding widespread use as a riot-control agent, namely oleoresin capsicum, also known as Agent OC.

The bioregulator that, in the 1960s, initiated consideration of these often complex chemicals as weapons was the endecapeptide known as Substance P (6), a tachykinin. Several other bioregulatory peptides have recently attracted similar attention (7–11), but are not discussed here.
5. Documents from Regions, Regional Organizations and Other Organizations

At a most basic level, regional organizations play an important role in providing states with a forum for consultation on political and security issues in a regional context. These consultations have led, for example, to specific agreements that proclaim the region free of a particular category of weapon or a WMD-free zone, or that implement regional strategies to prevent the proliferation of WMD in general, and CW issues specifically.

5.1 African Union

Established by the issuing of the Sirte Declaration in 1999 and the Constitutive Act of the African Union in 2000, the African Union is a successor to the amalgamated African Economic Community and the Organization of African Unity. The AU has 53 member states, including all African states except Morocco. In 2002, the African Union adopted a decision on the implementation and universality of the CWC, which is included in this section of the Resource Guide. In January 2006, OPCW Director-General Rogelio Pfirter and the Chairperson of the African Union Commission, Alpha Oumar Konaré, signed a memorandum of understanding focused on the universality of the Convention in Africa, effective national implementation of its provisions, and increased participation by African Member States in the OPCW’s international cooperation programmes (the MoU is annexed to OPCW document S/547/2006).

5.2 Association of Southeast Asian Nations

As part of its commitment to promote regional peace and stability the Association of Southeast Asian Nations (ASEAN) established the ASEAN Regional Forum (ARF) in 1994. ARF currently has 26 participants. The ARF agenda consists of two broad objectives: first, to foster constructive dialogue and consultation on political and security issues of common interest and concern and, second, to contribute to efforts towards confidence building and preventive diplomacy in the Asia-Pacific region. This agenda aims to evolve in three broad stages, namely the promotion of confidence building, development of preventive diplomacy and elaboration of approaches to conflicts and, as part of that, the ARF countries agreed a non-proliferation statement in 2004, a copy of which is included in this section of the Resource Guide.

5.3 European Union

Established in 1957 by the Treaty of Rome, the European Union (EU) currently has 27 Member States. While the EU has always had an interest in arms control, disarmament and non-proliferation, especially since the adoption of its Common Foreign and Security Policy in the early 1990s, its involvement has recently become much more intensive and pro-active. In 1999, a Council Joint Action established a European Union cooperation programme for non-proliferation and disarmament in Russia, including financial assistance for CW destruction. In 2003, the EU adopted general strategy documents outlining its broad approach towards preventing WMD proliferation.

Since 2003, the EU has focused on more concrete activities. In November 2003, the Council of the European Union adopted a Common Position on the universalisation and reinforcement of multilateral WMD agreements which called for all states to join the CWC and committed EU Member States to strengthened national implementation measures. In November 2004, the Council adopted the first Joint Action on support for OPCW activities in the framework of the implementation of the EU WMD Strategy. This Joint Action has been followed by similar Joint Actions in 2005 and 2007. The Council adopted a Common Position in June 2007 setting out the EU’s objectives for the Second Review Conference. This section of the Resource Guide includes the 2003 Common Position, the 2004 Joint Action Plan and follow-up Actions of 2005 and 2007 and the 2007 Common Position.
5.4 Latin America

In September 1991 in Mendoza, Argentina, the governments of Argentina, Brazil and Chile jointly signed the Declaration of Mendoza which committed the three countries not to “develop, produce or acquire in any way, stockpile or retain, transfer directly or indirectly, and not to use chemical or biological arms.” The Declaration was agreed in the context of the negotiation of the CWC and is primarily concerned with supporting the negotiation but, in its preambular determination to “consolidate the region as an area of peace and cooperation, free from the scourge of these weapons of mass destruction”, it can be seen as a precursor of later declarations by the OAS. The Declaration was subsequently also signed by Bolivia, Ecuador, Paraguay and Uruguay.

In December 1991, the leaders of the Andean Group countries (Bolivia, Colombia, Ecuador, Peru and Venezuela) signed a Declaration on Renunciation of Weapons of Mass Destruction in Cartagena des Indias. The declaration obliged its signatories not to produce, develop, use, test and transfer weapons of mass destruction, whether nuclear, biological, toxin or chemical weapons, and to refrain from storing, acquiring or holding such weapons. Regarding the CWC specifically, the Declaration states the signatories support for the ongoing CWC negotiations and their intention to become original States Parties to the Convention. Like the Mendoza Declaration, the Cartagena Declaration states the goal of “the transformation of Latin America and the Caribbean into the first inhabited area of the planet which is free of weapons of mass destruction”.

Both declarations are included in this section of the Resource Guide.

5.5 Non-Aligned Movement

The first conference of non-aligned heads of state was held in Belgrade in September 1961. The Non-Aligned Movement (NAM) currently has over 110 Member States. Summit meetings of NAM Heads of State are held approximately every three years and there have been fourteen to date with the most recent being held in Cuba in September 2006. After each summit, the host country becomes chair of the NAM until the next summit meeting, so Cuba is the current chair of the NAM. This section of the Resource Guide contains an extract from the 2006 NAM summit declaration relating to the CWC.

5.6 Organization of American States

The Organization of American States (OAS) brings together 35 independent countries (however, while Cuba remains a member of the OAS, its government has been excluded from participation since 1962) to strengthen cooperation and advance common interests in the Western Hemisphere. At the Second Summit of the Americas, held in Santiago, Chile, in 1998 the Heads of State and Government decided to promote regional dialogue taking into account the new post Cold War political, economic, social, and strategic-military factors with a view to revitalizing and strengthening the institutions of the Inter-American system.

One result of this regional dialogue was momentum to make the region a chemical and biological weapons-free zone, building on earlier commitments in the Mendoza and Cartagena Declarations of 1991. In October 2003, a Special Conference in Mexico City adopted the “Declaration on Security in the Americas” which represented a new approach to hemispheric security taking into account the impact of globalization and other changes in the region. The Declaration reaffirmed their commitment to preventing the proliferation of weapons of mass destruction by resolutely supporting the OPCW. It additionally declared as an objective of the OAS making the Americas a region free of chemical and biological weapons. This latter objective was put into effect by a resolution of the 34th OAS General Assembly in Quito in 2004 in which OAS Member States resolved to “concretely fulfill the shared commitment of member states to make the Americas a region free of biological and chemical weapons.” A copy of the resolution is included in this section of the Resource Guide.
ASSEMBLY OF HEADS OF STATE
AND GOVERNMENT
Thirty-Eighth Ordinary Session
of the Organization of African Unity
8 July 2002
Durban, SOUTH AFRICA

AHG/Decisions 171-184(XXXVIII)
AHG/Decl. 1-2 (XXXVIII)

DECISIONS AND DECLARATIONS
DECISION ON THE IMPLEMENTATION AND UNIVERSALITY OF
THE CONVENTION ON THE PROHIBITION OF THE
DEVELOPMENT, PRODUCTION, STOCKPILING
AND USE OF CHEMICAL WEAPONS
AND ON THEIR DESTRUCTION

The Assembly:

1. TAKES NOTE of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (hereinafter “the Convention”) that aims to achieve the effective prohibition of the development, production, acquisition, transfer, stockpiling and use of chemical weapons and their destruction,

2. RECALLS United Nations General Assembly Resolution A/RES/55/33 of 20 November 2000 which notes with appreciation the ongoing work to achieve the objective and purpose of the Convention, to ensure the full implementation of its provisions and to provide a forum for consultation and cooperation among States parties,

3. ALSO RECALLS the steadfast position of Africa regarding Weapons of Mass Destruction and in particular to the Pelindaba Treaty,

4. ACKNOWLEDGES the conclusions and recommendations of the workshop devoted to Africa on the Chemical Weapons Convention held in Khartoum, the Sudan, from 9 to 11 March 2002,

5. WELCOMES the recommendation for an effective implementation of the Chemical Weapons Convention in Africa through sustained technical assistance from the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons,

6. ENCOURAGES the call to achieve universality of the Chemical Weapons Convention in Africa,

7. REQUESTS the Secretary General to inform Council, at its regular sessions, of developments regarding the implementation of the Chemical Weapons Convention and the progress made on the issue of universality.
ASEAN Regional Forum Statement on Non-Proliferation
Jakarta, 2 July 2004

1. The Chairman of the ASEAN Regional Forum, on behalf of the ARF participants, issues the following statement:

2. Recognizing that:
   A. The proliferation of weapons of mass destruction (WMD) in all its aspects and their means of delivery constitute a threat to international peace and security and a growing danger to all states;
   B. The proliferation of WMD and the spread of terrorist groups increase the risk that terrorists may gain access to WMD and their means of delivery;
   C. A multilateral approach to security, including disarmament and nonproliferation, contributes to maintaining international order, therefore every effort should be undertaken to uphold, implement and strengthen the multilateral disarmament and nonproliferation treaties and agreements to which ARF participants are States Parties.
   D. The support of international institutions charged respectively with verification and upholding of compliance with these treaties is of key importance.
   E. It is vital to prevent terrorists or those who harbor them from acquiring or developing WMD, their means of delivery, and related materials, and continued efforts to reduce this threat should be greatly encouraged.
   F. In the interest of international peace and security, ARF participants agree that it is vital that we prevent, with utmost vigilance and urgency, the proliferation of WMD, their means of delivery, and related materials.
   G. The effort to prevent the proliferation of WMD and their means of delivery requires a comprehensive approach in accordance with international law.
   H. Critical to such an approach is to encourage all ARF participants to comply with their respective nonproliferation commitments and disarmament obligations under the international treaties to which they are parties. They are also encouraged to adopt new measures as appropriate on effective export controls and on establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations.
   I. The ARF has long recognized the threat posed by the proliferation of WMD and their means of delivery to the Asia-Pacific region and the need to uphold, implement and strengthen the multilateral disarmament and nonproliferation treaties and agreements to which ARF participants are states parties. These principles were reflected in the 1996 ARF Chairman’s Statement, which referred to the ARF Seminar on Nonproliferation in Jakarta on December 6-7, 1996, and in subsequent ARF statements. The ARF commends Canada’s proposal to conduct a seminar on export licensing in the next ARF cycle.
   J. The prevention of proliferation should not hamper international cooperation in materials, equipment and technology for peaceful purposes.

3. The ARF supports, in line with Article 25 of the UN Charter, the adoption of UN Security Council Resolution 1540 on nonproliferation of weapons of mass destruction (2004) and presumes that all its provisions, having unequivocal supremacy over this Statement, should be effectively implemented. To this end, ARF participants will closely collaborate with each other and duly cooperate with the Committee of the Security Council established under Resolution1540. This Statement is a contribution at the regional level to achieving the goals of the aforesaid Resolution.

4. The ARF notes the progress that has been made by ARF participants in addressing proliferation concerns. The ARF encourages ARF participants to further enhance their efforts and commitments to prevent the proliferation of WMD and their means of delivery in a more comprehensive manner that takes into account ARF participants’ resources and capacities. The ARF encourages ARF participants to make best efforts:
A. To redouble their efforts to maintain and strengthen the disarmament and nonproliferation treaties, and for all States parties to these treaties to fully implement them in accordance with their obligations under these treaties.

B. To enact or improve national legislation, regulations and procedures to exercise effective control over the transfer of WMD and related materials, while ensuring that such legislation, regulations and procedures are consistent with the obligations of States Parties under international treaties;

C. To strengthen cooperation in sharing of information among ARF participants and with relevant multilateral and international organizations in order to deal effectively with proliferation of WMD and their means of delivery and related transfers.

D. To take cooperative measures to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery and related materials in accordance with national legal authorities and legislation and consistent with international law; and

E. To strengthen national legal measure, as appropriate, for criminalizing the illicit exports of equipment and technology that contributes to the proliferation of WMD, their delivery systems, and related materials.

5. To accomplish these goals, ARF participants have decided to carry out the following cooperative actions, as appropriate and in accordance with international law, for strengthening measures against proliferation of WMD and their means of delivery:

A. ARF participants will implement effective export controls and enforcement measures to control the transfer of materials, technology and expertise that can contribute to the design, development, production or use of WMD and their means of delivery, where necessary reinforcing their national authorities and capabilities toward this end, while ensuring that such policies and practices are consistent with obligations of States Parties to the international treaties. However, efforts to prevent the proliferation of WMD should not hamper international cooperation in material, equipment and technology for peaceful purposes.

B. To this end, ARF participants recognize the utility of effective national export control lists as well as the need, where necessary to rigorously enforce and further develop them, without affecting the rights to develop research, production and use of (nuclear, chemical and biological) materials for peaceful purposes.

C. Given that safe and secure management of radioactive sources is very important in the current security climate, ARF participants will review their abilities to control radioactive sources and will make a political commitment to work toward following guidance contained in the International Atomic Energy Agency’s (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources, or “Code.”

D. Agreeing that the denuclearization of the Korean Peninsula would contribute to the peace and stability of the Asia-Pacific region, ARF participants will continue to support the Six Party Talks to resolve the nuclear issue peacefully through dialogue.

E. ARF participants will continue to enhance cooperation with the IAEA and the OPCW in order to strengthen international nuclear and chemical safeguards respectively, and to uncover networks that provide WMD-related equipment, materials and technologies illegally.

F. All participants will foster regional dialogue and cooperation in order to strengthen a global response to this serious challenge and threat to international security.

6. In addition, ARF participants decided that they will:

A. Work actively with international cooperative mechanisms to provide, when and where possible, technical assistance to strengthen mechanisms against proliferation of WMD, their delivery systems and related materials and technologies, to ARF participants that request such assistance; and

B. Encourage the ARF Chair to explore with the ASEAN Secretariat, or, if established, and ARF Unit, whether it would be willing to record requests from ARF participants for assistance in implementing measures to strengthen their respective WMD national authorities and other mechanisms against proliferation of WMD, their delivery systems and related materials and technologies.
ARF participants will review the progress of these and other efforts to strengthen nonproliferation of WMD in all its aspects and their delivery means at the 12th ARF Ministerial Meeting in 2005.
COUNCIL COMMON POSITION 2003/805/CFSP
of 17 November 2003
on the universalisation and reinforcement of multilateral agreements in the field of non-proliferation of weapons of mass destruction and means of delivery

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the European Union, and in particular Article 15 thereof,

Whereas:

(1) At Thessaloniki, the European Council stated that the proliferation of weapons of mass destruction and means of delivery is a growing threat to international peace and security; the risk that terrorists will acquire chemical, biological, radiological or nuclear materials adds a new dimension to this threat. Therefore, the European Council decided that the EU collective effort would focus, inter alia, on working towards the universal ratification of, and adherence to, the key disarmament and non-proliferation treaties and agreements and, when necessary, towards the strengthening thereof.

(2) In its Action Plan for the implementation of the Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction, the EU and its Member States undertook to promote at political level universal adherence to instruments relating to weapons of mass destruction and their means of delivery.

(3) The restatement of this policy would serve as a yardstick in the negotiations of EU positions in international forums, and it is therefore appropriate to formulate it in a Council Common Position,

HAS ADOPTED THIS COMMON POSITION:

Article 1

The objectives of this Common Position are:

(a) to promote the universal ratification of, and adherence to, the following multilateral agreements and, where necessary, to reinforce their provisions, including by ensuring compliance:

(i) Nuclear Non-Proliferation Treaty and Safeguards Agreements (NPT);

(ii) Additional Protocols with the International Atomic Energy Agency (IAEA Additional Protocols);

(iii) Chemical Weapons Convention;

(iv) Biological and Toxin Weapons Convention;

(v) The Hague Code of Conduct against Ballistic Missile Proliferation;

(b) to promote the early entry into force of the Comprehensive Nuclear Test-Ban Treaty.

These key instruments provide a basis for the international community’s disarmament and non-proliferation efforts, which contribute to international confidence, stability and peace, including the fight against terrorism.

Article 2

In pursuit of the objectives set up in Article 1, the EU and its Member States will pay particular attention to the need to reinforce compliance with the multilateral treaty regime by:

— enhancing the detectability of violations, and

— strengthening the enforcement of obligations established by this treaty regime.

To this end, particular emphasis will be placed on making best use of existing verification mechanisms and, where necessary, establishing additional verification instruments as well as strengthening the role of the UN Security Council which has the primary responsibility for the maintenance of international peace and security.

Article 3

The EU and its Member States will focus their diplomatic action on the pursuance of the objectives referred to in Articles 1 and 2, in accordance with the modalities set out below.
The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is the cornerstone of the global non-proliferation regime and the essential foundation for the pursuit of nuclear disarmament, under Article VI thereof. Achieving universal adherence to the NPT is of crucial importance. To that end, the EU will:

— call on all those States not yet parties to the NPT to accede unconditionally to the NPT as non-nuclear-weapon States and to place all their nuclear facilities and activities under the provisions of the IAEA Comprehensive Safeguards System,

— urge those States not yet having entered into Safeguards Agreements with the IAEA to fulfil their obligations in accordance with Article III of the NPT and to conclude such agreements as a matter of urgency,

— promote all the objectives laid down in the NPT,

— support the Final Document of the 2000 NPT Review Conference and the Decisions and Resolution adopted at the 1995 NPT Review and Extension Conference,

— promote further consideration of security assurances,

— promote measures to ensure that any possible misuse of civilian nuclear programmes for military purposes will be effectively excluded.

The EU considers the IAEA Additional Protocols to be an integral part of the IAEA Safeguards System. By raising the standard for compliance and by making it easier to detect violations, the Additional Protocols strengthen the NPT. In order to promote the universal adoption and implementation of the Additional Protocols, the EU will:

— urge the early ratification of the Additional Protocols by the EU Member States and Acceding Countries by the end of 2003,

— urge other regional organisations to do likewise,

— work towards making the Additional Protocols and Safeguards Agreements the standard for the IAEA verification system and work towards universal adherence to the Additional Protocols,

— encourage strong political and financial support for the work of the IAEA.

The Chemical Weapons Convention is a unique disarmament and non-proliferation instrument the integrity and strict application of which must be fully guaranteed. Effective national implementation is essential for the effective operation of the Convention. In order to strengthen the Convention, the EU will:

— encourage those countries that have not yet adhered to or ratified the Convention to do so without delay,

— encourage all countries which are parties to the Convention to enact without delay necessary national implementation measures, including penal legislation. Such measures must reflect the comprehensive nature of the Convention's provisions,

— urge those States concerned to ensure compliance with their obligation to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Convention,

— work towards the bans on chemical weapons being declared universally binding rules of international law.

The Biological and Toxin Weapons Convention (BTWC) is a cornerstone in the effort to prevent biological agents or toxins from being used as weapons. The EU continues to support the principle of verification of the BTWC.

In order to strengthen the Convention, the EU will:

— make specific efforts to convince States which have not yet adhered to or ratified the Convention to do so without delay,

— work towards identifying effective mechanisms to strengthen and verify compliance within the BTWC,

— work to ensure concrete outcomes from the annual meetings to be held between 2003 and 2005, in preparation for the Sixth Review Conference in 2006,

— put emphasis on, where necessary, strengthening national implementation measures, including penal legislation, and control over pathogenic microorganisms and toxins in the framework of the BTWC,

— work towards the bans on biological and toxin weapons being declared universally binding rules of international law.
Article 8

The Hague Code of Conduct against Ballistic Missile Proliferation is an important tool against the growing proliferation of ballistic missiles capable of carrying weapons of mass destruction. The Code establishes fundamental principles where previously there were none and represents a crucial step towards a possible multilateral arrangement to prevent ballistic missiles proliferation. The EU will:

— convince as many countries as possible to subscribe to it, especially those with ballistic missile capabilities,

— work together with other subscribing States to develop further and implement the Code, in particular the confidence building measures provided for in the Code,

— promote, where possible and appropriate, a closer relationship between the Code and the UN system.

Article 9

The EU will promote the early entry into force of the Comprehensive Nuclear Test-Ban Treaty in accordance with the terms set out in Council Decision 2003/567/CFSP of 21 July 2003 implementing Common Position 1999/533/CFSP relating to the European Union’s contribution to the promotion of the early entry into force of the Comprehensive Nuclear Test-Ban Treaty (CTBT) (1).

Article 10

This Common Position shall take effect on the date of its adoption.

Article 11

This Common Position shall be published in the Official Journal of the European Union.

Done at Brussels, 17 November 2003.

For the Council
The President
F. FRATTINI

COUNCIL JOINT ACTION 2004/797/CFSP
of 22 November 2004
on support for OPCW activities in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on European Union, and in particular Article 14 thereof,

Whereas:

(1) On 12 December 2003, the European Council adopted the EU Strategy against the Proliferation of Weapons of Mass Destruction, which contains, in its Chapter III, a list of measures to combat such proliferation.

(2) The European Union is actively implementing the above EU Strategy and is giving effect to the measures listed in its Chapter III, in particular those related to the universisation of the Chemical Weapons Convention (CWC) and of the provision of financial resources to support specific projects conducted by multilateral institutions.

(3) The objectives of the EU Strategy, as set out in recital (2), are complementary to the objectives pursued by the Organisation for the Prohibition of Chemical Weapons (OPCW), in the context of its responsibility for the implementation of the CWC.

(4) The Commission has accepted to be entrusted with the supervision of the proper implementation of the EU contribution,

HAS ADOPTED THIS JOINT ACTION:

Article 1

1. For the purpose of giving immediate and practical application to some elements of the EU Strategy against the Proliferation of Weapons of Mass Destruction, the European Union shall support activities of the Organisation for the Prohibition of Chemical Weapons (OPCW), with the following objectives:

   — Promotion of universality of the Chemical Weapons Convention (CWC);

   — Support for full implementation of the CWC by States Parties;

   — International cooperation in the field of chemical activities, as accompanying measures to the implementation of the CWC.

A detailed description of the projects above is set out in the Annex.

2. The projects of the OPCW, corresponding to measures of the EU Strategy, are the projects which aim at strengthening:

   — The promotion of the CWC by carrying out activities, including regional and sub-regional workshops and seminars, aiming at increasing the membership of the OPCW;

   — The provision of sustained technical support to States Parties that request it for the establishment and effective functioning of National Authorities and the enactment of national implementation measures as foreseen in the CWC;

   — International cooperation in the field of chemical activities through the exchange of scientific and technical information, chemicals and equipment for purposes not prohibited under the CWC, in order to contribute to the development of the States Parties’ capacities to implement the CWC.

Article 2

1. The financial reference amount for the three projects listed in Article 1(2) is EUR 1 841 000.

2. The expenditure financed by the amount stipulated in paragraph 1 shall be managed in accordance with the European Community procedures and rules applicable to the general budget of the European Union with the exception that any pre-financing shall not remain the property of the Community.
3. For the purpose of implementing the projects referred to in Article 1, the Commission shall conclude a financing agreement with the OPCW on the conditions for the use of the EU contribution, which will take the form of a grant. The financing agreement to be concluded will stipulate that the OPCW shall ensure visibility of the EU contribution, appropriate to its size.

4. The Commission shall report on the implementation of the EU contribution to the Council, in association with its Presidency.

**Article 3**

The EU Council Presidency shall be responsible for the implementation of this Joint Action in full association with the Commission. The Commission shall supervise the proper implementation of the EU contribution referred to in Article 2.

**Article 4**

This Joint Action shall enter into force on the day of its adoption.

It shall expire one year after its adoption.

**Article 5**

This Joint Action shall be published in the *Official Journal of the European Union*.

Done at Brussels, 22 November 2004.

*For the Council*

*The President*

B. R. BOT
ANNEX

EU support for OPCW activities, in the framework of the implementation of the EU strategy against proliferation of Weapons of Mass Destruction

1. Objective and Description

Overall objective: to support the universalisation of the CWC and in particular to promote the accession to the CWC by States not Party (signatory States as well as non-signatory States) and to support the implementation of the CWC by the States Parties.

Description: EU assistance to the OPCW will be focused on the following areas identified by the CWC States Parties as requiring urgent action:

(i) Promotion of universality of the CWC;
(ii) Support for implementation of the CWC by the States Parties;
(iii) International cooperation in the field of chemical activities.

The projects described below will benefit exclusively from EU support. EU funding will only cover expenditures specifically related to the implementation of the projects. Accordingly, these projects will not be financed under the OPCW 2005 Regular Budget. In addition, the procurement of any goods, work or services shall be made by the OPCW.

2. Project description

2.1. Project 1: Promotion of universality of the CWC:

Project purpose: Enhanced membership of the CWC.

Project results:

(i) Enhanced membership of the CWC in various geographical regions (in the Caribbean region, Africa, the Mediterranean countries, South East Asia and the Pacific Islands);
(ii) Strengthened regional networking (involving relevant sub-regional organisations and networks in various areas relevant to the CWC).

Project description: Universality-related regional, sub-regional, and bilateral activities

The participation of States not Party to regional/sub-regional activities offers opportunities for the OPCW to establish/develop contacts with representatives from the capitals and to highlight the advantages and benefits of accessing the CWC, as well as associated obligations. Assistance and technical support are also provided on specific issues relevant to the preparation for accession to the CWC.

In general, the level of funding has limited the OPCW to the conduct of a small number of regional seminars and workshops, designed primarily to raise political awareness of the benefits of the CWC for States not Party.

Since the entry into force of the CWC in 1997, three to four regional events were held each year.

The level of funding available, including voluntary contributions, has not permitted more intensive and targeted ways to assist States not Party in the process of preparing for accession to the CWC, for example through bilateral visits, or regional/sub regional meetings focusing on issues of national implementation measures in conjunction with the ratification of the CWC.

The project will finance the following activities in 2005:

(i) Workshop on the CWC for States not Party in the Caribbean to enable participation by decision-makers and regional/sub-regional organisations, e.g. CARICOM, OECS (venue in an OECS Member State, second quarter 2005, two days, dates tbc). Representatives, including from Antigua and Barbuda, Bahamas, Barbados, Dominican Republic, Haiti, Honduras and Grenada, will be invited. One or two guest speakers from EU would be most helpful to brief the participants on EU initiatives on non-proliferation and disarmament relating to Weapons of Mass Destruction (WMD).

Total Estimated Cost of Event: EUR 28 000.
(ii) Workshop on the CWC for States not Party in Africa (venue in Southern/Central Africa, tbd, three days, first quarter 2005), participants to be sponsored from decision-making bodies in States not Party, and relevant regional/sub-regional organisations. Representatives from Angola, Central African Republic, the Comoros, Congo, Democratic Republic of the Congo, Djibouti, Egypt, Guinea-Bissau, Liberia, Madagascar, Sierra Leone, and Somalia will be invited. A guest speaker from the EU would be most useful to brief participants on EU initiatives relevant to Africa on non-proliferation and disarmament relating to WMD.

Total Estimated Cost of Event: EUR 69 000.

(iii) Workshop on the CWC for countries of the Mediterranean Basin and the Middle East. Representatives from Egypt, Iraq, Israel, Lebanon and Syria will be invited. In addition, decision-making and advisory bodies in States not Party, as well as key representatives from regional States Parties and organisations will be invited. One or two guest speakers from the EU may be requested to brief participants on EU initiatives on non-proliferation and disarmament relating to WMD, the political-security aspects of the Euro-Mediterranean Partnership, export control measures implemented by the EU, etc.

Total Estimated Cost of Event: EUR 62 000.

(iv) Targeted sub-regional training and support for States not Party in Asia (venue tbc, two-three days, third-quarter 2005). Representatives from Bhutan, Cambodia, DPR Korea, Iraq, Lebanon, Myanmar, Niue, Syria, Solomon Islands, and Vanuatu will be invited. Sponsorship of participants from States not Party and regional actors in small sub-regional groups or meetings of national decision-makers. One or two guest speakers from EU would be most helpful to brief the participants on EU initiatives on non-proliferation and disarmament relating to WMD.

Total Estimated Cost of Event: EUR 48 000.

Total Estimated Cost of Project 1: EUR 207 000.

2.2. Project 2: National Implementation of the CWC

Project purpose: Establishment and effective functioning of National Authorities, the enactment of national implementation measures, and the adoption of any administrative measures required in accordance with Article VII obligations of the CWC.

Project results:

(i) To facilitate the establishment and effective functioning of National Authorities and adoption of adequate implementation measures in all regions, through legal and technical assistance and implementation support to National Authorities;

(ii) Putting in place legislation that provides States Parties with adequate information and control over import and export of CWC scheduled chemicals from their territories as well as a wider dissemination of information about and appreciation of EU export control regulations;

(iii) Removing discrepancies in import export data provided by States Parties to enhance confidence in the ability to ensure that transfers of scheduled chemicals are taking place for purposes not prohibited by the CWC.

Project description: the project will contribute to the improvement of the effective functioning of National Authorities and the adoption of adequate implementation measures through:

(a) Assistance visits on legal and technical aspects to respond to specific needs of requesting States Parties who are yet to fulfil their Article VII obligations. Such assistance will be provided by experts/resources from the OPCW staff with the inclusion of EU experts, as necessary. The duration of each visit will be about 5 days. These visits will comprise no more than 3 experts for each visit.

Total Estimated Cost: EUR 135 000.

(b) The participation of National Authorities and other concerned agencies in a technical meeting on the transfers provisions of the CWC which will allow for a wider dissemination of information about these provisions as well as an appreciation of EU export control regulations.

Total Estimated Cost: EUR 189 000.
(c) The participation of customs officials in a meeting related to export control regulations related to the CWC. A critical component for ensuring that transfers of chemicals take place for intended purposes is the proper sensitisation of customs officials to the provisions of the CWC. This meeting will also involve tabletop exercises, discussions on scenarios and sharing of experiences by experts from the EU and other participating Member States.

Total Estimated Cost: EUR 165 000.

Total Estimated Cost of Project 2: EUR 489 000.

2.3. Project 3: International cooperation in the field of chemical activities

Project purpose:

To facilitate the development of the States Parties’ capacities to implement the CWC in the field of chemical activities in accordance with the provisions of Article XI thereto.

This project essentially focuses on the building of capacities through equipment support, technical assistance for laboratories and training in the area of analytical skills.

Project results/activities:

(i) Identification of donor institutions, which are willing to transfer, used but still functional laboratory equipment to a publicly-funded laboratory, research or academic institution or government agency in States Parties whose economies are either developing or in transition;

(ii) Supply of 50 new desktop PCs of standard configuration with printers as donation to national authorities, in the abovementioned targeted States Parties;

(iii) Provision of some essential equipment to improve the quality and accuracy of chemical analysis in publicly-funded laboratories in States Parties;

(iv) Enabling such laboratories in these targeted States Parties to upgrade their level of technical competence;

(v) Assisting qualified analytical chemists from States Parties to acquire further experience and practical knowledge to facilitate the analysis of chemicals related to the national implementation of the CWC.

Project description:

The EU contribution will focus on the following three aspects:

(a) Equipment support: it relates to the building of capacities of National Authorities and other relevant institutions in States Parties whose economies are either developing or in transition so as to enable them to implement the CWC and to engage in peaceful application of chemistry.

A number of National Authorities have identified the lack of availability of essential office equipment like computers and accessories to organise and run their offices.

The project supplies National Authorities in targeted States Parties with 50 new desktop PCs of standard configuration with accessories including printers.

Clearance mechanism:

A clearance mechanism will be set up involving a representative of the EU in regard to the selection of the National Authorities for the new PCs.

Total Estimated Cost: EUR 75 000.

(b) Laboratory assistance

Under a Laboratory Assistance Programme, OPCW has been providing assistance to improve the technical competence of laboratories engaged in chemical analysis and monitoring. The assistance is basically in the form of financial support for conducting technical evaluation or audit of a laboratory so as to improve its level of competence and training of technical personnel at an advanced laboratory/institution for development of skills, for allowing internships at an accredited laboratory for skills development and for conducting small scale research projects relating to method development, validation, etc.
However, the support provided by the OPCW does not cover cost of acquisition of hardware or other investment costs. Also, since expert assistance available in the OPCW is limited due to other commitments, it is necessary that such assistance has to be availed from external sources. EU support for meeting the cost of these requirements will go a long way in enabling the laboratories in the targeted States Parties to improve their technical competence significantly and to improve the quality and accuracy of chemical analysis.

The project covers technical assistance as well as some essential hardware support (gas chromatographs, GCMS, etc) for a limited number of eight publicly funded laboratories engaged in the area of application of chemistry for purposes not prohibited under the CWC in States Parties whose economies are either developing or in transition. Applications will be invited from interested institutions from the targeted States Parties which will have to be routed through their National Authorities/Permanent Delegations.

Clearance mechanism:

A clearance mechanism for the purpose of project 3 will be set up involving representatives of the EU Council Presidency, the Office of the Personal Representative of the High Representative on non-proliferation of WMD, the Commission Services and the OPCW, regarding the selection of beneficiaries to be funded against this grant. Prior agreement by the EU Member States is needed for projects regarding the eight publicly funded laboratories, including hardware support. Any transfers under this project shall be made in accordance with Council Regulation (EC) No 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technology(1) as well as the guidelines of the relevant export control regime, in the framework of which the OPCW Technical Secretariat may be invited to perform a supervisory role. The States Parties to the CWC that will be beneficiaries under this project shall guarantee the use of the transferred goods in accordance with the provisions of the CWC by signing a Memorandum of Understanding to this end with the OPCW Technical Secretariat.

Total Estimated Cost: EUR 900 000.

(c) Analytical skills development course

A course on analytical skills development is to be conducted at an academic institution in Europe. The course will accommodate 20 participants. Its aims are to assist qualified analytical chemists from States Parties whose economies are either developing or in transition to acquire further experience and practical knowledge; to facilitate the analysis of chemicals related to the national implementation of the CWC; to enhance national capacities in the Member States by offering training in analytical chemistry to personnel from the industry, academic institutions and government laboratories; to facilitate the adoption of good laboratory practices; and to broaden the pool of manpower from which the National Authorities and the OPCW Technical Secretariat can draw in future. The course will be for duration of 2 weeks in June-July 2005. It will cover both theoretical and practical training in areas relating to system validation, trouble shooting, sample preparation and analysis.

Total Estimated Cost of Event: EUR 115 000.

Total Estimated Cost of Project 3: EUR 1 090 000.

3. Duration

The total estimated duration for the implementation of this Joint Action is 12 months.

4. Beneficiaries

The beneficiaries of universality related activities are States not Party to the CWC (both signatory States and non-signatory States). The beneficiaries of implementation related activities are non EU-States Parties to the CWC. The selection of the countries Beneficiaries will be identified by the OPCW in coordination with the EU Council Presidency.

5. Implementing entity

The OPCW will be entrusted with the implementation of the three projects. The implementation of these three projects will be done by the OPCW staff with the help of the OPCW Member States and their institutions, selected experts or contractors, as above. In the case of contractors, the procurement of any goods, works or services by the OPCW in the context of this Joint Action shall be carried out in accordance with the applicable rules and procedures of the OPCW, as detailed in the European Community Contribution Agreement with an International Organisation.

6. Third party participants

These projects will be financed 100 % by this Joint Action. Experts of OPCW Member States may be considered as third party participants. They will work under the standard rules of operation for OPCW experts.

7. Estimated required means

The EU contribution will cover 100% of the implementation of the three projects as described in this Annex. The estimated costs are as follows:

Project 1: EUR 207 000

Project 2: EUR 489 000

Project 3: EUR 1 090 000

Total cost (excluding contingencies): EUR 1 786 000

In addition, a contingency reserve of about 3% of eligible costs (EUR 55 000) is included.

Total cost (including contingencies): EUR 1 841 000.

8. Financial reference amount to cover the cost of the project

The total cost of the project is EUR 1 841 000.
COUNCIL JOINT ACTION 2005/913/CFSP
of 12 December 2005
on support for OPCW activities in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on European Union, and in particular Article 14 thereof,

Whereas:

(1) On 12 December 2003, the European Council adopted the EU Strategy against the Proliferation of Weapons of Mass Destruction, Chapter III of which contains a list of measures to combat such proliferation.

(2) The objectives of the EU Strategy are complementary to the objectives pursued by the Organisation for the Prohibition of Chemical Weapons (OPCW), in the context of its responsibility for the implementation of the Chemical Weapons Convention (CWC).

(3) On 22 November 2004, the Council adopted a Joint Action on support for OPCW activities in the framework of the implementation of the EU Strategy against the Proliferation of Weapons of Mass Destruction (1), which was to expire one year after its adoption.

(4) The continuation of such intensive and targeted assistance from the EU to the OPCW is necessary in the context of the active implementation of Chapter III of the EU Strategy, in particular those measures related to the universalisation of the CWC, and of the provision of financial resources to support specific projects conducted by multilateral institutions.

(5) The Commission has agreed to be entrusted with the supervision of the proper implementation of the EU contribution.

HAS ADOPTED THIS JOINT ACTION:

Article 1

1. For the purpose of giving immediate and practical application to some elements of the EU Strategy, the European Union shall support activities of the OPCW, with the following objectives:

— promotion of universality of the CWC,

— support for full implementation of the CWC by States Parties,

— international cooperation in the field of chemical activities, as accompanying measures to the implementation of the CWC.

2. The projects of the OPCW, corresponding to measures of the EU Strategy, shall be the projects which aim at strengthening:

— promotion of the CWC by carrying out activities, including regional and sub-regional workshops and seminars, designed to increase the membership of the OPCW,

— provision of sustained technical support to States Parties that request it for the establishment and effective functioning of National Authorities and the enactment of national implementation measures as envisaged in the CWC,

— international cooperation in the field of chemical activities through the exchange of scientific and technical information, chemicals and equipment for purposes not prohibited under the CWC, in order to contribute to the development of the States Parties capacities to implement the CWC.

A detailed description of these projects is set out in the Annex.

Article 2

1. The financial reference amount for the three projects listed in Article 1(2) shall be EUR 1 697 000, to be funded from the 2006 general budget of the European Union.

2. The expenditure financed by the amount stipulated in paragraph 1 shall be managed in accordance with the European Community procedures and rules applicable to the general budget of the European Union with the exception that any pre-financing shall not remain the property of the Community.

3. For the purpose of implementing the projects referred to in Article 1, the Commission shall conclude a financing agreement with the OPCW on conditions for the use of the EU contribution, which shall take the form of a grant. The financing agreement to be concluded shall stipulate that the OPCW is to ensure visibility of the EU contribution, appropriate to its size.

4. The Commission shall report on the implementation of the EU contribution to the Council, in association with the Presidency.

Article 3

The Presidency shall be responsible for the implementation of this Joint Action in full association with the Commission. The Commission shall supervise the proper implementation of the EU contribution referred to in Article 2.

Article 4

This Joint Action shall enter into force on the day of its adoption.

It shall expire one year after its adoption.

Article 5

This Joint Action shall be published in the Official Journal of the European Union.

Done at Brussels, 12 December 2005.

For the Council
The President
J. STRAW
ANNEX

EU support for OPCW activities, in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction

1. Objective and description

Overall objective: to support the universalisation of the CWC and, in particular, to promote the accession to the CWC by States not Parties (signatory States as well as non-signatory States) and to support the implementation of the CWC by the States Parties.

Description: EU assistance to the OPCW will be focused on the following areas identified by the CWC States Parties as requiring urgent action:

(i) promotion of universality of the CWC;

(ii) support for implementation of the CWC by the States Parties;

(iii) international cooperation in the field of chemical activities.

The projects described below will benefit exclusively from EU support. EU funding will only cover expenditure specifically related to the implementation of the projects. Accordingly, these projects will not be financed under the OPCW 2006 Regular Budget. In addition, the procurement of any goods, work or services will be made by the OPCW.

2. Project description

2.1. Project 1: promotion of universality of the CWC

Project purpose: enhanced membership of the CWC.

Project results:

(i) enhanced membership of the CWC in various geographical regions (in Africa, the Caribbean region, the Mediterranean Basin and the Middle East);

(ii) strengthened regional networking (involving relevant sub-regional organisations and networks in various areas relevant to the CWC).

Project description: universality-related regional, sub-regional, and bilateral activities.

The participation of States not Parties in regional, sub-regional, and bilateral activities offers opportunities for the OPCW to establish/develop contacts with representatives from the capitals and to highlight the advantages and benefits of acceding to the CWC, as well as associated obligations. Assistance and technical support are also provided on specific issues relevant to the preparation for accession to the CWC.

Before 2005, the available level of funding had limited the OPCW to the conduct of a small number of regional seminars and workshops, designed primarily to raise political awareness of the benefits of the CWC for States not Parties. In 2005, the financial support provided by the EU afforded more intensive and targeted ways of assisting States not Parties in the process of preparing for accession to the CWC, for example through bilateral visits, or regional/sub-regional meetings focusing on issues of national implementing legislation in conjunction with the ratification of the CWC.

In 2006, the continuation of such intensive and targeted assistance will enable the OPCW to increase its membership with a view to promoting greater universality of the CWC by the 10th anniversary of its entry into force in April 2007.
The project will finance the following activities in 2006:

(i) workshop on the CWC and bilateral training and support for States not Parties in Africa (venue in an African State to be determined, first and third quarters 2006, two to three days, date to be confirmed). Participants to be sponsored from decision-making bodies in States not Parties, and relevant regional/sub-regional organisations e.g. African Union. Representatives from Angola, Central African Republic, the Comoros, Congo, Djibouti, Egypt, Guinea-Bissau, Liberia, and Somalia will be invited. A guest speaker from the EU would be most useful to brief participants on EU initiatives relevant to Africa on non-proliferation and disarmament relating to Weapons of Mass Destruction.

Total estimated cost of event: EUR 56 000;

(ii) workshop on the CWC for countries of the Mediterranean Basin and the Middle East (venue to be confirmed, two to three days, second quarter 2006). Following the workshop held in Cyprus in 2005 with funding from the EU, which was attended, for the first time, by all States not Parties from the region, representatives from States not Parties (e.g. Egypt, Iraq, Israel, Lebanon, Syria, and other States not Parties that are members of the League of Arab States) will be invited. In addition, decision-making and advisory bodies in States not Parties, as well as key representatives from regional States Parties and organisations, will be invited. One or two guest speakers from the EU may be requested to brief participants on EU initiatives on non-proliferation and disarmament relating to Weapons of Mass Destruction, the political-security aspects of the Euro-Mediterranean Partnership and export control measures implemented by the EU.

Total estimated cost of event: EUR 46 000;

(iii) targeted sub-regional and bilateral training and support for States not Parties in the Caribbean (venue to be confirmed, two days, first and last quarters 2006). Representatives including from Bahamas, Barbados, Dominican Republic, Haiti, and regional/sub-regional organisations e.g. OAS, OECS, will be invited. A guest speaker from the EU would be most helpful to brief participants on EU initiatives on non-proliferation and disarmament relating to Weapons of Mass Destruction.

Total estimated cost of event: EUR 24 000.

Total estimated cost of project 1: EUR 126 000.

2.2. Project 2: national implementation of the CWC

Project purpose: establishment and effective functioning of National Authorities, the enactment of national implementation measures and the adoption of any administrative measures required in accordance with Article VII obligations of the CWC.

Project results:

(i) continue to facilitate the establishment and effective functioning of National Authorities and the adoption of adequate implementation measures in all regions, through legal and technical assistance and implementation support to National Authorities;

(ii) assist National Authorities in the national implementation process through capacity-building support;

(iii) through an extended visit programme, provide a temporary OPCW presence in Africa to enhance national implementation under Article VII of the CWC in African States Parties;

(iv) provide adequate information over transfers of CWC scheduled chemicals from territories under the jurisdiction of the National Authorities, as well as its wider dissemination to customs authorities in order to address any discrepancies in transfer data provided by States Parties.

Project description: the project will contribute to ongoing efforts to improve the functioning of National Authorities, and the adoption of adequate implementation measures through:

(a) assistance on all CWC-related matters, with particular emphasis on legal and technical aspects to meet the needs of requesting States Parties in order to assist them in fulfilling their Article VII obligations through bilateral visits or other appropriate formats. Such assistance will be provided by experts/resource persons from the OPCW staff with the inclusion of EU experts as necessary. The duration of each visit will be about five working days. There will normally be three experts for each visit. The duration of each visit and the number of persons travelling in each team will be determined on a case by case basis to meet the requirements of the assistance to be provided in the most cost-effective manner.
In addition, the EU will fund an extended visit programme to provide a temporary OPCW presence in Africa to assist African States Parties to fulfil their Article VII obligations. This presence will be established for a strictly limited period of time and its single purpose will be to foster national implementation in Africa.

Total estimated cost: EUR 225 000;

(b) grants to National Authorities to support capacity building efforts for necessary national activities and infrastructure for the implementation of the CWC; a pilot project, to fund national implementation activities in selected National Authorities is to be initiated. The project in its pilot phase will provide funding for approximately 12 National Authorities, not exceeding EUR 15 000 for each of the National Authorities selected. The identification of specific tasks to increase capacities within National Authorities to improve the process of national implementation will determine the extent and nature of support to be provided.

Throughout 2005, the EU voluntary contribution has supported the OPCW’s effort to assist States Parties to fulfil their obligations in accordance with the Plan of Action regarding the implementation of Article VII obligations. Bilateral technical assistance visits have provided specific assistance to requesting States Parties. During such visits, identification of further activities to fulfil Article VII obligations, including the development of a country-specific action plan has been undertaken. The response to such bilateral technical assistance visits has been positive, with States Parties initiating activities to comply with their obligations and identifying specific areas for future assistance. In order to continue with the momentum generated in these States Parties for implementation, specific areas of assistance as identified by them may be supported with EU funds in 2006.

The specific areas for which assistance may be requested in the near future by States Parties include funds to conduct national awareness courses for personnel from relevant agencies, Departments and Ministries on the implementation of different provisions of the CWC, consultancy fees for legal experts drafting the national implementing legislation, publication and distribution of enacted legislation and regulations, translation of national implementing legislation and enforcement regulations into local language, establishing an office for the National Authority. These grants will not provide any financial assistance towards payment of salaries.

The pilot project addressing specific areas of assistance will be implemented to ensure that national capacity for implementing the provisions of the Convention is enhanced and tangibly contributes to progress expected to be made by the recipient States Parties.

Selection of National Authorities to receive grants will be undertaken on the basis of carefully identified criteria, including a demonstration of their ability to make quantifiable progress for the implementation of the provisions of the CWC and in accordance with a country-specific action plan developed during a bilateral assistance visit. A clearance mechanism for the selection of National Authorities and proposed consultants will be set up involving representatives of the EU Council Presidency, the Office of the Personal Representative of the High Representative on non-proliferation of Weapons of Mass Destruction, the Commission Services and the OPCW. The grants should contribute towards making the National Authorities thus selected self-sustaining entities in subsequent years.

In order to receive such grants, the recipient National Authorities will need to provide the OPCW with quantifiable objectives to be accomplished as well as a clear time frame for their implementation with the use of the grants. As part of the contract, the recipient National Authority will be obliged to report its activities to the OPCW on a regular basis. The disbursement of grants will be made in instalments, with successive instalments being released after review of progress achieved. The OPCW will provide the EU with relevant details of progress by recipient States Parties as well as a financial statement on the use of the funds by each recipient State Parties.

Total estimated cost: EUR 180 000;

(c) participation of National Authorities and customs authorities in one or more technical meetings in The Hague or in different regions on the transfers provisions of the CWC. This will allow for wider dissemination of information concerning these provisions. These meetings will involve, as appropriate, table-top exercises, discussions on scenarios and sharing of experiences by experts from the EU and other participating States.

Total estimated cost: EUR 180 000.

Total estimated cost of project 2: EUR 585 000.
2.3. Project 3: international cooperation in the field of chemical activities

Project purpose:

to facilitate the development of the States Parties’ capacities to implement the CWC in the field of chemical activities in accordance with Article XI thereof.

This project essentially focuses on the building of capacities through provision of support to analytical laboratories and training in the area of analytical skills.

Project results/activities:

(i) provision of essential equipment to improve the quality and accuracy of chemical analysis in publicly funded laboratories in States Parties the economies of which are either developing or in transition;

(ii) enabling such laboratories in these targeted countries to upgrade their level of technical competence;

(iii) assisting qualified analytical chemists from States Parties to acquire further experience and practical knowledge to facilitate the analysis of chemicals related to the national implementation of the CWC.

Project description:

the EU contribution will focus on the following two aspects:

(a) Laboratory assistance

Under a Laboratory Assistance Programme, OPCW has been providing assistance to improve the technical competence of laboratories engaged in chemical analysis and monitoring. The assistance is basically in the form of financial support for conducting technical evaluation or audit of a laboratory so as to improve its level of competence, training of technical personnel at an advanced laboratory/institution for development of skills, internship at an accredited laboratory for skills development, conducting small scale research projects relating to method development, validation, etc.

However, the support provided by the OPCW does not cover the cost of acquiring hardware or other investment costs. Also, since expert assistance available in the OPCW is limited due to other commitments, it is necessary for such assistance to be available from external sources. As part of the Council Joint Action of 22 November 2004, a project on laboratory assistance has been taken up, for implementation in 2005, under which eight publicly funded laboratories in developing and transition-economy countries are being provided with essential analytical equipment such as bench-top gas chromatographs (GC) or a bench-top gas chromatograph-mass spectrometers (GC-MS) with necessary technical assistance so as to improve their technical competence in the area analysis of chemicals related to the CWC. In response to a note circulated by the Technical Secretariat of the OPCW seeking applications for support under the project, a total of 100 applications was received. Of these, 19 applications were recommended for consideration by the EU. However, since only eight laboratories were to be provided with support under the project in 2005, the remaining 11 short-listed cases could not be considered for acceptance.

EU support for meeting the cost of these requirements will go a long way in enabling the laboratories in the targeted countries to improve their technical competence significantly and to improve the quality and accuracy of chemical analysis. The new project to be implemented in 2006 will cover another eight laboratories, or as many as available funds may allow, to be selected by the clearance mechanism referred to in project 2.2.b.

This project, therefore, will be an extension of the laboratory assistance project in 2005. Its implementation will start only once EU Member States have made a positive evaluation of the current project, based on a written report to be provided by the OPCW.
Clearance mechanism:

the clearance mechanism set up for project 2.2.b will be used to select beneficiaries to be funded against this grant. Prior agreement by the EU Member States is needed for projects regarding the eight publicly funded laboratories, including hardware support. Only laboratories with a link to the CWC should be eligible, and due consideration will be given on the status of implementation of the CWC as well as the timely contribution to the OPCW budget by the possible beneficiaries States. Any transfers under this project shall be made in accordance with Council Regulation (EC) No 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technology (1) as well as the guidelines of the relevant export control regime, in the framework of which the OPCW Technical Secretariat may be invited to perform a supervisory role. The States Parties to the CWC that will be beneficiaries under this project shall guarantee the use of the transferred goods in accordance with the provisions of the CWC by signing a Memorandum of Understanding to this end with the OPCW Technical Secretariat.

Total estimated cost: EUR 700 000;

(b) Analytical skills development course

The Council Joint Action of 22 November 2004 provided support for an analytical development course for 20 participants conducted in a Member State of the European Union in 2005. The course was successfully conducted from 24 June to 8 July 2005 in the Netherlands. Keeping in view the huge response from the targeted countries, namely the developing and transition economy countries, for participation in the course (nearly 180 applications were received), it is proposed to conduct two units of the same course in 2006. The courses will be conducted in Europe, with the help of either one or two institutions. Each course will accommodate 20 participants. Participants should have a clear connection to activities of the CWC and, in particular, the effective implementation of the CWC in their country. The course will aim to assist qualified analytical chemists from States Parties that are either developing or have economies in transition to acquire further experience and practical knowledge: to facilitate the analysis of chemicals related to the national implementation of the CWC; to enhance national capacities in the States Parties by offering training in analytical chemistry to personnel from the industry, academic institutions and government laboratories; to facilitate the adoption of good laboratory practices; and to broaden the pool of manpower from which the National Authorities and the Secretariat may draw in future. It will cover both theoretical and practical training in areas relating to system validation, troubleshooting, sample preparation and analysis. Each course will last for two weeks in June to July or in any other convenient period in 2006.

Total estimated cost: EUR 230 000.

Total estimated cost of project 3: EUR 930 000.

3. Duration

The total estimated duration for the implementation of this Joint Action is 12 months.

4. Beneficiaries

The beneficiaries of universality related activities are States not Parties to the CWC (both signatory States and non-signatory States). The beneficiaries of implementation related activities are non-EU States Parties to the CWC. The selection of the beneficiary countries will be identified by the OPCW in coordination with the EU Council Presidency.

5. Implementing entity

The OPCW will be entrusted with the implementation of the three projects. The implementation of these three projects will be done by the OPCW staff with the help of the OPCW States Parties and their institutions, selected experts or contractors, as above. In the case of contractors, the procurement of any goods, works or services by the OPCW in the context of this Joint Action shall be carried out in accordance with the applicable rules and procedures of the OPCW, as detailed in the European Community Contribution Agreement with an International Organisation.

6. Third Parties participants

These projects will be financed 100 % by this Joint Action. Experts of OPCW States Parties may be considered as third Parties participants. They will work under the standard rules of operation for OPCW experts.

7. **Estimated required means**

The EU contribution will cover 100% of the implementation of the three projects as described in this Annex. The estimated costs are as follows:

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1</td>
<td>126 000</td>
</tr>
<tr>
<td>Project 2</td>
<td>585 000</td>
</tr>
<tr>
<td>Project 3</td>
<td>930 000</td>
</tr>
</tbody>
</table>

**TOTAL COST (excluding contingencies)**: EUR 1 641 000

In addition, a contingency reserve of about 3% of eligible costs (EUR 56 000) is included.

**TOTAL COST (including contingencies)**: EUR 1 697 000

8. **Financial reference amount to cover the total cost of the project**

The total cost of the project is EUR 1 697 000.
III

(Acts adopted under the EU Treaty)

ACTS ADOPTED UNDER TITLE V OF THE EU TREATY

COUNCIL JOINT ACTION 2007/185/CFSP
of 19 March 2007

on support for OPCW activities in the framework of the implementation of the EU Strategy against
Proliferation of Weapons of Mass Destruction

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on European Union, and in particular Article 14 thereof,

Whereas:

(1) On 12 December 2003, the European Council adopted the EU Strategy against Proliferation of Weapons of Mass Destruction (hereinafter referred to as the EU Strategy), Chapter III of which contains a list of measures to combat such proliferation.

(2) The EU Strategy underlines the crucial role of the Chemical Weapons Convention (CWC) and of the Organisation for the Prohibition of Chemical Weapons (OPCW) in creating a world free of chemical weapons. As part of the Strategy, the EU has committed itself to working towards universal adherence to key disarmament and non-proliferation treaties and agreements, among which is the CWC. The objectives of the EU Strategy are complementary to the objectives pursued by the OPCW, in the context of its responsibility for the implementation of the CWC.

(3) On 22 November 2004, the Council adopted Joint Action 2004/797/CFSP on support for OPCW activities in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction (1), following the expiry of Joint Action 2004/797/CFSP, the Council adopted Joint Action 2005/913/CFSP of 12 December 2005 on support for OPCW activities in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction (2), which expired one year after its adoption.

(4) Since the beginning of the implementation of the EU Joint Actions in support of the OPCW in 2005, 14 countries have signed and ratified the CWC, bringing the number of OPCW Member States up to 181.

(5) The continuation of such intensive and targeted assistance from the EU to the OPCW is necessary in the context of the active implementation of Chapter III of the EU Strategy. Measures related to the universalisation of the CWC should continue and be adapted and targeted to the declining number of States not Parties to the CWC. These activities should be complemented by new ones to support specific projects conducted by the OPCW aimed at the full implementation of the CWC and to enhance international cooperation in the field of chemical activities.

(6) The Commission should be entrusted with the supervision of the proper implementation of the EU contribution,

HAS ADOPTED THIS JOINT ACTION:

Article 1

1. For the purpose of giving immediate and practical application to some elements of the EU Strategy, the European Union shall support activities of the OPCW, with the following objectives:


(2) OJ L 331, 17.12.2005, p. 34.
— promotion of universality of the CWC,
— support for full implementation of the CWC by States Parties,
— international cooperation in the field of chemical activities, as accompanying measures to the implementation of the CWC,
— support for the creation of a collaborative framework among the chemical industry, OPCW and national authorities in the context of the 10th anniversary of the OPCW.

2. The projects of the OPCW, corresponding to measures of the EU Strategy, shall be projects which aim at the:

— promotion of the CWC by carrying out regional, sub-regional and bilateral activities, designed to increase the membership of the OPCW,
— provision of sustained technical support to States Parties that request it for the establishment and effective functioning of national authorities, through the provision of grants aiming at capacity building and the enactment of national implementation measures as envisaged in the CWC,
— strengthening of the States Parties’ capacities to respond and develop assistance and protection programmes against chemical weapons,
— establishment of a freely accessible database to allow national authorities and industry an easy identification of chemicals contained in the schedules of the Annex on Chemicals to the CWC,
— strengthening of international cooperation in the field of chemical activities to facilitate the development of the States Parties’ capacities to implement the CWC in the field of chemical activities,
— support for visits to chemical weapons destruction facilities (CWDFs) and/or CWDF construction sites in order to consider the progress and efforts made towards meeting the extended destruction deadlines.

A detailed description of these projects is set out in the Annex.

Article 2

1. The financial reference amount for the implementation of the seven projects listed in Article 1(2) shall be EUR 1 700 000, to be funded from the 2007 general budget of the European Union.

2. The expenditure financed by the amount stipulated in paragraph 1 shall be managed in accordance with the European Community procedures and rules applicable to the general budget of the European Union with the exception that any pre-financing shall not remain the property of the Community.

3. The Commission shall supervise the proper implementation of the EU contribution referred to in paragraph 1. For this purpose, it shall conclude a financing agreement with the OPCW on conditions for the use of the EU contribution, which shall take the form of a grant. The financing agreement to be concluded shall stipulate that the OPCW is to ensure visibility of the EU contribution, appropriate to its size.

4. The Commission shall endeavour to conclude the financing agreement referred to in paragraph 3 as soon as possible after the entry into force of this Joint Action. It shall inform the Council of any difficulties in that process and of the date of conclusion of the financing agreement.

Article 3

1. The Presidency, assisted by the Secretary-General/High Representative (SG/HR), shall be responsible for the implementation of this Joint Action. The Commission shall be fully associated.

2. The technical implementation of the projects referred to in Article 1(2) shall be entrusted to the Technical Secretariat of the OPCW (hereinafter referred to as the Technical Secretariat), which shall perform this task under responsibility of the Presidency and under control of the SG/HR. For this purpose, the SG/HR shall enter into necessary arrangements with the Technical Secretariat.
Article 4

1. The Presidency, assisted by the SG/HR, shall report to the Council on the implementation of this Joint Action. The Commission shall be fully associated and shall provide information on the financial aspects of the implementation of the projects referred to in Article 1(2).

2. The information referred to in paragraph 1 shall be based on regular reports to be provided by the Technical Secretariat.

Article 5

This Joint Action shall enter into force on the day of its adoption.

It shall expire 18 months after the conclusion of the financing agreement referred to in Article 2(3).

Article 6

This Joint Action shall be published in the Official Journal of the European Union.

Done at Brussels, 19 March 2007.

For the Council
The President
Horst SEEHOFER
ANNEX

EU support for OPCW activities in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction

1. Objective and description

Overall objective: to support the universalisation of the Chemical Weapons Convention (CWC), and in particular to promote the ratification/accession to the CWC by States not Parties (signatory States as well as non-signatory States) and to support the full implementation of the CWC by the States Parties.

Description: EU assistance to the Organisation for the Prohibition of Chemical Weapons (OPCW) will be focused on the following areas identified by the CWC States Parties as requiring urgent action:

— promotion of universality of the CWC,

— support for full implementation of the CWC by States Parties,

— international cooperation in the field of chemical activities, as accompanying measures to the implementation of the CWC,

— support for the creation of a collaborative framework among the chemical industry, OPCW and national authorities in the context of the 10th anniversary of the OPCW.

The projects described in point 2 will receive the EU support. EU funding will only cover expenditure specifically related to the implementation of those projects. In addition, the procurement of any goods, works or services will be carried out by the OPCW.

2. Projects description

2.1. Project 1: Universality of the CWC

Project purpose

To achieve universal adherence to the CWC by actively promoting ratification/accession to the CWC by States not Parties (signatory States as well as non-signatory States) and to support the full and effective implementation of the CWC by States Parties.

Project results/activities

— Increased membership of the CWC, by encouraging and supporting the 14 remaining States not Parties (1) to join it as soon as possible,

— strengthened regional networking (involving relevant regional and sub-regional organisations for the purposes of promoting universality as well as effective national implementation of the CWC),

— enhanced awareness of the CWC, its provisions, and benefits to States Parties through regional, sub-regional and bilateral programmes and participation of States not Parties in OPCW events such as training courses, workshops and seminars on the implementation of the CWC.

Project description

(a) Regional Workshop on CWC for the Mediterranean Basin and the Middle East:

Workshop on the CWC for States not Parties in the Mediterranean Basin and the Middle East (venue to be confirmed, two to three days, second semester of 2007). This workshop will be a follow-up to similar events held in Malta (2004), Cyprus (2005), Italy (2006) and in the North of Africa (2007). It aims to intensify

(1) States not Party are regionally distributed as follows: Africa (Angola, Congo (Brazzaville), Guinea Bissau and Somalia), Middle East (Egypt, Iraq, Israel, Lebanon and Syria), Latin America and the Caribbean (Bahamas, Barbados and Dominican Republic) and Asia (Myanmar and North Korea).
awareness of the CWC and its contribution to regional stability and international peace and security. Participants from States not Parties in the region will be sponsored. The Technical Secretariat of the OPCW (hereinafter referred to as the Technical Secretariat) may also sponsor representatives from States Parties and regional/sub-regional organisations (such as the League of Arab States) to serve as resource persons. One or two guest speakers from the EU will be requested to brief participants on EU initiatives on non-proliferation and disarmament relating to weapons of mass destruction (WMD), the political-security aspects of the Euro-Mediterranean Partnership and export control measures implemented by the EU.

Total estimated cost: EUR 56,478

(b) Bilateral visits/programmes

The Technical Secretariat will intensify, in coordination with the EU Presidency, targeted bilateral approaches and programmes for individual States not Parties. The visiting team will include EU representatives as appropriate.

(i) Two to three bilateral visits to States not Parties in Africa. Each visit will last for two to three days. The visit will consist of a maximum of five persons from the Technical Secretariat. Only the most relevant divisions or branches of the Technical Secretariat will be invited to send resource persons.

(ii) Two to three bilateral visits to States not Parties in the Middle East. Each visit will last for two to three days. The visit will consist of a maximum of four persons from the Technical Secretariat. Only the most relevant divisions or branches will be invited to send resource persons.

(iii) Two to three bilateral visits to States not Parties in Latin America and the Caribbean. The visit will consist of a maximum of four persons from the Technical Secretariat. Only the most relevant divisions or branches will be invited to send resource persons.

(iv) One or two bilateral visits to Asia. The visits will consist of a maximum of four persons from the Technical Secretariat. Only the most relevant divisions or branches will be invited to send resource persons.

Total estimated cost: EUR 88,435

The bilateral events for these countries could include national workshops/seminars to raise awareness of the CWC and promote ratification/accession. It should be noted that the final decision to undertake such bilateral events will be determined by positive developments and by the level of preparation by the aforementioned countries.

Total estimated cost of Project 1: EUR 144,913

2.2. Project 2: National Implementation of the CWC

2.2.1. Establishment and effective functioning of national authorities, the enactment of national implementation measures and the adoption of any administrative measures required in accordance with obligations under Article VII of the CWC, and submission of accurate Article VI declarations

Project description

The project will contribute to ongoing efforts to improve the functioning of national authorities, and the adoption of adequate implementation measures through assistance on all CWC-related matters, with particular emphasis on legal and technical aspects to meet the needs of requesting States Parties in order to assist them in fulfilling their obligations under Article VII of the CWC, through bilateral visits or other appropriate formats. Such assistance will be provided by experts/resource persons from the OPCW staff with the inclusion of EU experts, as necessary. Each visit will last about five working days. There will normally be three experts for each visit. The duration of each visit and the number of persons travelling in each team will be determined on a case by case basis to meet the requirements of the assistance to be provided in the most cost-effective manner. Alternatively, assistance will be provided by funding visits by experts from requesting States Parties to the Technical Secretariat, for consultations and hands-on work with relevant officials of the Technical Secretariat. Each of these visits will also last about five working days, with normally three national experts for each visit.
In addition, the EU will fund an extended visit programme to Africa to assist African States Parties to fulfil their obligations under Article VII of the CWC.

Total Estimated Cost: EUR 225 498

2.2.2. Allocation of financial grants to national authorities to support capacity-building efforts for necessary national activities for the implementation of the CWC

Project description

Financial grants to fund national implementation activities in approximately 10 selected national authorities, not exceeding EUR 10 000 for each of the national authorities selected.

The specific areas for which assistance may be requested in the near future by States Parties include funds for:

— the translation into and publication of the CWC in the national language when different from one of the CWC languages and publication and distribution of enacted legislation and regulations which establish an office for the national authority,

— consultancy fees for legal experts drafting the national implementing legislation,

— national awareness courses for personnel from relevant government agencies and industry on the implementation of the CWC. These may include outreach and awareness-raising seminars for decision-makers in Ministries such as External Relations, Justice, Defence, Interior, Industry and Trade, customs authorities and industry associations,

— training sessions for the relevant stakeholders on how to identify and report on declarable facilities, scheduled chemicals, imports and exports relevant to the CWC.

These grants will not provide any financial assistance towards payment of salaries.

Clearance mechanism

A clearance mechanism for the selection of national authorities and proposed consultants will be set up involving representatives of the EU Presidency, the Office of the Personal Representative of the High Representative on non-proliferation of Weapons of Mass Destruction, Commission services and the Technical Secretariat.

Selection criteria

The selection of national authorities to receive grants will be undertaken on the basis of carefully identified criteria, including a demonstration of their ability to make quantifiable progress in the implementation of the provisions of the CWC and in accordance with a country-specific action plan developed during a bilateral assistance visit.

The clearance mechanism will screen applications for grants from national authorities for their eligibility (specifically, as regards relevance to increasing the national implementation capacity, transparency, feasibility and sustainability) before making recommendations to the competent bodies of the Council. The grants should contribute towards making the selected national authorities self-sustaining entities in subsequent years.

In order to receive such grants, the recipient national authorities will need to provide the OPCW with quantifiable objectives to be accomplished as well as a clear time-frame for their implementation with the use of the grants. As part of the contract, the recipient national authority will be obliged to report its activities to the Technical Secretariat on a regular basis. The disbursement of grants will be made in instalments, with successive instalments being released after review of progress achieved. The Technical Secretariat will provide the EU with relevant details of progress by recipient States Parties as well as a financial statement on the use of the funds by each recipient State Party.

Total Estimated Cost: EUR 100 000
2.2.3. Participation of national authorities and customs authorities in one or more technical meetings in The Hague or elsewhere, on the transfer provisions of the CWC

Project description

The difficulties met by States Parties in collecting reliable import-export data for scheduled chemicals and making accurate declarations to the OPCW and in monitoring the trade in scheduled chemicals due to national capacity restraints have an impact on the effectiveness of the verification regime of the OPCW and the attainment of its non-proliferation objectives.

The Technical Secretariat is seeking to address the above challenges by focusing on the following:

— making stakeholders in national authorities, especially customs authorities, aware of the CWC legal requirements in order to further the non-proliferation objectives of the Convention,

— providing customs authorities with technical information through focused meetings on better management of import-export procedures for the regulation of trade in scheduled chemicals,

— identifying relevant chemicals for effective monitoring of trade in scheduled chemicals and sharing of national and regional experiences in implementing the transfer provisions of the Convention,

— disseminating information on EU initiatives and assistance activities for the monitoring of scheduled chemicals,

— understanding the practical difficulties and challenges that customs authorities in different regions and sub-regions encounter in monitoring the trade in scheduled chemicals,

— facilitating better understanding and cooperation amongst stakeholders of the national authorities for monitoring and submitting data on the import-export of scheduled chemicals,

— seeking synergies between the different international regimes which customs authorities are required to monitor and providing of a forum for consultation and cooperation within sub-regions to implement the requirements of the CWC effectively.

The Technical Secretariat will organise three sub-regional meetings for South East Asia, the Southern African Development Community and for States Parties in Eastern Europe. Through these meetings, the Technical Secretariat will seek to highlight the need for all States Parties to put in place measures that will help attain the non-proliferation objectives of the CWC. In addition, during the Annual Regional Meeting of national authorities in GRULAC, there will be a focus on the need for effective interaction between national authorities and customs authorities.

The number of States Parties attending a sub-regional event ranges between seven and ten. Two representatives from the national authority and customs authorities from each State Party are invited to participate. Resource persons with a relevant specialisation are also sponsored by the OPCW for such meetings.

Total estimated cost: EUR 183,466

2.2.4. Outreach to make Parliamentarians aware of the CWC requirements for States Parties to adopt comprehensive national implementing legislation

Project purpose

Promote the adoption of national implementing legislation in States Parties.

Project description

The Technical Secretariat will seek to reach out to parliaments in the different geographical regions represented in the OPCW with the purpose of making them aware of the importance of adopting CWC national implementing legislation.
To that end, the Technical Secretariat will seek to organise two dedicated meetings of Parliamentarians at regional level in Asia and Latin America.

In addition, awareness-raising work will continue to be carried out during the Assemblies of the Inter-Parliamentary Union.

This request is made on the basis of the number of drafts of national implementing legislation expected to be considered by national Parliaments during 2007-2008. Only a third of the OPCW members have comprehensive national implementing legislation.

Total estimated cost: EUR 167 769

2.3. Project 3: International cooperation in the field of chemical activities

Analytical skills development course

Project purpose

To facilitate the development of the States Parties’ capacities to implement the CWC in the field of chemical activities in accordance with the provisions of Article XI of the CWC.

This project essentially focuses on the building of capacities through the provision of support to analytical laboratories by way of training in the area of sampling and analysis of chemicals relevant to the CWC.

Project results/activities

— Assisting qualified analytical chemists from States Parties to acquire further experience and practical knowledge to facilitate the analysis of chemicals related to the national implementation of the CWC,

— enabling analytical laboratories in these targeted countries to upgrade their levels of technical competence.

Project description

Three units of the analytical development course will be organised for 20 participants each in 2007. The aims of the course will be to assist qualified analytical chemists from States Parties that are either developing or have economies in transition to acquire further experience and practical knowledge; to facilitate the analysis of chemicals related to the national implementation of the CWC; to enhance national capacities in the Member States by offering training in analytical chemistry to personnel from industry, academic institutions and government laboratories; to facilitate the adoption of good laboratory practices; and to broaden the pool of manpower from which the national authorities and the Secretariat can draw in future. The course will cover both theoretical and practical training in areas relating to system validation, trouble shooting, sample preparation and analysis. Each course will last for two weeks.

Total Estimated Cost of Project 3: EUR 360 000

2.4. Project 4: Assistance and protection against chemical weapons

Project purpose

The OPCW is committed to addressing threats to peace and security. These threats call for rapid and coordinated responses at national, regional and international levels. Article X of the CWC which consists of assistance and protection has a particular role in this regard. The OPCW is required to develop and maintain a state of readiness to provide a timely, adequate and efficient response. For this reason, the OPCW needs to assist States Parties to develop and/or improve national and regional response systems against chemical weapons and to build an effective mechanism for the mobilisation of international assistance to any requesting State Party in the case of possible use of chemical weapons.
Project results

— Strengthening of the capabilities of the Technical Secretariat to mobilise and coordinate international assistance,

— building/developing or improving the national response capabilities and protection programmes of States Parties,

— establishment of effectively functioning regional protection networks,

— provision and dissemination of information in the field of protection against chemical weapons.

2.4.1. Technical visits to States Parties for inspection of offers of assistance

Project description

The Technical Secretariat will carry out up to six visits in 2007 to States Parties for inspection of offers of assistance under paragraph 7 of Article X of the CWC. The Technical Secretariat team will be composed of a maximum of two experts.

A total of 71 States Parties have undertaken to provide assistance through the OPCW, and to this end 42 States Parties elected to volunteer assistance to the OPCW, in this regard. These voluntary assistance pledges include different types of individual protective equipment, detection and decontamination equipment and units, humanitarian equipment, literature, and expert advice.

These visits will allow offers made by the visited OPCW Member State to be assessed in order to ensure their validity, and verify the status of the equipment (shelf-life, packing, availability, readiness to be delivered, etc.). If the equipment is at the limits of its shelf-life or if the offer is intended to be changed, such visits will establish the new conditions and get more details about the offer. This information will be entered into the OPCW Assistance and Protection database.

Total estimated cost: EUR 45 230

2.4.2. National capacity building of North African States Parties against chemical weapons

Project description

In the current security situation, the States Parties are becoming more aware of the fact that their current national response plans do not take into account the possible use of WMD. Consequently, the OPCW is receiving high numbers of requests related to protective capacity building against chemical weapons from States Parties, in the event of a chemical terrorist attack.

The Technical Secretariat has given high priority to the African region, where almost no protective capacity exists against chemical weapons, and the Technical Secretariat believes the need is greatest and has decided to provide this region with timely assistance.

Recently, for the sake of the security and safety of the region, the North African States Parties (Algeria, Libya, Morocco and Tunisia), asked the OPCW for assistance in accordance with paragraph 5 of Article X of the CWC, which entitles States Parties to request and receive expert advice from the Technical Secretariat in improving and developing their capacity building against chemical weapons.

The Technical Secretariat has planned a set of activities aimed at training first responders involved in the field, and developing their emergency response system against chemical warfare agents (CWA). The activity in North Africa will start with one preliminary planning meeting, followed by basic, advanced and specialised protection courses. The project will be concluded with a sub-regional exercise and a final evaluation meeting.

Total estimated cost: EUR 200 900

Total estimated cost of Project 4: EUR 246 130
2.5. **Project 5: Support for full national implementation of the CWC by the States Parties through the updating of the scheduled chemicals database for verification purposes**

2.5.1. **Update of the scheduled chemicals database for verification purposes**

**Project objective**

To facilitate the operation of the national authorities and the industry through the establishment of a freely accessible database which will allow easy identification of scheduled chemicals and help them to improve the identification of facilities for declaration and reduce discrepancies in the declared import and export of these chemicals between State Parties.

**Project results**

— Develop a database with all CWC scheduled chemicals,

— identify these chemicals with the Chemical Abstract Service (CAS) Registry Number, if assigned, the Harmonised System (HS) code for the use of customs officers and chemical and structural formulae,

— make the database accessible through the web without cost.

Total estimated cost of Project 5: EUR 80 180

2.6. **Project 6: OPCW Industry and Protection Forum**

**Project objective**

To prepare and conduct an OPCW Industry and Protection Forum in the framework of the 10th Anniversary of the OPCW on 2 and 3 November 2007, prior to the 12th Session of the Conference of States Parties and the national authorities meeting immediately before that.

Two days of plenary sessions and concurrent industry and protection workshops and training sessions with the Technical Secretariat, chemical industry, national authorities and respective national agencies, accompanied by an exhibition of CWC inspection and WMD protection equipment.

**Project purpose**

The overall purpose of the Forum is to support national implementation of the CWC through building synergies and strengthening a collaborative framework between the chemical industry, the OPCW and the national authorities. By inviting representatives of the chemical industry of the Signatory States, the Forum will also aim at promoting universality of the CWC.

**Project results**

— Enhanced support for the chemical industry in the national implementation of the CWC and growing synergies between the chemical industry, the OPCW and the national authorities,

— growing awareness of the chemical industry of the proliferation threat and challenges,

— improved capacities of the States Parties in WMD protection (e.g. detection, medical counter-measures and response equipment),

— improved capacities of the chemical industry in handling CWC verification techniques and procedures,

— assisting developing countries to participate in the exchange of experience and practical knowledge on industry verification and providing access to recent developments in the sphere of CWC verification and protection against WMD.
Project partners, audiences/stakeholders as well as participants and beneficiaries

The chemical industry, including associations (CEFIC, International Council of Chemical Associations) and companies from Member States and Signatory States, national authorities of the OPCW Member States, Government agencies which are involved in the monitoring/supervision of activities in the sphere of national implementation and control of toxic chemicals, Government agencies which are engaged in the provision of assistance in case of use of chemical weapons or terrorist use of toxic chemicals, international and national organisations and agencies, as well as companies producing WMD protective equipment.

Total estimated cost of Project 6: EUR 140 000

2.7. Project 7: To provide financial support to visiting groups from the OPCW to chemical weapons destruction facilities

Project purpose

To provide financial support for representatives from the OPCW Executive Council, as described in the decision by the Executive Council and the Conference of States Parties (EC-M-26/DEC.5), to enable visits to CWDFs and/or CWDF construction sites in order to consider the progress and efforts made towards meeting the extended destruction deadlines.

Project results

Implementation of the Executive Council and the Conference of States Parties Decisions (EC-M-26/DEC.5), by facilitating the participation in visiting groups of representatives from all regional groups who, due to financial constraints, might not otherwise be able to attend.

Project description

On 8 December 2006, the Executive Council of the OPCW adopted Decision EC-M-26/DEC.5 ‘Visits by Representatives of the Executive Council’ recommending the Conference of States Parties to take a decision to agree on visits by representatives of the Executive Council to CWDFs in the United States of America and in the Russian Federation.

Through its Decision C-11/DEC.20 of 8 December 2006 ‘Visits by Representatives of the Executive Council’, the Conference of States Parties agreed that such visits are to take place and established the practical modalities thereof.

The aim of the visits will be to provide members of the Executive Council with the opportunity to assess progress and efforts towards meeting extended deadlines and any measures being taken by the visited State Party, so that possible problems or delays in the destruction programme could be overcome.

In accordance with Decision C-11/DEC.20, the visiting groups should comprise: the chairperson (or vice-chairperson) of the Executive Council, a representative from each of the other regional groups, one representative from other States Parties hosting such visits, the Director-General of the Technical Secretariat (or his representative), and, if necessary, a Technical Secretariat interpreter.

That decision stipulates that the Technical Secretariat is to cover the costs of its own staff and of chairperson (or vice-chairperson) of the Executive Council and that all other participants are to meet their own costs.

The purpose of this project is to provide funding for the four regional representatives participating, if they so request.

The clearance mechanism set up for the project set out in point 2.2.2 will be used to select beneficiaries to be funded under this project. The Technical Secretariat will inform the EU Presidency as soon as possible of all interested candidates and a meeting of the clearance mechanism will be convened. Prior agreement by EU Member States will be needed for the final selection of participants which will benefit from the EU support for the visits. Selection criteria will include the status of least developed countries, fulfilment by the applicant countries of their obligations to the OPCW and respect for all relevant international obligations on disarmament and non-proliferation.

The EU will consider, at a later stage, the creation of a trust fund for these purposes.

Total estimated cost of Project 7: EUR 21 696
3. **Duration**

The total estimated duration for the implementation of this Joint Action is 18 months.

4. **Beneficiaries**

The beneficiaries of universality-related activities are States not Parties to the CWC (both signatory States and non-signatory States). The beneficiaries of implementation-related activities are non-EU States Parties to the CWC. Projects will aim at reinforcing the strict implementation of, and compliance with, the CWC by States Parties. The selection of the beneficiaries will be identified by the OPCW in coordination with the EU Presidency.

5. **Implementing entity**

The OPCW will be entrusted with the implementation of the seven projects.

These seven projects will be implemented by OPCW staff with the help of the OPCW States Parties and their institutions, selected experts or contractors, as above. In the case of contractors, the procurement of any goods, works or services by the OPCW in the context of this Joint Action will be carried out in accordance with the applicable rules and procedures of the OPCW, as detailed in the European Community Contribution Agreement with an International Organisation.

The results achieved by each of the seven projects financed under this Joint Action will be evaluated by the competent institutions and bodies of the EU in accordance with this Joint Action. For this purpose, the OPCW will provide the EU Presidency, through the Secretary-General/High Representative, and the Commission with detailed implementation reports.

6. **Third Parties participants**

These projects will be financed 100 % by this Joint Action. Experts of OPCW States Parties may be considered as third Parties participants. They will work under the standard rules of operation for OPCW experts.

7. **Estimated required resources**

The EU contribution will cover 100 % of the implementation of the seven projects, as described in this Annex. The estimated costs are as follows:

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1</td>
<td>EUR 144 913</td>
</tr>
<tr>
<td>Project 2</td>
<td>EUR 676 733</td>
</tr>
<tr>
<td>Project 3</td>
<td>EUR 360 000</td>
</tr>
<tr>
<td>Project 4</td>
<td>EUR 246 130</td>
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<tr>
<td>Project 5</td>
<td>EUR 80 180</td>
</tr>
<tr>
<td>Project 6</td>
<td>EUR 140 000</td>
</tr>
<tr>
<td>Project 7</td>
<td>EUR 21 696</td>
</tr>
</tbody>
</table>

**TOTAL ROUNDED COST (excluding contingencies): EUR 1 670 000**

In addition, a contingency reserve of about 3 % of eligible costs (EUR 30 000) is included.

**TOTAL COST (including contingencies): EUR 1 700 000**

8. **Financial reference amount to cover the total cost of the projects**

The total cost of the projects is EUR 1 700 000.
COUNCIL COMMON POSITION 2007/469/CFSP
of 28 June 2007
relating to the 2008 Review Conference of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on European Union, and in particular Article 15 thereof,

Whereas:

(1) On 29 April 1997, the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC) entered into force. The Convention aims at eliminating an entire category of weapons of mass destruction by prohibiting the development, production, acquisition, stockpiling, retention, transfer or use of chemical weapons by States Parties. States Parties, in turn, must take the steps necessary to enforce that prohibition in respect of persons (natural or legal) within their jurisdiction.

(2) The European Union considers the CWC to be a key component of the international non-proliferation and disarmament framework and a unique disarmament and non-proliferation instrument the integrity and strict application of which must be fully guaranteed. All EU Member States are States Parties to the CWC.

(3) From 28 April to 9 May 2003, States Parties of the Organisation for the Prohibition of Chemical Weapons (OPCW) convened in The Hague for the First Review Conference. In particular, the First CWC Review Conference assessed the destruction process of declared arsenals. It took into account relevant scientific and technological developments since the Convention was drafted. It also reviewed and re-examined the provisions of the Convention relating to verification in the chemical industry. The Conference provided strategic guidance for the next phase of the implementation of the CWC.

(4) On 17 November 2003 the Council adopted Common Position 2003/805/CFSP (1) on the universalisation and reinforcement of multilateral agreements in the field of non-proliferation of weapons of mass destruction and means of delivery. Under that Common Position, the CWC is included as one of these multilateral agreements.

(5) On 12 December 2003, the European Council adopted the EU Strategy against Proliferation of Weapons of Mass Destruction, which reaffirms the commitment of the EU to the multilateral treaty system, and underlines, inter alia, the crucial role of the CWC and of the OPCW in creating a world free of chemical weapons.

(6) On 28 April 2004, the United Nations Security Council unanimously adopted Resolution 1540 (2004) describing the proliferation of weapons of mass destruction and their means of delivery as a threat to international peace and security. Implementation of the provisions of this Resolution contributes to implementation of the CWC.


(9) In view of the forthcoming Second Review Conference of the CWC during the period 7 to 18 April 2008 it is appropriate to define the approach of the European Union, which will guide the EU Member States at this conference,

HAS ADOPTED THIS COMMON POSITION:

Article 1

The objective of the European Union shall be to strengthen the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC), in particular by promoting compliance with the CWC, including the timely destruction of all chemical weapons, and by enhancing its verification regime and striving for universality.

The European Union shall therefore seek a successful outcome of the Second Review Conference in 2008.

(1) OJ L 302, 20.11.2003, p. 34.
(4) OJ L 85, 27.3.2007, p. 10.
Article 2

For the purposes of the objective laid down in Article 1, the European Union shall:

(a) contribute to a full review of the operation of the CWC at the Second Review Conference, including the implementation of obligations of States Parties under the Treaty, as well as the identification of areas in which, and of means through which, further progress should be sought in future;

(b) help build a consensus for a successful outcome of the Second Review Conference, on the basis of the framework established by the First Review Conference, and shall promote, inter alia, the following essential issues:

(i) reaffirmation of the comprehensive nature of the prohibition of chemical weapons as laid down in the General Purpose Criterion by;

— reconfirming that the Convention’s prohibitions apply 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 are consistent with such purposes, and thus take into account the developments in science and technology since the First Review Conference,

— underlining the obligation of States Parties to reflect the General Purpose Criterion in their national implementation legislation and administrative enforcement practice,

— emphasising the obligation of States Parties to declare riot control agents;

(ii) reaffirmation of the obligation of chemical weapons possessor states to destroy their chemical weapons within the deadlines of the CWC, through:

— welcoming the progress made and the efforts undertaken by possessor states to meet the deadlines while urging them to overcome delays in destruction,

— underlining the importance of systematic verification through continuous on-site inspection of chemical weapons destruction,

— assessing progress in the destruction of chemical weapons, taking into account, inter alia, the results of visits by representatives of the Executive Council in accordance with the decision of the 11th Session of the Conference of the States Parties,

— emphasising the responsibility of the policy-making organs to consider States Parties’ compliance with agreed destruction deadlines at the appropriate time;

(iii) further strengthening of the verification regime with regard to activities not prohibited under the Convention, with a view to enhancing confidence in the non-proliferation of chemical weapons and to further promoting cooperation with industry, through:

— continued awareness-raising of the Convention’s prohibitions throughout Government, industry, academia and non-governmental organisations,

— emphasising the need to increase the number of inspections in Other Chemical Production Facilities (OCPF) and to improve the effectiveness of the regime where necessary, giving priority to those sites which are of high relevance to the Convention, and to the improvement of declarations by States Parties on OCPF sites;

(iv) implementation of the provisions of the Convention on consultations, cooperation and fact-finding, in particular the challenge-inspection mechanism, which remains an indispensable and readily available instrument as well as a viable and usable tool of the OPCW’s verification regime, stressing the legal right of States Parties to request a challenge inspection without prior consultation and encouraging the use of the mechanism as a matter of course where appropriate;

(v) development of tailored strategies on achieving the universality of the CWC, in particular with regard to the Middle East, including regional workshops in the areas concerned;

(vi) continuous improvement of national implementation measures and recalling that full compliance with Article VII is a vital factor for the present and future efficiency of the CWC regime, including through:

— offering assistance to States Parties in need, as exemplified by the Joint Actions of the European Union; and

— strengthening national export controls which are required to prevent the acquisition of Chemical Weapons;

(vii) ensuring the OPCW’s capability to provide assistance and protection;
(viii) fostering international cooperation in accordance with the provisions of the Convention, and in particular contributing to capacity building activities by the OPCW in States Parties developing their chemical industry and trade;

(ix) beginning work to ensure that, following the completion of the destruction of all chemical weapons, the OPCW is wellplaced to focus on its remaining activities, in particular its non-proliferation role;

(x) compliance with obligations under United Nations Security Council Resolutions 1540 (2004) and 1673 (2006), in particular to call for practical cooperation between OPCW and the UN 1540 Committee as well as other forums with the aim of eliminating the risk of chemical weapons being acquired or used for terrorist purposes, including possible terrorist access to materials, equipment, and knowledge that could be used in the development and production of chemical weapons;

(xi) the G8 Global Partnership programmes targeted at preventing proliferation of weapons and materials of mass destruction through support for disarmament, control and security of sensitive materials, facilities and expertise.

**Article 3**

Action taken by the European Union for the purposes of Article 2 shall comprise:

(a) agreement by Member States on proposals on substantive issues for submission on behalf of the European Union for consideration by States Parties to the Convention in the preparation phase and at the Second Review Conference;

(b) where appropriate, approaches by the Presidency pursuant to Article 18 of the Treaty on European Union:

   (i) with a view to promoting universal accession to the CWC;

   (ii) to promote effective national implementation of the CWC by States Parties;

   (iii) to urge States Parties to support and participate in an effective and complete review of the CWC and thereby reiterate their commitment to this fundamental international norm against chemical weapons;

   (iv) to promote the above mentioned proposals submitted by the European Union for States Parties’ consideration which are aimed at further strengthening the CWC;

   (c) statements by the European Union delivered by the Presidency in the run up to, and during, the Second Review Conference.

**Article 4**

This Common Position shall take effect on the day of its adoption.

**Article 5**

This Common Position shall be published in the Official Journal of the European Union.

Done at Luxembourg, 28 June 2007.

For the Council
The President
S. GABRIEL
The Declaration of Mendoza

September 5, 1991

Mendoza, Argentina
September 5, 1991

The Government of the Federative Republic of Brazil, the Government of the Republic of Argentina, the Government of the Republic of Chile,

Convinced that total proscription of chemical and biological weapons will contribute to the strengthening of the security of all countries;

Determined to consolidate the region as an area of peace and cooperation, free from the scourge of these weapons of mass destruction;

Ratifying the respective unilateral declarations on non-possession of chemical weapons formulated by the three countries;

Agreeing with the need to prevent the dissemination of such weapons by means of a multilateral convention, being currently negotiated at the Conference on Disarmament, prohibiting completely chemical arms and their production facilities, urging all countries that manufacture and possess such weapons to be parties to the Convention;

Contributing to the confidence building measures agreed upon by the Party States of the 1972 Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) Weapons, and Toxin Weapons and on Their Destruction, which will hold its third Review Conference in Geneva from September 9 to 27;

Declare:

1. Their total commitment not to develop, produce or acquire in any way, stockpile or retain, transfer directly or indirectly, and not to use chemical or biological arms;

2. Until the future Convention on chemical arms enters into force, their commitment to study and analyze jointly all the necessary mechanisms for assuring the fulfillment of the agreement;

3. Until the Convention enters into force in accordance with international law, their intention of establishing in their respective countries appropriate inspection mechanisms for the substances defined as precursors of chemical warfare agents;

4. Their desire to cooperate closely to facilitate conclusion of a multilateral convention on the prohibition of chemical weapons and of subscribing simultaneously as original parties;

5. Their right to use all peaceful applications of chemistry and biology for economic and technological development and for the well being of their people;

6. Their conviction that the application of the Convention will create between the States Parties a sign of mutual trust that will allow substantial improvement of international cooperation in the exchange, among others, of chemical substances, related equipment and technology;

7. Their purpose of contributing decidedly to the success of the Third Review Conference of the Convention on the Prohibition of Biological Weapons and their readiness to examine ways of strengthening their verification mechanisms;

8. Their hope that other countries in the region will join this agreement.

Signed in the City of Mendoza, on 5 September 1991, in two originals, in Portuguese and Spanish, both texts being equally authentic.

Francisco Rezek
for the Government of the Federative Republic of Brazil

Guido de Tella
for the Government of the Republic of Argentina

Enrique Silva Cimma
for the Government of the Republic of Chile
The Presidents of the member countries of the Andean Group, meeting in the city of Cartagena de Indias,

Considering that the fundamental changes in international relations resulting from East-West détente and the end of the cold war are of major historical significance and offer new possibilities for strengthening international peace and security,

Aware that in the current global process of détente, international security and cooperation, particularly in Latin America and the Caribbean, must be approached in an all-round manner and linked to the strengthening of democracy, the fostering of a climate of peace between neighbours, the full realization of human rights and the promotion of the economic and social welfare of our peoples,

Determined to contribute to the global process of international détente that is currently under way,

Resolved to prevent the introduction of weapons of mass destruction in Latin America and the Caribbean, which would lead to a ruinous arms race and thereby limit the allocation and transfer of greater financial resources for the socio-economic development of the region,

Standing ready to strengthen the role of the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco) and its protocols, and to extend that ban to all categories of weapons of mass destruction, in order to transform this region into a zone free of such weapons,

Reaffirming their support for the Acapulco Commitment to Peace, Development and Democracy adopted at the first summit meeting of heads of State of the Mechanism for Consultation and Concerted Political Action, in which it is stated that the approach to security in our region must cover both the aspects of peace and stability and those relating to political, economic and financial vulnerability,

Endorsing the Guadalajara Declaration, which calls for the promotion of conventional disarmament and the banning of weapons of mass destruction and seeks to ensure that measures to control and reduce such weapons do not hinder legitimate access to advanced technologies for peaceful purposes that are essential for the socio-economic development of the peoples of the region,

Expressing their support for the subregional and multilateral undertakings in favour of disarmament, including the Treaty on the Non-Proliferation of Nuclear Weapons, the 1974 Declaration of Ayacucho, the Andean Agreement on Peace, Security and Cooperation and the Foz do Iguaçu declaration on Argentine-Brazilian common nuclear policy, as well as the resolutions approved by the twenty-first General Assembly of OAS on cooperation for the security of the western hemisphere and limitation of the proliferation of instruments of war and weapons of mass destruction, the declaration on the exclusively peaceful uses of nuclear energy signed by the Presidents of Argentina and Brazil, and the Mendoza Accord,

Have agreed on the following Declaration:

1. They welcome the initiative of the Government of Peru concerning the prohibition of weapons of mass destruction in Latin America and the Caribbean as the beginning of a gradual process to strengthen security and mutual trust in the region:

2. They proclaim the commitment of their Governments to renounce the possession, production, development, use, testing and transfer of all weapons of mass destruction, whether nuclear, bacteriological (biological), toxin or chemical weapons, and to refrain from storing, acquiring or holding such categories of weapons, in any circumstances;
3. They reaffirm the inalienable right of their peoples to benefit, through international cooperation, from scientific and technological developments for exclusively peaceful uses in the field of nuclear energy, biology and chemical industry, and also to have access to space technologies;

4. They call on the countries that possess technology for the production of weapons of mass destruction to strengthen in an effective manner systems to monitor the transfer of such technologies;

5. They request the countries possessing weapons of mass destruction to undertake not to use such weapons and not to threaten their use against the parties to the present Declaration;

6. They announce their intention to become original signatories of the convention on the complete and effective prohibition of the development, production, use and stockpiling of chemical weapons and on their destruction, and to that end express their support for the negotiations being conducted in the Conference on Disarmament for the adoption of a chemical weapons convention in 1992;

7. They express support for the 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, as well as the negotiations aimed at strengthening its verification machinery;

8. They declare their determination to promote the transformation of Latin America and the Caribbean into the first inhabited area of the planet which is free of weapons of mass destruction;

9. They declare that responsibility for proscribing the proliferation of weapons of mass destruction and halting the arms race falls on the entire international community, but particularly on the militarily important States and especially those which possess nuclear weapons;

10. They consider that it is urgently necessary to halt nuclear tests, in all environments, as the best means of putting an end to the qualitative improvement of nuclear weapons and the development of new types of such weapons;

11. They appeal to the other Governments of the region to become parties to the present declaration, and appeal to the entire international community, in general, to support the objectives and purposes set out in it and refrain from any action which may undermine the spirit of the present Declaration.

Cartagena de Indias, 4 December 1991

(Signed) Jaime Paz Zamora  
President of Bolivia

(Signed) Cesar Gaviria Trujillo  
President of Colombia

(Signed) Rodrigo Borja  
President of Ecuador

(Signed) Alberto Fujimori  
President of Peru

(Signed) Carlos Andrés Pérez  
President of Venezuela
# 14th SUMMIT CONFERENCE OF HEADS OF STATE OR GOVERNMENT OF THE NON-ALIGNED MOVEMENT
Havana, Cuba
11th to 16th of September, 2006

**FINAL DOCUMENT**

Havana, Cuba
16 September 2006

XIV CONFERENCE OF HEADS OF STATE OR GOVERNMENT OF THE NON – ALIGNED MOVEMENT.
HAVANA, CUBA.
11 – 16 SEPTEMBER 2006
DRAFT
FINAL DOCUMENT

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INTRODUCTION

1. The Heads of State or Government of the Movement of Non-Aligned Countries, met under the Chairmanship of H.E. Dr. Fidel Castro Ruz, President of the Council of State and the Council of Ministers of the Republic of Cuba, in Havana, Cuba on 15 and 16 September 2006 to address the existing, new and emerging global issues of collective concern and interest to the Movement, with a view to generating the necessary responses and initiatives thereof. In this regard, they reaffirmed and underscored the Movement’s abiding faith in and strong commitment to its Founding Principles, ideals and purposes, particularly in establishing a peaceful and prosperous world as well as a just and equitable world order.
any time or under any circumstances, pending the conclusion of a legally binding instrument on security assurances.

94. The Heads of State or Government reaffirmed the inalienable right of developing countries to engage in research, production and use of nuclear energy for peaceful purposes without discrimination. They continued to note with concern that undue restrictions on exports to developing countries of material, equipment and technology, for peaceful purposes persist. They again emphasised that proliferation concerns are best addressed through multilaterally negotiated, universal, comprehensive and non-discriminatory agreements. Non-proliferation control arrangements should be transparent and open to participation by all States, and should ensure that they do not impose restrictions on access to material, equipment and technology for peaceful purposes required by developing countries for their continued development. In this regard, they also expressed their strong rejection of attempts by any Member State to use the IAEA technical co-operation programme as a tool for political purposes in violation of the IAEA Statute.

95. The Heads of State or Government of the States Parties to the NPT emphasised once more that nothing in the Treaty shall be interpreted as affecting the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I, II, and III of the Treaty. They stressed that this right constitutes one of the fundamental objectives of the Treaty. In this connection, they confirmed that each country’s choices and decision in the field of peaceful uses of nuclear energy should be respected without jeopardising its policies or international co-operation agreements and arrangements for peaceful uses of nuclear energy and its fuel-cycle policies.

96. The Heads of State or Government stressed particularly the responsibility of developed countries to promote the legitimate need of nuclear energy of the developing countries, by allowing them to participate to the fullest possible to transfer of nuclear equipment, materials, scientific and technological information for peaceful purposes with a view to achieving the largest benefits and applying pertinent elements of sustainable development in their activities.

97. The Heads of State or Government, while emphasising the importance of the positive role played by the Non-Aligned Members in the IAEA, stressed the necessity that all members of the IAEA strictly observe its Statute. They stressed that any undue pressure or interference in the Agency’s activities, especially its verification process, which could jeopardize the efficiency and credibility of the Agency, should be avoided. They recognised that the IAEA is the sole competent authority for verification of compliance with the obligations under the respective safeguards agreements of the Member States. They also reaffirmed that a clear distinction has to be made between the legal obligations of Member States under their respective safeguards agreements and their voluntary undertakings, in order to ensure that such voluntary undertakings are not turned into legal safeguards obligations.

98. The Heads of State or Government congratulated the IAEA and its Director General, Dr. Mohamed El Baradei, for being awarded the 2005 Nobel Peace Prize. They expressed full confidence in the impartiality and professionalism of the Agency. They also congratulated the Agency on its Fiftieth Anniversary in 2007.

99. The Heads of State or Government reaffirmed the inviolability of peaceful nuclear activities and that any attack or threat of attack against peaceful nuclear facilities –operational or under construction- poses a great danger to human beings and the environment, and constitutes a grave violation of international law, principles and purposes of the UN Charter and regulations of the IAEA. They recognised the need for a comprehensive multilaterally negotiated instrument prohibiting attacks or threat of attacks on nuclear facilities devoted to peaceful uses of nuclear energy.

100. The Heads of State or Government affirmed the need to strengthen the Radiological Safety and Protection Systems at facilities utilising radioactive materials as well as at radioactive waste management facilities, including the safe transportation of these materials. They reaffirmed the need to strengthen existing international regulations relating to safety and security of transportation of such materials. While reiterating the need to take appropriate measures to prevent any dumping of nuclear or radioactive wastes, they called for effective implementation of the Code of Practice on the International Transboundary Movement of Radioactive Waste of the IAEA as a means of enhancing the protection of all States from the dumping of radioactive wastes on their territories.

101. The Heads of State or Government stressed that the issue of proliferation should be resolved through
political and diplomatic means, and that measures and initiatives taken in this regard should be within the framework of international law; relevant conventions; the UN Charter, and should contribute to the promotion of international peace, security and stability.

102. The Heads of State or Government of the States Parties to the Biological and Toxin Weapons Convention (BWC) reaffirmed that the possibility of any use of bacteriological (biological) agents and toxins as weapons should be completely excluded, and the conviction that such use would be repugnant to the conscience of humankind. They recognised the particular importance of strengthening the Convention through multilateral negotiations for a legally binding Protocol and universal adherence to the Convention. They reiterated their call to promote international cooperation for peaceful purposes, including scientific-technical exchange. They underlined the need to coordinate among the NAM States Parties to the Convention and expressed their commitment to work towards a successful outcome of the forthcoming Sixth Review Conference, to be held in Geneva, from 20 November to 8 December 2006.

103. The Heads of State or Government of the States Parties to the Chemical Weapons Convention (CWC) invited all States that have not yet signed or ratified the Convention to do so as soon as possible with a view to its universality. They reiterated their call on the developed countries to promote international cooperation through the transfer of technology, material and equipment for peaceful purposes in the chemical field and the removal of all and any discriminatory restrictions that are contrary to the letter and spirit of the Convention. They recalled that the full, effective and non-discriminatory implementation of the provisions of international cooperation contribute to the universality of the Convention. They also called upon States having declared possession of chemical weapons to bring about the destruction of their chemical weapons at the earliest possible date. While recognizing the financial and technical challenges for some possessors, they called upon those States Parties in a position to do so, and where requested, to assist such possessor States in the achievement of the total elimination of chemical weapons.

104. The Heads of State or Government regretted unsubstantiated allegations of non-compliance with relevant instruments on weapons of mass destruction and called on States Parties to such instruments that make such allegations to follow procedures set out in those instruments and to provide necessary substantiation for their allegations. They called upon all States parties to the respective international instruments to implement fully and in a transparent manner all their obligations under these instruments.

105. The Heads of State or Government expressed their satisfaction with the consensus among States on measures to prevent terrorists from acquiring weapons of mass destruction. They welcomed the adoption by consensus of the General Assembly Resolution 60/78 entitled “Measures to prevent terrorists from acquiring weapons of mass destruction” and underlined the need for this threat to humanity to be addressed within the UN framework and through international co-operation. While stressing that the most effective way of preventing terrorists from acquiring weapons of mass destruction is through the total elimination of such weapons, they emphasized that progress was urgently needed in the area of disarmament and non-proliferation in order to help maintain international peace and security and to contribute to global efforts against terrorism. They called upon all Member States to support international efforts to prevent terrorists from acquiring weapons of mass destruction and their means of delivery. They also urged all Member States to take and strengthen national measures, as appropriate, to prevent terrorists from acquiring weapons of mass destruction, their means of delivery and materials and technologies related to their manufacture.

106. While noting the adoption of resolution 1540 (2004) and resolution 1673 (2006) by the Security Council, the Heads of State or Government underlined the need to ensure that any action by the Security Council does not undermine the UN Charter and existing multilateral treaties on weapons of mass destruction and of international Organisations established in this regard, as well as the role of the General Assembly. They further cautioned against the continuing practice of the Security Council to utilize its authority to define the legislative requirements for Member States in implementing Security Council decisions. In this regard, the Heads of State or Government stressed the importance of the issue of non-state actors acquiring weapons of mass destruction to be addressed in an inclusive manner by the General Assembly, taking into account the views of all Member States.

107. The Heads of State or Government reaffirmed the sovereign right of States to acquire, manufacture, export, import and retain conventional arms for their self-defence and security needs. They expressed their concern about unilateral coercive measures and emphasised that no undue restriction should be placed on the transfer of such arms.

108. The Heads of State or Government recognised the significant imbalance in the production, possession and trade in conventional weapons between the industrialized and the Non-Aligned Countries, and called for a significant reduction in the production, possession and trade of conventional weapons by the industrialized
AG/RES. 2000 (XXXIV-O/04): The Americas As A Biological- And Chemical-Weapons-Free Region

June 8, 2004

(Adopted at the fourth plenary session held on June 8, 2004)

THE GENERAL ASSEMBLY,

HAVING SEEN the Annual Report of the Permanent Council, in particular the section related to hemispheric security issues (AG/doc.4265/04 add.5 corr. 1);

AWARE of the determination of the international community to eradicate the development, production, use, stockpiling, and transfer of biological and chemical weapons;

BEARING IN MIND the Declaration on Security in the Americas, adopted at the Special Conference on Security, held in Mexico City, Mexico, in October 2003, in which the States of the Hemisphere declare their objective "to make the Americas a region free of biological and chemical weapons", and in particular the paragraphs 4.m, 4.y, 12, 13, and 14;

RECALLING its resolution "Cooperation for Security and Development in the Hemisphere: Regional Contributions to Global Security" [AG/RES. 1236 (XXIII-O/93)] which recognized the efforts of the member states to contribute to regional and global security and which commended them for their accession to the principles of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction;


NOTING that twenty-six member states are States Parties to the Chemical Weapons Convention and thirty-one member states are States Parties to the Biological Weapons Convention;

UNDERSCORING the importance of universal participation by all member states in the Biological and Chemical Weapons Conventions and their full implementation, in accordance with the domestic legal framework of each member state;

MINDFUL of the fundamental importance of full implementation and strict observance by member states of arms limitation, disarmament and non-proliferation obligations and commitments; and

WELCOMING the activities of the Organization for the Prohibition of Chemical Weapons (OPCW), among them the establishment of a working group, that encourage universal adherence to and foster full implementation of the CWC and of the practical program of work undertaken by BWC States Parties aimed at strengthening the Convention and stemming the biological weapons threat,

RESOLVES:

1. To concretely fulfill the shared commitment of member states to make the Americas a region free of biological and chemical weapons.

2. To reaffirm member states' commitment to arms control, disarmament, and the non-proliferation of all weapons of mass destruction, and to the principles and norms of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (Chemical Weapons Convention); the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (Biological Weapons Convention); and the 1925 Geneva Protocol.

3. To urge those member states which have not yet done so to consider adhering as soon as possible to the Chemical Weapons Convention and the Biological Weapons Convention, to consider subscribing to the International Code of Conduct against Ballistic Missile Proliferation (ICOC), and to promote the universalization of these Conventions and Arrangements.

4. To urge member states to adopt, at the national level, legal and administrative measures for the implementation of the Chemical Weapons Convention and the Biological Weapons Convention.

5. To welcome the specific steps taken by a number of member states to adhere to and implement said Conventions.

6. To urge member states' participation in upcoming regional meetings of the Organization for the Prohibition of Chemical Weapons (OPCW) which encourage the universalization of the Chemical Weapons Convention, legislative measures to implement it, and the establishment of National Authorities to the OPCW.

7. To urge member states which have not yet done so, to establish National Authorities responsible for liaising with the OPCW, in accordance with the Chemical Weapons Convention.

8. To welcome efforts of the States Parties to the Biological Weapons Convention to promote measures for national implementation and strengthen the Convention in order to stem the threat of biological weapons threat.
9. To carry the message of the importance of the implementation of, and compliance with, relevant international obligations outside the region.

10. To request that the Permanent Council discuss and review, in the framework of the Committee on Hemispheric Security, the efforts of member states to fulfill their commitment to a region free of biological and chemical weapons, in accordance with paragraph 13 of the Declaration on Security in the Americas.

11. To urge member states to implement the recommendations contained within the Declaration on Security in the Americas to prevent and eliminate the proliferation of weapons of mass destruction.

12. To request that the Secretary General transmit this resolution to the Secretary-General of the United Nations and to the Director General of the OPCW.

13. To request the Permanent Council to report to the General Assembly at its thirty-fifth regular session on the implementation of this resolution, which will be carried out with the resources allocated in the program-budget of the Organization and other resources.
6. Documents from Other Arrangements

Although the BWC and the CWC are at the heart of the international regime governing the prohibition of biological and chemical weapons, other arrangements complement and strengthen the norm against the hostile use of disease. These arrangements, which range from informal groupings to more formally-constituted groups of States, tend to entail collective agreement to take or renounce certain actions to prevent CBW proliferation. These arrangements are initiated by groups of like-minded States, rather than by widespread international consensus among States, as multilateral treaties are.

6.1 Australia Group

The Australia Group, which began work in 1984/85, seeks to harmonize supply-side controls on dual-use technology, including equipment, chemical agents and biological pathogens, applicable to chemical and biological warfare, by promoting common standards for the formation and implementation of national export-control policies. The Australia Group was one of the earliest plurilateral initiatives on non-proliferation, arising as a direct result of the discovery, confirmed by UN investigators, that the CW that Iraq used in its war with Iran were manufactured using ‘dual use’ commodities and know-how imported from the global marketplace. Australia hosted a meeting of countries with relevant export controls at its embassy in Brussels in June 1985. All subsequent plenary meetings until 2003 took place in the Australian Embassy in Paris, but from 2004 onwards meetings have taken place in the Kleber Centre in Paris (except the 20th anniversary meeting in 2005 which took place in Sydney).

Its membership and range of activities have expanded over the years, most notably in the early 1990s, when it expanded its scope to include biological export controls. Regarding CW proliferation, the Group now maintains lists of CW precursors, in addition to a list of dual-use chemical manufacturing facilities and equipment and related technology equipment. The two lists are included in this section of the Resource Guide. The Australia Group lists form the basis of the CBW-related sections of the European Union’s dual-use goods regime, and they have been adopted as the basis for national export controls by many non-participating countries. The Australia Group now has 40 participating countries, plus the European Commission. All Australia Group participants are States Parties to both the BWC and CWC.

6.2 Group of Eight Nations

The Group of Eight Nations (G8) comprises eight major industrialised nations (Canada, France, Germany, Italy, Japan, Russia, the UK and the US) whose leaders meet annually to discuss issues of mutual concern. At its 2002 summit meeting in Kananaskis, Canada, the G8 launched the Global Partnership against the Spread of Weapons and Materials of Mass Destruction. The Global Partnership served to attract and provide a framework for international financing of the destruction of CW, the dismantlement of decommissioned nuclear submarines, the disposition of fissile materials and the employment of former weapons scientists, initially in Russia (Ukraine has now also been accepted as a recipient country).

The Global Partnership has since broadened its objectives to include the development of measures for “international non-proliferation, disarmament, counter-terrorism and nuclear safety issues”, including biosecurity projects and supportive activities in states beyond Russia that have renounced WMD. At Kananaskis, the G8 leaders committed to raising US$ 20 billion to support such activities over the following ten years. By the 2007 summit, held in Heiligendamm, Germany, 14 non-G8 countries had joined the Global Partnership as donors (in 2003: Finland, the Netherlands, Norway, Poland, Sweden, and Switzerland; and in 2004: Australia, Belgium, the Czech Republic, Denmark, Ireland, New Zealand, and South Korea).
At their 2003 summit meeting in Evian, France, the G8 leaders adopted a declaration on non-proliferation of weapons of mass destruction, in which they described the threat posed by the proliferation of WMD and their means of delivery, together with the spread of international terrorism, as “the pre-eminent threat to international security.” At each summit meeting since Evian, the G8 leaders have included reference to the CWC in their summit communiqué, copies of which are included in this section of the Resource Guide.

6.3 Proliferation Security Initiative

The Proliferation Security Initiative (PSI) was launched by US President George Bush during a speech in Krakow, Poland in 2003. Like the Australia Group, the PSI is not a formal organization constituted by Member States. Rather, it is a coalition of states that adhere to a statement of principles and that undertake, on the basis of a web of supporting agreements, to cooperate with each other in the interdiction, by armed force if necessary, of international shipments of goods thought destined for WMD programmes considered illegal by PSI participants. According to its website: “The PSI is not a formal institution, nor is it a treaty body. It is a statement of purpose: an activity, not an organisation.”

The “Statement of Interdiction Principles” that is included in this section of the Resource Guide sets out the scope and aims of the PSI. The statement was adopted by PSI participants at its third plenary meeting in Paris in September 2003. To date, PSI participants have convened seven plenary meetings since the first in June 2003. In addition, there have been over 18 operational experts’ meetings in many PSI participant countries and PSI participants have conducted over 25 air, ground and maritime interdiction exercises. Few details have emerged of interdictions conducted under the PSI. However, in June 2006 US Under Secretary for Arms Control and International Security Robert Joseph said that “between April 2005 and April 2006, the United States worked successfully with multiple PSI partners in Europe, Asia and the Middle East on roughly two dozen separate occasions to prevent transfers of equipment and materials to WMD and missile programs in countries of concern.” In May 2005 US Secretary of State Condoleezza Rice said that “In the last nine months alone, the United States and ten of our PSI partners have quietly cooperated on 11 successful efforts.”

According to a US Department of State list, 86 countries participate in the PSI. The USA has signed bilateral ship-boarding agreements with eight countries (Belize, Croatia, Cyprus, Liberia, Malta, Marshall Islands, Mongolia and Panama).
# Export Control List: Chemical Weapons Precursors

**November 2004**

<table>
<thead>
<tr>
<th>Precursor Chemical</th>
<th>CAS No.</th>
<th>CWC-Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiodiglycol</td>
<td>(111-48-8)</td>
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</tr>
<tr>
<td>Phosphorus oxychloride</td>
<td>(10025-87-3)</td>
<td>3B</td>
</tr>
<tr>
<td>Dimethyl methylphosphonate</td>
<td>(756-79-6)</td>
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</tr>
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<td>Methylphosphonyl difluoride (DF)</td>
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</tr>
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<td>Methylphosphonyl dichloride (DC)</td>
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<td>2B</td>
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<td>Dimethyl phosphite (DMP)</td>
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<td>Phosphorus trichloride</td>
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<td>3B</td>
</tr>
<tr>
<td>Trimethyl phosphite (TMP)</td>
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<td>3B</td>
</tr>
<tr>
<td>Thionyl chloride</td>
<td>(7719-09-7)</td>
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<td>3-Hydroxy-1-methylpiperidine</td>
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<td>N,N-Diisopropyl-(beta)-aminoethyl chloride</td>
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<td>N,N-Diisopropyl-(beta)-aminoethane thiol</td>
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<td>2B</td>
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<td>3-Quinuclidinol</td>
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<td>Potassium fluoride</td>
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<td>2-Chloroethanol</td>
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<td>Diethyl phosphite</td>
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<td>Dimethylamine hydrochloride</td>
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<td>Ethylphosphinyl dichloride</td>
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<td>(1066-50-8)</td>
<td>2B</td>
</tr>
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<td>Ethylphosphonyl difluoride</td>
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</tr>
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<td>Hydrogen fluoride</td>
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<td>Methyl benzilate</td>
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</tr>
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<td>N,N-Diisopropyl-(beta)-amino-ethanol</td>
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<td>Pinacolyl alcohol</td>
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<td>Arsenic trichloride</td>
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<td>Benzilic acid</td>
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<td>Diethyl methylphosphonite</td>
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<td>Dimethyl ethylphosphonate</td>
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<td>Methylphosphinyl difluoride</td>
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</tr>
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<td>3-Quinuclidone</td>
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<td>Pinacolone</td>
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<td>Potassium cyanide</td>
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<tr>
<td>Potassium bifluoride</td>
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<td>CAS Number</td>
<td>Remarks</td>
</tr>
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<td>Ammonium bifluoride</td>
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<td>Sodium bifluoride</td>
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<td>Sodium fluoride</td>
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<td>Sodium cyanide</td>
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<td>Triethanolamine</td>
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<tr>
<td>Phosphorus pentasulphide</td>
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<td>Diisopropylamine</td>
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<td>Diethylaminoethanol</td>
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<td>Sodium sulphide</td>
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<td>Sulphur monochloride</td>
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<td>Sulphur dichloride</td>
<td>(10545-99-0)</td>
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<td>Triethanolamine hydrochloride</td>
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<td>N,N-Diisopropyl-2-aminoethyl chloride hydrochloride</td>
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<td>Methylphosphonic acid</td>
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<td>Diethyl methylphosphonate</td>
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<td>N,N-Dimethylaminophosphoryl dichloride</td>
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<td>Sodium hexafluorosilicate</td>
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</tr>
<tr>
<td>Methylphosphonothioic dichloride</td>
<td>(676-98-2)</td>
<td>2B</td>
</tr>
</tbody>
</table>
Control List of Dual-Use Chemical Manufacturing Facilities, Equipment, and related technology

I. Manufacturing Facilities And Equipment

**Note 1:** The objective of these controls should not be defeated by the transfer of any non-controlled item containing one or more controlled components where the controlled component or components are the principal element of the item and can feasibly be removed or used for other purposes.

**N.B.** In judging whether the controlled component or components are to be considered the principal element, governments should weigh the factors of quantity, value, and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the item being procured.

**Note 2.** The objective of these controls should not be defeated by the transfer of a whole plant, on any scale, which has been designed to produce any CW agent or AG-controlled precursor chemical.

1. **Reaction Vessels, Reactors or Agitators**

   Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume greater than 0.1 m³ (100 l) and less than 20 m³ (20000 l), where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

   a. nickel or alloys with more than 40% nickel by weight;
   b.loys with more than 25% nickel and 20% chromium by weight;
   c. fluoropolymers;
   d. glass or glass-lined (including vitrified or enamelled coating);
   e. tantalum or tantalum alloys;
   f. titanium or titanium alloys;
   g. zirconium or zirconium alloys; or
   h. niobium (columbium) or niobium alloys.

   Agitators for use in the above-mentioned reaction vessels or reactors; and impellers, blades or shafts designed for such agitators, where all surfaces of the agitator or component that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

   a. nickel or alloys with more than 40% nickel by weight;
   b. lloys with more than 25% nickel and 20% chromium by weight;
   c. fluoropolymers;
   d. glass or glass-lined (including vitrified or enamelled coating);
   e. tantalum or tantalum alloys;
   f. titanium or titanium alloys;
   g. zirconium or zirconium alloys; or
   h. niobium (columbium) or niobium alloys.

2. **Storage Tanks, Containers or Receivers**

http://www.australiagroup.net/en/dual_chemicals.html
Storage tanks, containers or receivers with a total internal (geometric) volume greater than 0.1 m³ (100 l) where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

a. nickel or alloys with more than 40% nickel by weight;
b. alloys with more than 25% nickel and 20% chromium by weight;
c. fluoropolymers;
d. glass or glass-lined (including vitrified or enamelled coating);
e. tantalum or tantalum alloys;
f. titanium or titanium alloys;
g. zirconium or zirconium alloys; or
h. niobium (columbium) or niobium alloys.

3. Heat Exchangers or Condensers

Heat exchangers or condensers with a heat transfer surface area of greater than 0.15 m², and less than 20 m²; and tubes, plates, coils or blocks (cores) designed for such heat exchangers or condensers, where all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:

a. nickel or alloys with more than 40% nickel by weight;
b. alloys with more than 25% nickel and 20% chromium by weight;
c. fluoropolymers;
d. glass or glass-lined (including vitrified or enamelled coating);
e. graphite or carbon-graphite;
f. tantalum or tantalum alloys;
g. titanium or titanium alloys;
h. zirconium or zirconium alloys;
i. silicon carbide;
j. titanium carbide; or
k. niobium (columbium) or niobium alloys.

Technical note: carbon-graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

4. Distillation or Absorption Columns

Distillation or absorption columns of internal diameter greater than 0.1 m; and liquid distributors, vapour distributors or liquid collectors designed for such distillation or absorption columns, where all surfaces that come in direct contact with the chemical (s) being processed are made from the following materials:

a. nickel or alloys with more than 40% nickel by weight;
b. alloys with more than 25% nickel and 20% chromium by weight;
c. fluoropolymers;
d. glass or glass-lined (including vitrified or enamelled coating);
e. graphite or carbon-graphite;
f. tantalum or tantalum alloys;
g. titanium or titanium alloys;
h. zirconium or zirconium alloys; or
i. niobium (columbium) or niobium alloys.

Technical note: carbon-graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

5. **Filling Equipment**

Remotely operated filling equipment in which all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:

a. nickel or alloys with more than 40% nickel by weight; or
b. alloys with more than 25% nickel and 20% chromium by weight.

6. **Valves**

Valves with nominal sizes greater than 1.0 cm (3/8”) and casings (valve bodies) or preformed casing liners designed for such valves, in which all surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the following materials:

a. nickel or alloys with more than 40% nickel by weight;
b. alloys with more than 25% nickel and 20% chromium by weight;
c. fluoropolymers;
d. glass or glass-lined (including vitrified or enamelled coating);
e. tantalum or tantalum alloys;
f. titanium or titanium alloys;
g. zirconium or zirconium alloys; or
h. niobium (columbium) or niobium alloys.

7. **Multi-Walled Piping**

Multi-walled piping incorporating a leak detection port, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

a. nickel or alloys with more than 40% nickel by weight;
b. alloys with more than 25% nickel and 20% chromium by weight;
c. fluoropolymers;
d. glass or glass-lined (including vitrified or enamelled coating);
e. graphite or carbon-graphite;
f. tantalum or tantalum alloys;
g. titanium or titanium alloys;
h. zirconium or zirconium alloys; or
i. niobium (columbium) or niobium alloys.

Technical note: carbon-graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

8. **Pumps**

Multiple-seal and seal-less pumps with manufacturer’s specified maximum flow-rate greater than 0.6 m3/h, or vacuum pumps with manufacturer’s specified maximum flow-rate greater than 0.6 m3/h.
flow-rate greater than 5 m³/h (under standard temperature (273 K (0o C)) and pressure (101.3 kPa) conditions), and casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come into direct contact with the chemical(s) being processed are made from any of the following materials:

a. nickel or alloys with more than 40% nickel by weight;
b. alloys with more than 25% nickel and 20% chromium by weight;
c. fluoropolymers;
d. glass or glass-lined (including vitrified or enamelled coating);
e. graphite or carbon-graphite;
f. tantalum or tantalum alloys;
g. titanium or titanium alloys;
h. zirconium or zirconium alloys;
i. ceramics;
j. ferrosilicon; or
k. niobium (columbium) or niobium alloys.

Technical note: carbon-graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

9. **Incinerators**

Incinerators designed to destroy CW agents, AG-controlled precursors or chemical munitions, having specially designed waste supply systems, special handling facilities, and an average combustion chamber temperature greater than 1000o C, in which all surfaces in the waste supply system that come into direct contact with the waste products are made from or lined with the following materials:

a. nickel or alloys with more than 40% nickel by weight;
b. alloys with more than 25% nickel and 20% chromium by weight; or
c. ceramics.

**Statement of Understanding**

These controls do not apply to equipment which is specially designed for use in civil applications (for example food processing, pulp and paper processing, or water purification, etc) and is, by the nature of its design, inappropriate for use in storing, processing, producing or conducting and controlling the flow of chemical warfare agents or any of the AG-controlled precursor chemicals.

**II. Toxic Gas Monitoring Systems and Detectors**

Toxic gas monitoring systems and dedicated detectors

1. designed for continuous operation and usable for the detection of chemical warfare agents or AG-controlled precursors at concentrations of less than 0.3 mg/m³; or
2. designed for the detection of cholinesterase-inhibiting activity.

**III. Related Technology**

The transfer of 'technology', including licenses, directly associated with -
CW agents;
AG-controlled precursors; or
AG-controlled dual-use equipment items,
to the extent permitted by national legislation.

Technical assistance is subject to control. Controls on 'technology' transfer, including 'technical assistance', do not apply to information 'in the public domain' or to 'basic scientific research' or the minimum necessary information for patent application.

The approval for export of any AG-controlled item of dual-use equipment also authorises the export to the same end-user of the minimum 'technology' required for the installation, operation, maintenance or repair of that item.

Definition of Terms

'Technology'
Specific information necessary for the 'development', 'production' or 'use' of a product. The information takes the form of 'technical data' or 'technical assistance'.

'Basic scientific research'
Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not primarily directed towards a specific practical aim or objective.

'Development'
'Development' is related to all phases before 'production' such as:
- design
- design research
- design analysis
- design concepts
- assembly of prototypes
- pilot production schemes
- design data
- process or transforming design data into a product
- configuration design
- integration design
- layouts

'in the public domain'
'In the public domain', as it applies herein, means technology that has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove technology from being in the public domain).

'Production'
Production means all production phases such as:
- construction
- production engineering
- manufacture
- integration
- assembly (mounting)
- inspection
- testing
- quality assurance
'Technical assistance' may take forms, such as: instruction, skills, training, working knowledge, consulting services.

N.B. 'Technical assistance' may involve transfer of 'technical data'.

'Technical data'

May take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

'Use'

Operation, installation (including on-site installation), maintenance (checking), repair, overhaul or refurbishing.

'Export'

An actual shipment or transmission of AG-controlled items out of the country. This includes transmission of technology by electronic media, fax or telephone.
Statement by G8 Leaders

The G8 Global Partnership
Against the Spread of Weapons and Materials of Mass Destruction

The attacks of September 11 demonstrated that terrorists are prepared to use any means to cause terror and inflict appalling casualties on innocent people. We commit ourselves to prevent terrorists, or those that harbour them, from acquiring or developing nuclear, chemical, radiological and biological weapons; missiles; and related materials, equipment and technology. We call on all countries to join us in adopting the set of non-proliferation principles we have announced today.

In a major initiative to implement those principles, we have also decided today to launch a new G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction. Under this initiative, we will support specific cooperation projects, initially in Russia, to address non-proliferation, disarmament, counter-terrorism and nuclear safety issues. Among our priority concerns are the destruction of chemical weapons, the dismantlement of decommissioned nuclear submarines, the disposition of fissile materials and the employment of former weapons scientists. We will commit to raise up to $20 billion to support such projects over the next ten years. A range of financing options, including the option of bilateral debt for program exchanges, will be available to countries that contribute to this Global Partnership. We have adopted a set of guidelines that will form the basis for the negotiation of specific agreements for new projects, that will apply with immediate effect, to ensure effective and efficient project development, coordination and implementation. We will review over the next year the applicability of the guidelines to existing projects.

Recognizing that this Global Partnership will enhance international security and safety, we invite other countries that are prepared to adopt its common principles and guidelines to enter into discussions with us on participating in and contributing to this initiative. We will review progress on this Global Partnership at our next Summit in 2003.
The G8 Global Partnership:
Principles to prevent terrorists, or those that harbour them, from gaining access to weapons or materials of mass destruction

The G8 calls on all countries to join them in commitment to the following six principles to prevent terrorists or those that harbour them from acquiring or developing nuclear, chemical, radiological and biological weapons; missiles; and related materials, equipment and technology.

1. Promote the adoption, universalization, full implementation and, where necessary, strengthening of multilateral treaties and other international instruments whose aim is to prevent the proliferation or illicit acquisition of such items; strengthen the institutions designed to implement these instruments.

2. Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage and domestic and international transport; provide assistance to states lacking sufficient resources to account for and secure these items.

3. Develop and maintain appropriate effective physical protection measures applied to facilities which house such items, including defence in depth; provide assistance to states lacking sufficient resources to protect their facilities.

4. Develop and maintain effective border controls, law enforcement efforts and international cooperation to detect, deter and interdict in cases of illicit trafficking in such items, for example through installation of detection systems, training of customs and law enforcement personnel and cooperation in tracking these items; provide assistance to states lacking sufficient expertise or resources to strengthen their capacity to detect, deter and interdict in cases of illicit trafficking in these items.

5. Develop, review and maintain effective national export and transshipment controls over items on multilateral export control lists, as well as items that are not identified on such lists but which may nevertheless contribute to the development, production or use of nuclear, chemical and biological weapons and missiles, with particular consideration of end-user, catch-all and brokering aspects; provide assistance to states lacking the legal and regulatory infrastructure, implementation experience and/or resources to develop their export and transshipment control systems in this regard.

6. Adopt and strengthen efforts to manage and dispose of stocks of fissile materials designated as no longer required for defence purposes, eliminate all chemical weapons, and minimize holdings of dangerous biological pathogens and toxins, based on the recognition that the threat of terrorist acquisition is reduced as the overall quantity of such items is reduced.
The G8 Global Partnership: Guidelines for New or Expanded Cooperation Projects

The G8 will work in partnership, bilaterally and multilaterally, to develop, coordinate, implement and finance, according to their respective means, new or expanded cooperation projects to address (i) non-proliferation, (ii) disarmament, (iii) counter-terrorism and (iv) nuclear safety (including environmental) issues, with a view to enhancing strategic stability, consonant with our international security objectives and in support of the multilateral non-proliferation regimes. Each country has primary responsibility for implementing its non-proliferation, disarmament, counter-terrorism and nuclear safety obligations and requirements and commits its full cooperation within the Partnership.

Cooperation projects under this initiative will be decided and implemented, taking into account international obligations and domestic laws of participating partners, within appropriate bilateral and multilateral legal frameworks that should, as necessary, include the following elements:

(i) Mutually agreed effective monitoring, auditing and transparency measures and procedures will be required in order to ensure that cooperative activities meet agreed objectives (including irreversibility as necessary), to confirm work performance, to account for the funds expended and to provide for adequate access for donor representatives to work sites;

(ii) The projects will be implemented in an environmentally sound manner and will maintain the highest appropriate level of safety;

(iii) Clearly defined milestones will be developed for each project, including the option of suspending or terminating a project if the milestones are not met;

(iv) The material, equipment, technology, services and expertise provided will be solely for peaceful purposes and, unless otherwise agreed, will be used only for the purposes of implementing the projects and will not be transferred. Adequate measures of physical protection will also be applied to prevent theft or sabotage;

(v) All governments will take necessary steps to ensure that the support provided will be considered free technical assistance and will be exempt from taxes, duties, levies and other charges;

(vi) Procurement of goods and services will be conducted in accordance with open international practices to the extent possible, consistent with national security requirements;
(vii) All governments will take necessary steps to ensure that adequate liability protections from claims related to the cooperation will be provided for donor countries and their personnel and contractors;

(viii) Appropriate privileges and immunities will be provided for government donor representatives working on cooperation projects; and

(ix) Measures will be put in place to ensure effective protection of sensitive information and intellectual property.

Given the breadth and scope of the activities to be undertaken, the G8 will establish an appropriate mechanism for the annual review of progress under this initiative which may include consultations regarding priorities, identification of project gaps and potential overlap, and assessment of consistency of the cooperation projects with international security obligations and objectives. Specific bilateral and multilateral project implementation will be coordinated subject to arrangements appropriate to that project, including existing mechanisms.

For the purposes of these guidelines, the phrase “new or expanded cooperation projects” is defined as cooperation projects that will be initiated or enhanced on the basis of this Global Partnership. All funds disbursed or released after its announcement would be included in the total of committed resources. A range of financing options, including the option of bilateral debt for program exchanges, will be available to countries that contribute to this Global Partnership.

The Global Partnership’s initial geographic focus will be on projects in Russia, which maintains primary responsibility for implementing its obligations and requirements within the Partnership.

In addition, the G8 would be willing to enter into negotiations with any other recipient countries, including those of the Former Soviet Union, prepared to adopt the guidelines, for inclusion in the Partnership.

Recognizing that the Global Partnership is designed to enhance international security and safety, the G8 invites others to contribute to and join in this initiative.

With respect to nuclear safety and security, the partners agreed to establish a new G8 Nuclear Safety and Security Group by the time of our next Summit.
Non Proliferation of Weapons of Mass Destruction – A G8 Declaration

NON PROLIFERATION OF WEAPONS OF MASS DESTRUCTION
A G8 DECLARATION

1. We recognise that the proliferation of weapons of mass destruction (WMD) and their means of delivery poses a growing danger to us all. Together with the spread of international terrorism, it is the pre-eminent threat to international security.

2. This global challenge requires a multifaceted solution. We need to tackle it individually and collectively – working together and with other partners, including through relevant international institutions, in particular those of the United Nations system.

3. We have a range of tools available to tackle this threat: international treaty regimes; inspection mechanisms such as those of the International Atomic Energy Agency (IAEA) and Organization for the Prohibition of Chemical Weapons; initiatives to eliminate WMD stocks such as the G8 Global Partnership; national and internationally-co-ordinated export controls; international co-operation and diplomatic efforts; and if necessary other measures in accordance with international law.

4. While all of these instruments are necessary, none is sufficient by itself. Not all proliferation challenges require the same remedies. We need to deploy the tools which are most effective in each case. We remain committed to work with and strengthen all these instruments and, where appropriate, to pursue the universalisation of relevant treaties and instruments.

5. Last year, at Kananaskis, we endorsed a set of Principles to prevent the spread of WMD and materials of mass destruction to terrorists and those that harbour them. Since then, events in the world have underscored the relevance of those Principles and the urgency of implementing them.

6. We reaffirm our commitment to the Non Proliferation Treaty (NPT), the Chemical Weapons Convention, and the Biological and Toxin Weapons Convention, and we urge all states which have not yet joined them to do so. We consider these three treaties to be essential.
instruments to maintain international peace and security and cornerstones of non-proliferation and disarmament.
We reaffirm our support for the IAEA, which should be granted the necessary means to implement its monitoring tasks.

7. North Korea's uranium enrichment and plutonium production programs and its failure to comply with its IAEA safeguards agreement undermine the non-proliferation regime and are a clear breach of North Korea's international obligations. We strongly urge North Korea to visibly, verifiably and irreversibly dismantle any nuclear weapons programs, a fundamental step to facilitate a comprehensive and peaceful solution.

8. We will not ignore the proliferation implications of Iran's advanced nuclear program. We stress the importance of Iran's full compliance with its obligation under the NPT. We urge Iran to sign and implement an IAEA Additional Protocol without delay or conditions. We offer our strongest support to comprehensive IAEA examination of this country's nuclear program.

9. We call on all States to establish effective procedures and machinery to control the transfer of materials, technology and expertise which may contribute to the development, production or use of WMD and their means of delivery. We likewise call on all States to establish and implement effective national standards for secure storage and handling of such materials with a view to effectively prevent proliferation and eliminate the risk that terrorists gain access to them. We agree, individually and collectively, to give support to this end where it is most needed.
Global Partnership Against the Spread of Weapons and Materials of Mass Destruction – A G8 Action Plan

GLOBAL PARTNERSHIP AGAINST THE SPREAD OF WEAPONS AND MATERIALS OF MASS DESTRUCTION
A G8 ACTION PLAN

The Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, which we launched last year at the Kananaskis Summit, has made significant progress over the past year toward realising the objective of preventing terrorists, or those who harbour them, from acquiring or developing nuclear, chemical, radiological, and biological weapons; missiles; and related materials, equipment, and technology.

With our determined commitment, significant progress has been made:

" Substantial sums have already been pledged by Partners towards their Kananaskis commitment to raise up to $20 billion over ten years;

" The Russian government has made welcomed decisions to ensure implementation of guidelines, in particular full exemption of assistance from taxation, duties and other charges. Other guidelines have also been intensively addressed;

" The recent conclusion of the Multilateral Nuclear Environment Programme for the Russian Federation has demonstrated substantial progress in translating the Global Partnership initiative into concrete actions;

" All Partners have actively engaged in determining co-operation projects to be undertaken, and some significant projects have already been launched or expanded, in accordance with our priorities identified in Kananaskis;

" Outreach activities have been undertaken to invite and facilitate non–G8 countries to participate and contribute, as a result of which Finland, Norway, Poland, Sweden and Switzerland have indicated their interest in joining the Global Partnership as donors.

We commit ourselves to an active programme to continue the implementation of the initiative and to achieve substantial progress by the next Summit. Our goals are:

" To pursue the universal adoption of the non–proliferation principles;

" To reach our Kananaskis commitment of raising up to $20 billion
over ten years through contributions from new donors or additional pledges from Partners;
"To significantly expand project activities, building upon preparatory work to establish implementing frameworks and to develop plans for project activities, as well as to sustain steady progress in projects already underway. We will continue to review progress in initiation and implementation of projects over the coming year, and to oversee co-ordination of projects, in order to review priorities, avoid gaps and overlaps, and assess consistency of projects with international security objectives, in accordance with our priorities;
"To resolve all outstanding implementation challenges and to review the implementation of all guidelines in practice, keeping in mind the need for uniform treatment of Partners, reflecting our co-operative approach;

"To expand participation in the Global Partnership to interested non-G8 donor countries that are willing to adopt the Kananaskis documents. While still focusing on projects in Russia, we mandate the Chair to enter into preliminary discussions with new or current recipient countries including those of the former Soviet Union that are prepared to adopt the Kananaskis documents, as the Ukraine has already done;
"To inform other organisations, parliamentary representatives, and publics of the importance of the Global Partnership.
G-8 Action Plan on Nonproliferation

At Evian, we recognized the proliferation of weapons of mass destruction and their delivery systems, together with international terrorism, as the pre-eminent threat to international peace and security. This challenge requires a long-term strategy and multi-faceted approaches.

Determined to prevent, contain, and roll back proliferation, today, at Sea Island, we announce an action plan to reinforce the global nonproliferation regime. We will work together with other concerned states to realize this plan.

All states must fulfill their arms control, disarmament, and nonproliferation commitments, which we reaffirm, and we strongly support universal adherence to and compliance with these commitments under the relevant multilateral treaties. We will help and encourage states in effectively implementing their obligations under the multilateral treaty regimes, in particular implementing domestically their obligations under such treaties, building law enforcement capacity, and establishing effective export controls. We call on all states that have not already done so to subscribe to the Hague Code of Conduct against Ballistic Missile Proliferation.

We strongly support UN Security Council Resolution 1540, calling on all states to establish effective national export controls, to adopt and enforce effective laws to criminalize proliferation, to take cooperative action to prevent non-state actors from acquiring weapons of mass destruction, and to end illicit trafficking in such weapons, their means of delivery, and related materials. We call on all states to implement this resolution promptly and fully, and we are prepared to assist them in so doing, thereby helping to fight the nexus between terrorism and proliferation, and black markets in these weapons and related materials.

1. Nuclear Nonproliferation

The trafficking and indiscriminate spread of sensitive nuclear materials, equipment, and technology that may be used for weapons purposes are a threat to us all. Some states seek uranium enrichment and plutonium reprocessing capabilities for weapons programs contrary to their commitments under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). We reaffirm our commitment to the NPT and to the declarations made at Kananaskis and Evian, and we will work to prevent the illicit diversion of nuclear materials and technology. We announce the following new actions to reduce the risk of nuclear weapons proliferation and the acquisition of nuclear materials and technology by terrorists, while allowing the world to enjoy safely the benefits of peaceful nuclear technology.

- To allow the world to safely enjoy the benefits of peaceful nuclear energy without adding to the danger of weapons proliferation, we have agreed to work to establish new measures so that sensitive nuclear items with proliferation potential will not be exported to states that may seek to use them for weapons purposes, or allow them to fall into terrorist hands. The export of such items should only occur pursuant to criteria consistent with global nonproliferation norms and to states rigorously committed to those norms. We shall work to amend appropriately the Nuclear Suppliers Group (NSG) guidelines, and to gain the widest possible support for such measures in the future. We aim to have appropriate measures in place by the next G-8 Summit. In aid of this process, for the intervening year, we agree that it would be prudent not to inaugurate new initiatives involving transfer of enrichment and reprocessing equipment and technologies to additional states. We call on all states to adopt this strategy of prudence. We will also develop new measures to ensure reliable access to nuclear materials, equipment, and technology, including nuclear fuel and related services, at market conditions, for all states, consistent with maintaining nonproliferation commitments and standards.
- We seek universal adherence to IAEA comprehensive safeguards and the Additional Protocol and urge all states to ratify and implement these agreements promptly. We are actively engaged in outreach efforts toward this goal, and ready to offer necessary support.
- The Additional Protocol must become an essential new standard in the field of nuclear supply arrangements. We will work to strengthen NSG guidelines accordingly. We aim to achieve this by the end of 2005.
- We support the suspension of nuclear fuel cycle cooperation with states that violate their nuclear
nonproliferation and safeguards obligations, recognizing that the responsibility and authority for such decisions rests with national governments or the Security Council.

- To enhance the IAEA's integrity and effectiveness, and strengthen its ability to ensure that nations comply with their NPT obligations and safeguards agreements, we will work together to establish a new Special Committee of the IAEA Board of Governors. This committee would be responsible for preparing a comprehensive plan for strengthened safeguards and verification. We believe this committee should be made up of member states in compliance with their NPT and IAEA commitments.
- Likewise, we believe that countries under investigation for non-technical violations of their nuclear nonproliferation and safeguards obligations should elect not to participate in decisions by the IAEA Board of Governors or the Special Committee regarding their own cases.

2. Proliferation Security Initiative

We reiterate our strong commitment to and support for the Proliferation Security Initiative (PSI) and the Statement of Interdiction Principles, which is a global response to a global problem. We will continue our efforts to build effective PSI partnerships to interdict trafficking in weapons of mass destruction, their delivery systems, and related materials. We also will prevent those that facilitate proliferation from engaging in such trafficking and work to broaden and strengthen domestic and international laws supporting PSI. We welcome the increasing level of support worldwide for PSI, which now includes all G-8 members. The Krakow meeting commemorating PSI's first anniversary, attended by 62 countries, evidences growing global support.

We will further cooperate to defeat proliferation networks and coordinate, where appropriate, enforcement efforts, including by stopping illicit financial flows and shutting down illicit plants, laboratories, and brokers, in accordance with national legal authorities and legislation and consistent with international law. Several of us are already developing mechanisms to deny access to our ports and airports for companies and impose visa bans on individuals involved in illicit trade.

We encourage all states to strengthen and expand national and international measures to respond to clandestine procurement activities. Directly, and through the relevant international mechanisms, we will work actively with states requiring assistance in improving their national capabilities to meet international norms.

3. The Global Partnership Against Weapons and Materials of Mass Destruction

Since its launch by G-8 Leaders two years ago at Kananaskis, the Global Partnership has become a significant force worldwide to enhance international safety and security. Global Partnership member states, including the six new donors that joined at Evian, have in the past year launched new cooperative projects in Russia and accelerated progress on those already underway. While much has been accomplished, significant challenges remain. We recommit ourselves to our Kananaskis Statement, Principles, and Guidelines as the basis for Global Partnership cooperation.

- We recommit ourselves to raising up to $20 billion for the Global Partnership through 2012.
- Expanding the Partnership to include additional donor countries is essential to raise the necessary resources and to ensure the effort is truly global. Today we welcome the decisions of Australia, Belgium, the Czech Republic, Denmark, Ireland, the Republic of Korea, and New Zealand to join.
- We will continue to work with other former Soviet states to discuss their participation in the Partnership. We reaffirm that Partnership states will participate in projects according to their national interests and resources.
- We reaffirm that we will address proliferation challenges worldwide. We will, for example, pursue the retraining of Iraqi and Libyan scientists involved in past WMD programs. We also support projects to eliminate over time the use of highly-enriched uranium fuel in research reactors worldwide, secure and remove fresh and spent HEU fuel, control and secure radiation sources, strengthen export control and border security, and reinforce biosecurity. We will use the Global Partnership to coordinate our efforts in these areas.

4. Nonproliferation Challenges

- The DPRK's announced withdrawal from the NPT, which is unprecedented; its continued pursuit of nuclear weapons, including through both its plutonium reprocessing and its uranium enrichment programs, in violation of its international obligations; and its established history of missile proliferation are serious concerns to us all. We strongly support the Six-Party Process, and strongly urge the DPRK to dismantle all of its nuclear weapons-related programs in a complete, verifiable, and irreversible manner, a fundamental step to facilitate a comprehensive and peaceful solution.
- We remain united in our determination to see the proliferation implications of Iran's advanced nuclear
program resolved. Iran must be in full compliance with its NPT obligations and safeguards agreement. To this end, we reaffirm our support for the IAEA Board of Governors' three Iran resolutions. We note that since Evian, Iran has signed the Additional Protocol and has committed itself to cooperate with the Agency, and to suspend its enrichment and reprocessing related activities. While we acknowledge the areas of progress reported by the Director General, we are, however, deeply concerned that Iran's suspension of enrichment-related activity is not yet comprehensive. We deplore Iran's delays, deficiencies in cooperation, and inadequate disclosures, as detailed in IAEA Director General reports. We therefore urge Iran promptly and fully to comply with its commitments and all IAEA Board requirements, including ratification and full implementation of the Additional Protocol, leading to resolution of all outstanding issues related to its nuclear program.

- We welcome Libya's strategic decision to rid itself of its weapons of mass destruction and longer-range missiles, to fully comply with the NPT, the Additional Protocol, the Biological and Toxin Weapons Convention (BWC), and the Chemical Weapons Convention (CWC), and to commit not to possess missiles subject to the Missile Technology Control Regime. We note Libya has cooperated in the removal of nuclear equipment and materials and taken steps to eliminate chemical weapons. We call on Libya to continue to cooperate fully with the IAEA and the Organization for the Prohibition of Chemical Weapons.

5. Defending Against Bioterrorism

Bioterrorism poses unique, grave threats to the security of all nations, and could endanger public health and disrupt economies. We commit to concrete national and international steps to: expand or, where necessary, initiate new biosurveillance capabilities to detect bioterror attacks against humans, animals, and crops; improve our prevention and response capabilities; increase protection of the global food supply; and respond to, investigate, and mitigate the effects of alleged uses of biological weapons or suspicious outbreaks of disease. In this context, we seek concrete realization of our commitments at the fifth Review Conference of the BWC. The BWC is a critical foundation against biological weapons' proliferation, including to terrorists. Its prohibitions should be fully implemented, including enactment of penal legislation. We strongly urge all non-parties to join the BWC promptly.

6. Chemical Weapons Proliferation

We support full implementation of the CWC, including its nonproliferation aspects. We strongly urge all non-parties to join the CWC promptly, and will work with them to this end. We also urge CWC States Parties to undertake national legislative and administrative measures for its full implementation. We support the use of all fact-finding, verification, and compliance measures, including, if necessary, challenge inspections, as provided in the CWC.

7. Implementation of the Evian Initiative on Radioactive Source Security

At Evian we agreed to improve controls on radioactive sources to prevent their use by terrorists, and we have made substantial progress toward that goal. We are pleased that the IAEA approved a revised Code of Conduct on the Safety and Security of Radioactive Sources in September 2003. We urge all states to implement the Code and recognize it as a global standard.

We have agreed to export and import control guidance for high-risk radioactive sources, which should only be supplied to authorized end-users in states that can control them. States should ensure that no sources are diverted for illicit use. We seek prompt IAEA approval of this guidance to ensure that effective controls are operational by the end of 2005 and applied in a harmonized and consistent manner. We support the IAEA's program for assistance to ensure that all countries can meet the new standards.

8. Nuclear Safety and Security

Since the horrific 1986 accident at Chornobyl, we have worked with Ukraine to improve the safety and security of the site. We have already made a large financial contribution to build a safe confinement over the remnants of the Chornobyl reactor. We are grateful for the participation and contributions made by 21 other states in this effort. Today, we endorse international efforts to raise the remaining funds necessary to complete the project. We urge Ukraine to support and work closely with us to complete the confinement's construction by 2008 in a way that contributes to radiological safety, in particular in Ukraine and neighboring regions.

An effective, efficient nuclear regulatory system is essential for our safety and security. We affirm the importance for national regulators to have sufficient authority, independence, and competence.
GLENEAGLES STATEMENT ON NON-PROLIFERATION

1. We acknowledge, as we did at Evian and Sea Island, that the proliferation of weapons of mass destruction (WMD) and their delivery means, together with international terrorism, remain the pre-eminent threats to international peace and security. The threat of the use of WMD by terrorists calls for redoubled efforts.

2. All States have a role to play in meeting the challenge of WMD proliferation by upholding international arms control, disarmament and non-proliferation norms. All must meet their obligations in full, and ensure effective implementation. We reaffirm our commitments in this regard. And we emphasise our determination to meet proliferation challenges decisively, through both national efforts and effective multilateralism.

3. At Sea Island, we agreed an Action Plan on Non-Proliferation. During the past year, we have worked intensively with our international partners on all its aspects.

Universalising and reinforcing the non-proliferation regime

4. Multilaterally agreed norms provide an essential basis for our non-proliferation efforts. We strongly support universal adherence to and compliance with these norms. We will work to strengthen them, including through improved verification and enforcement. We call on all States not party to the Nuclear Non-Proliferation Treaty, an IAEA Comprehensive Safeguards Agreement and Additional Protocol, the Chemical Weapons Convention, the Biological and Toxin Weapons Convention, the 1925 Geneva Protocol and the Hague Code of Conduct Against the Proliferation of Ballistic Missiles, to accede without delay. We remain ready to assist States to this end.

5. We welcome the agreement by the international community of the International Convention on the Suppression of Acts of Nuclear Terrorism, initiated by the Russian Federation. We look forward to its early entry into force.

United Nations

6. We acknowledge the role of the UN Security Council in addressing the challenges of proliferation. We welcome the fact that the majority of UN members have responded to UNSCR 1540 by submitting reports on their domestic non-proliferation provisions including export controls, and their contribution to international co-operation. We urge those who have not yet done so to submit reports without delay. It is essential that all states meet their obligations in full, by enacting and enforcing national legal and regulatory measures including appropriate criminal and civil penalties for violations, and by committing to international co-
operation on non-proliferation. We stand ready to consider all requests from states seeking to develop their national procedures. We urge the 1540 Committee to work quickly and effectively, drawing on the support of relevant international organisations. We also urge the Security Council to consider how best to ensure that the work of the committee makes an enduring contribution to non-proliferation.

7. We welcome the attention given to non-proliferation by the UN Secretary General in his report “In Larger Freedom”. We stand ready to engage actively at the meeting of Heads of State and Government for the High Level Plenary Event of the General Assembly in September. We acknowledge the role of the Conference on Disarmament in advancing our non-proliferation and disarmament objectives and call on it to resume substantive work.

8. We look forward to strengthening the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA) by State Parties at the Diplomatic Conference in October.

**Proliferation Security Initiative**

9. We reaffirm our commitment to the Proliferation Security Initiative (PSI) and its Statement of Interdiction Principles, which is a global response to a global problem. We welcome the increasing international endorsement for the Initiative. We call on all States to commit themselves to deepen co-operation in order to counter trafficking in WMD, delivery means and related materials.

10. We also call for enhanced efforts to combat proliferation networks and illicit financial flows by developing, on an appropriate legal basis, co-operative procedures to identify, track and freeze relevant financial transactions and assets.

**Nuclear Non-Proliferation**

**Nuclear Non-Proliferation Treaty (NPT)**

11. We emphasise that the NPT remains the cornerstone of nuclear non-proliferation. We reaffirm our full commitment to all three pillars of the Treaty. While we note with regret that it was not possible to achieve consensus at the 2005 Review Conference, we welcome the fact that all States Parties reaffirmed the validity of the Treaty. We remain determined that threats and challenges to the nuclear non-proliferation regime be addressed on the basis of the NPT. For our part, we pledge ourselves to redouble our efforts to uphold and strengthen the Treaty.

**International Atomic Energy Agency (IAEA)**

12. Safeguards are an essential tool for the effective implementation of the NPT. We reaffirm our full support for the IAEA. We are working for the implementation of a Comprehensive Safeguards Agreement and the Additional Protocol to become the
universally accepted norm for verifying compliance with NPT safeguards obligations. The Additional Protocol must become an essential new standard in the field of nuclear supply arrangements. We will continue to work together to strengthen NSG guidelines accordingly. We welcome the establishment of the Committee on Safeguards and Verification, which will review the IAEA’s ability to ensure compliance with NPT obligations and safeguards Agreements in the light of recent non-proliferation challenges.

**Enrichment and Reprocessing Technology**

13. Since Sea Island, we have worked to develop further measures to prevent the export of sensitive nuclear items with proliferation potential to states that may seek to use them for weapons purposes or allow them to fall into terrorist hands, while allowing the world to enjoy safely the benefits of peaceful nuclear technology. We agreed at Sea Island that the export of such items should occur only pursuant to criteria consistent with global non-proliferation norms and to states rigorously committed to these norms. Over the past year, we have made progress in the development of such criteria. We welcome the decision at the recent Plenary Session of the Nuclear Suppliers Group (NSG) to work actively with a view to reaching consensus on this issue. In aid of this process, we continue to agree, as we did at Sea Island, that it would be prudent in the next year not to inaugurate new initiatives involving transfer of enrichment and reprocessing technologies to additional states. We continue to call on all states to adopt this strategy of prudence. We also welcome the adoption by the NSG of important measures which restrict nuclear transfers to States which have violated their non-proliferation and safeguards obligations.

14. We believe that strengthened conditions on the supply of sensitive technology should be accompanied by new measures to ensure that those states which forgo the nuclear fuel cycle and meet all nuclear non-proliferation obligations enjoy assured access to the market for nuclear fuel and related services. We welcome the efforts of the Expert Group, established by the Director-General of the IAEA, which has recently reported on possible Multinational Approaches to the Fuel Cycle. We will work together with all interested partners for a way forward which provides genuine access while minimising the risks of proliferation.

**Proliferation Challenges**

15. The example of Libya’s important renunciation of weapons of mass destruction demonstrates that the international community responds positively to States which desire to be a part of the global non-proliferation mainstream. In this spirit, we are working with determination to address current proliferation challenges.

16. We express profound concern over the threat posed by DPRK’s nuclear weapons programme, particularly following its recent statements that it has manufactured nuclear weapons and in the light of its missile programmes and history of missile proliferation. The DPRK has violated its commitments under the NPT and its
IAEA safeguards agreement. We reiterate the necessity for the DPRK promptly to return to full compliance with the NPT, and dismantle all its nuclear weapons-related programmes in a complete, verifiable and irreversible manner. It is also essential that the DPRK not contribute to missile proliferation elsewhere, and maintain indefinitely its moratorium on the launching of missiles. We reaffirm our full support for the Six-Party talks, which represent an important opportunity to achieve a comprehensive solution. It is essential that the DPRK return to the Six Party Talks immediately without preconditions, and participate constructively to this end.

17. We remain united in our determination to see the proliferation implications of Iran’s advanced nuclear programme resolved. It is essential that Iran provide the international community with objective guarantees that its nuclear programme is exclusively for peaceful purposes in order to build international confidence. We welcome the initiative of France, Germany and the United Kingdom, and the High Representative of the European Union to reach agreement with Iran on long-term arrangements which would provide such objective guarantees as well as political and economic co-operation. We call upon Iran to maintain the suspension of all enrichment- related and reprocessing activities while negotiations on the long term arrangements proceed. We reiterate the need for Iran to co-operate fully with IAEA requests for information and access, to comply fully with all IAEA Board requirements, and to resolve all outstanding issues related to its nuclear programme. We also urge Iran to ratify the Additional Protocol without delay and, pending its ratification, to act fully in accordance with its provisions.

Defending against biological threats

18. We reaffirm our strong commitment to strengthening our defences against biological threats. Over the last year, our efforts have focussed on enhancing protection of the food supply. We will continue efforts to address biological threats and support work in other relevant international groups.

19. This year marks the 30th anniversary of the entry into force of the Biological and Toxin Weapons Convention. New biological threats mean that full compliance with the Convention remains as relevant today as it was at its inception. We encourage States Party to take a full part in the ongoing programme of work which this year will discuss the content, promulgation and adoption of codes of conduct for scientists. Further, we look forward to a substantive and forward-looking Review Conference in 2006.

20. 2005 also marks the 80th anniversary of the opening for signature of the 1925 Geneva Protocol prohibiting the use in war of asphyxiating, poisonous or other gases and bacteriological methods of warfare. We emphasise the continuing vital relevance of this multilateral rejection of the use in war of chemical and biological weapons.
Chemical Weapons Convention

21. We continue to support full implementation of the Chemical Weapons Convention, including its non-proliferation aspects. While acknowledging the obligation to destroy chemical weapons within the time limits provided for by the chemical weapons convention and to destroy or convert chemical weapons production facilities, we recall that States Party agreed in 2003 to an Action Plan which requires all to have national implementing measures in place by the time of the Conference of States Party scheduled for this November. We urge those States Party who have not yet done so to take all necessary steps to ensure the deadline is met. We stand ready to provide appropriate assistance. We support the use of consultations and co-operation, as well as fact-finding, verification, and compliance measures, including, if necessary, challenge inspections, as provided in the CWC.

Global Partnership against Proliferation of Weapons and Materials of Mass Destruction

22. We reaffirm our commitment to the Global Partnership against the Proliferation of Weapons and materials of Mass Destruction, and to the Kananaskis Statement, Principles, and Guidelines. We will work to build on the considerable progress we have made to implement co-operative projects to which the G8 and thirteen other countries now contribute. We renew our pledge to raise up to $20 billion over ten years to 2012 for Global Partnership priorities, initially in Russia. In this context, we will embark on new projects according to these priorities. We welcome Ukraine’s participation, and continue to discuss with a number of countries of the Former Soviet Union their interest in joining the Partnership. We reaffirm our openness in principle to a further expansion of the Partnership to donor and recipient partners which support the Kananaskis documents.

Nuclear Safety and Security

23. We welcome continued co-operation with the IAEA in the area of nuclear and radiological safety and security, including on strengthening regulatory infrastructures and the interface between safety and security. We support the establishment of the Global Threat Reduction Initiative and welcome the progress which has been made so far. We welcome the results of the IAEA’s International Conference on Nuclear Security which was held in London in March. We have all signed the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management and urge others to join us.

24. Since the horrific accident in 1986, we have worked with Ukraine to improve the safety and security of the Chernobyl site. This year, together with the EU and 16 other countries, we have increased pledged funding for the construction of a new safe confinement over the remnants of the reactor to approximately $1 billion. We welcome Ukraine’s political and financial commitment to this project, and urge Ukraine to ensure that the project can be completed safely by 2009.
Radioactive Source Safety and Security

25. At Evian we resolved to improve controls on radioactive sources to prevent their use by terrorists. We welcome the fact that more than 70 countries have committed to implement the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and urge all other states to adopt the Code. We welcome the IAEA endorsement of the international import and export framework for the control of radioactive sources. We will work towards having effective controls applied by the end of 2005, in a harmonised and consistent manner. We commend the results of the IAEA’s International Conference on the Safety and Security of Radioactive Sources which was held in Bordeaux, France in June. We will strengthen our co-operation to improve the security of radioactive sources world wide.
Statement on Non-Proliferation

St. Petersburg, July 16, 2006

The proliferation of weapons of mass destruction (WMD) and their means of delivery, together with international terrorism remain the pre-eminent threat to international peace and security. The international community must therefore boldly confront this challenge, and act decisively to tackle this threat. We reaffirm our determination and commitment to work together and with other states and institutions in the fight against the proliferation of WMD, including by preventing them from falling into hands of terrorists.

As an essential element of our efforts to confront proliferation, we are determined to fulfill arms control, disarmament and non-proliferation obligations and commitments under relevant international treaties, conventions and multilaterally agreed arrangements to which we are parties or in which we participate. We call on all other states to meet their obligations and commitments in full in this regard. We re dedicate ourselves to the re-invigoration of relevant multilateral fora, beginning with the Conference on Disarmament. These efforts will contribute to the further reinforcement of the global non-proliferation regime.

We call on all states not Party to the Treaty on the Non-proliferation of Nuclear Weapons (NPT), the Chemical Weapons Convention (CWC), the Biological and Toxin Weapons Convention (BTWC) and the 1925 Geneva Protocol to accede to them without delay and those states that have not yet done so to subscribe to the Hague Code of Conduct Against Ballistic Missile Proliferation. We urge all states concerned to strictly observe a moratorium on nuclear weapon test explosions or any other nuclear explosions.

**Nuclear Non-Proliferation**

We reaffirm our full commitment to all three pillars of the NPT. We call on all states to comply with their NPT obligations, including IAEA safeguards as well as developing effective measures aimed at preventing trafficking in nuclear equipment, technology and materials.

**IAEA Safeguards**

We stress the importance of the IAEA safeguards system. We are seeking universal adherence to IAEA comprehensive safeguards agreements for the effective implementation of Article III of the NPT and to the Additional Protocol. In this context we urge all states that have not yet done so, to sign, ratify and implement these instruments promptly. We are actively engaged in efforts toward this goal, with a view to make comprehensive safeguards agreements together with an Additional Protocol the universally accepted verification standard. We will also work together vigorously to establish the Additional Protocol as an essential new standard in the field of nuclear supply arrangements.

**Peaceful use of nuclear energy**

We recall that Article IV of the NPT stipulates that nothing in the Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of the Treaty. We are committed to facilitate the exchange of equipment, materials and information for the peaceful use of nuclear energy. Full compliance with NPT non-proliferation obligations, including safeguards agreements, is an essential condition for such exchange.

An expansion of the peaceful use of nuclear energy must be carried forward in a manner consistent with nuclear non-proliferation commitments and standards. In this regard, it is important to develop and implement mechanisms assuring access to nuclear fuel related services to states as an alternative to pursuing enrichment and reprocessing activities. In this respect we appreciate the recent potentially complementary initiative of the President of the Russian Federation on multinational centres to provide nuclear fuel cycle services and the Initiative of the President of the United States on the Global Nuclear Energy Partnership as well as the recent initiative tabled at the IAEA by France, Germany, the Netherlands, the Russian Federation, the United Kingdom and the United States regarding a concept for a multilateral mechanism for reliable access to enrichment services for nuclear fuel. We will work to elaborate further these initiatives. To further strengthen this common approach we will:

- continue reviewing multinational approaches to the fuel cycle, including international centres to provide nuclear fuel cycle services, with the IAEA, as well as relevant practical, legal and organizational solutions;

- facilitate developing credible international assurances of access to nuclear fuel related services; while

- those of us who have or are considering plans relating to use and/or development of safe and secure nuclear energy will promote research and development for safer, more efficient, more environmentally friendly and more proliferation resistant nuclear energy systems, including relevant technologies of the nuclear fuel cycle. Until advanced systems are in place, appropriate interim solutions could be pursued to address back-end fuel cycle issues in accordance with national choices and non-proliferation objectives.
FMCT

We support the early commencement of negotiations on the Fissile Material Cut-Off Treaty in the Conference on Disarmament.

Enrichment and Reprocessing

In accordance with approaches agreed upon at the G8 summits at Sea Island and in Gleneagles, we support the development of measures to prevent transfers of sensitive nuclear equipment, materials and technologies to states that may seek to use them for weapons purposes, or allow them to fall into terrorists' hands.

We will exercise enhanced vigilance with respect to the transfers of nuclear technology, equipment and material, whether in the trigger list, in the dual-use list, or unlisted, which could contribute to enrichment-related and reprocessing activities, and will be particularly vigilant with respect to attempts to acquire such technology, equipment and material by covert and illicit means.

We agreed at Sea Island that the export of such items should occur only pursuant to criteria consistent with global non-proliferation norms and to those states rigorously committed to these norms. Over the last two years we have made significant progress in the development of such criteria. We welcome the progress noted by the Nuclear Suppliers Group and its commitment to work actively with a view to reaching consensus on this issue by 2007.

In aid of this process we continue to agree, as we did at Sea Island and Gleneagles, that it would be prudent in the next year not to inaugurate new initiatives involving transfer of enrichment and reprocessing technologies to additional states. We call upon all other states to adopt this strategy of prudence.

India

We look forward to reinforcing our partnership with India. We note the commitments India has made, and encourage India to take further steps towards integration into the mainstream of strengthening the non-proliferation regime, so as to facilitate a more forthcoming approach towards nuclear cooperation to address its energy requirements, in a manner that enhances and reinforces the global non-proliferation regime.

BTWC

We look forward to a successful 6th BTWC Review Conference dedicated to the effective review of the operation of the Convention. We will facilitate adoption by the Review Conference of decisions aimed at strengthening and enhancing the implementation of the BTWC.

We call upon all States Parties to take necessary measures, including as appropriate the adoption of and implementation of national legislation, including penal legislation, in the framework of the BTWC, in order to prohibit and prevent the proliferation of biological and toxin weapons and to ensure control over pathogenic microorganisms and toxins. We invite the States Parties that have not yet done so to take such measures at the earliest opportunity and stand ready to consider appropriate assistance. In this regard, we welcome initiatives such as the 2006 EU Joint Action in support of the BTWC.

CWC

We continue to support full implementation of the CWC. We note the ongoing destruction of chemical weapons by the possessor states and are encouraged by the fact that the stockpiles of these deadly weapons are gradually decreasing. We acknowledge their obligations to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Chemical Weapons Convention.

We welcome the increasing number of States Parties to the Convention. We acknowledge the value of the Organization for the Prohibition of Chemical Weapons’ Action Plan on national implementation measures and improvement of the situation with adoption of such measures. We urge States Parties to continue and intensify efforts in this direction. We stand ready to provide appropriate assistance.

United Nations Security Council Resolution 1540

We reaffirm the key role of the UN Security Council in addressing the challenges of proliferation. We urge all states to implement fully UNSC Resolution 1540, including reporting on their implementation of the Resolution.

We welcome the decision of UN Security Council Resolution 1673 to extend the mandate of the 1540 Committee in promoting the full implementation of the resolution. We intend to continue working actively at national and international levels to achieve this important aim, and stand ready to consider all requests for assistance in this regard.

HCOC

We reaffirm our commitment to work toward the, universalisation of the Hague Code of Conduct Against Ballistic Missile Proliferation, and the full implementation of its confidence-building measures.

PSI

We reaffirm our commitment to the Proliferation Security Initiative, which constitutes an important means to counter trafficking in WMD, their delivery means and related materials. We welcome the increasing international endorsement for the Initiative as it was demonstrated at the High Level Political Meeting in Warsaw. We take note of the discussion at that meeting on how PSI states can work cooperatively to prevent and disrupt proliferation finance, in furtherance of the objectives of UNSCR 1540.

Libya
The international community's positive response to Libya's renunciation of weapons of mass destruction demonstrates the benefits that follow a strategic decision to cooperate with the international community and be a part of the global nonproliferation mainstream.

Iran

We remain seriously concerned over the proliferation implications of Iran's advanced nuclear programme and we remain united in our commitment to see those implications resolved.

We stand fully behind the far reaching proposals presented to Iran on June 6, 2006 on behalf of China, France, Germany, Russia, the United States of America with the support of the High Representative of the European Union for a long-term comprehensive agreement with Iran based on cooperation and mutual respect.

We fully support the Statement of the Foreign Ministers of China, France, Germany, Russia, the United Kingdom, the United States of America issued on July 12, Paris, in which the Ministers and the High Representative of the European Union expressed their profound disappointment over the absence of any indication at all from the Iranians that Iran is ready to engage seriously on the substance of the above-mentioned proposals. Iran has failed to take the steps needed to allow negotiations to begin, specifically the suspension of all enrichment related and reprocessing activities, as required by the IAEA and supported in the United Nations Security Council Presidential Statement. The Ministers therefore decided to return the issue to the United Nations Security Council. We, the Leaders of the G-8, fully support this decision and the clear messages it sends to Iran about the choice it must make. We support the Paris appeal to Iran to respond positively to the substantive proposals made on June 6, 2006.

DPRK

We welcome the unanimously adopted UN Security Council Resolution 1695 which represents the clear and strong will of the international community.

We condemn the launching by the Democratic People's Republic of Korea (DPRK) of multiple ballistic missiles on July 5 local time and express serious concerns as this jeopardizes peace, stability and security in the region and beyond. This action violated the DPRK's pledge to maintain a moratorium on missile launches and is inconsistent with the purposes of the Six-Party Talks Joint Statement of September 19, 2005, in which all parties - including the DPRK - committed to joint efforts to lasting peace and stability in Northeast Asia. We also express our grave concern about the DPRK's indication of possible additional launches. We call on the DPRK to reestablish its preexisting commitments to a moratorium on missile launches and to refrain from contributing to missile proliferation. In accordance with the UN Security Council Resolution 1695 we will exercise vigilance in preventing any external cooperation with the DPRK's missile and WMD programmes.

These missile launches intensify our deep concern over the DPRK's nuclear weapons programmes. We reiterate the necessity for the DPRK promptly to return to full compliance with the NPT. We strongly urge the DPRK to abandon all nuclear weapons and existing nuclear programmes. We reaffirm our full support for the September 19, 2005 Joint Statement and the Six-Party talks. We urge the DPRK to expeditiously return to these talks without precondition and to cooperate to settle the outstanding issues of concern on the basis of this Statement, which reaffirms the common objective of Six Parties; all participants should intensify their efforts to achieve the verifiable denuclearization of the Korean Peninsula in a peaceful manner and to maintain peace and stability on the Korean Peninsula and in Northeast Asia.

Global Partnership

The Global Partnership against the Spread of Weapons and Materials of Mass Destruction has continued its progress in the past year towards achieving the goals set out at Kananaskis. It has become a significant force to enhance international security and safety. Much has been accomplished in all areas but more has to be done to increase the efficiency of our cooperation.

We reaffirm our commitment to the full implementation of all G8 Global Partnership objectives. We also reaffirm our openness to examine the expansion of the Partnership to other recipient countries and donor states which support the Kananaskis documents and to embrace the goals and priorities of all Partnership members. We welcome the progress GP members have made working with Ukraine.

We appreciate the contribution of 13 non-G8 states who joined the Global Partnership.

We remain committed to our pledges in Kananaskis to raise up to $20 billion through 2012 for the Global Partnership, initially in Russia, to support projects to address priority areas identified in Kananaskis and to continue to turn these pledges into concrete actions.
1. Preventing the proliferation of weapons of mass destruction and their means of delivery as well as effectively combating international terrorism are critical to international peace and security. We, the Leaders of the G8, remain resolute in our shared commitment to counter the global proliferation challenge and continue to support and implement all the statements on non-proliferation issued on the occasion of previous summits of the G8.

2. The global proliferation challenge requires determined action and international cooperation on the basis of a broad and multifaceted approach. To be successful we need to work jointly with other partners and through relevant international institutions, in particular those of the United Nations system, to strengthen all instruments available for combating the proliferation of weapons of mass destruction and their means of delivery.

3. We will also continue to promote a stable international and regional environment in order to address the underlying factors for proliferation activities.

4. We reaffirm our commitment to the multilateral treaty system which provides the normative basis for all non-proliferation efforts. The strengthening and universalisation of WMD related treaties, in particular the Treaty on the Non-Proliferation of Nuclear Weapons, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention, are therefore a key priority. These three treaties continue to be essential instruments to maintain international peace and security and are the cornerstones of the international regime for non-proliferation and disarmament.

5. We will continue to encourage states to fulfil their obligations under the multilateral treaty regimes and to help states in effectively implementing those obligations at their national levels, inter alia by accounting for, securing and physically protecting sensitive materials. We place particular emphasis on urging the adoption of effective measures to combat illicit trafficking in WMD materials and their means of delivery, in particular through capacity building related to law enforcement and the establishment and enforcement of effective export controls, as well as through the Proliferation Security Initiative.

6. We reaffirm our commitment at Gleneagles to develop cooperative procedures to identify, track and freeze financial transactions and assets associated with WMD proliferation networks. We agree that the United Nations Security Council resolutions, including 1540, 1695, 1718, 1737, and 1747, require all states to take actions against WMD proliferation and call upon states to fulfill their obligations and responsibilities against WMD proliferation finance.

7. We reiterate the key role of the United Nations Security Council in addressing the challenge of proliferation. In this regard, we underline the importance of full
implementation by all States of the UNSC Resolution 1540 and we reiterate our
support for the efforts of the 1540 Committee, including the sharing of best
practices.

8. The Global Partnership against the Proliferation of Weapons and Materials of Mass
   Destruction, launched five years ago at Kananaskis, is a unique and successful joint
effort. At the midpoint of its lifespan we have reviewed the progress made so far and
assessed the state of the cooperative projects undertaken. We acknowledge the
progress that has been made since the launch of the Partnership in 2002 but more
has to be done to increase the efficiency of our cooperation. We remain firmly
committed to completing the Kananaskis goals. We will discuss in due course
whether the Partnership should be extended beyond 2012 and if so how to allocate
the means for expanding its scope to address threat reduction and nonproliferation
requirements worldwide, including those mandated by United Nations Security
Council Resolution 1540. We will discuss how other states, both donors and
recipients, could be included in an expanded Global Partnership.

9. We strongly support the endeavours underway to overcome the stalemate in the
   Conference on Disarmament. We reaffirm our support to the early commencement
   of negotiations on a Fissile Material Cut-Off Treaty.

10. We underline the crucial importance of ensuring compliance with the multilateral
treaty system. To that end we need to strengthen verification and enforcement. We
are committed to continue our efforts to make the IAEA Comprehensive Safeguards
Agreement together with an Additional Protocol the universally accepted verification
standard for the peaceful use undertakings of the NPT. We will also work towards
rendering the implementation of the CWC and BTWC more effective, in particular by
promoting full and effective national implementation by all States Parties and full
compliance with their obligations with regard to both Conventions. We are also
committed to enhancing the effectiveness of the UNSC in meeting the challenge of
proliferation and effectively fulfilling its role as the final arbiter of the consequences
of non-compliance.

11. We acknowledge that the nuclear non-proliferation regime faces serious challenges.
We therefore reaffirm our full commitment to the objectives and obligations of all
three pillars of the NPT and we will continue to work for its universalisation. We call
on all states party to the NPT to make a constructive contribution to a balanced and
structured review of the Treaty, which has successfully begun with the first meeting
of the Preparatory Committee of the 2010 Review Conference. We will undertake all
efforts to achieve a positive outcome of the review process with a view to
maintaining and strengthening the authority, credibility and integrity of the treaty
regime.

12. We urge all states concerned to observe a moratorium on nuclear weapon test
explosions or any other nuclear explosions.

13. We reaffirm the inalienable right of all parties to the NPT to the use of nuclear
energy for peaceful purposes as enshrined in Article IV in conformity with all their
Treaty obligations. To reduce the proliferation risks associated with the spread of
enrichment and reprocessing goods and technology, we welcome the continued
discussion by the Nuclear Suppliers Group on mechanisms to strengthen controls on
transfers of enrichment and reprocessing equipment, facilities and technology. We
regret that they did not reach consensus on this issue by 2007 as called for in St. Petersburg. We urge the NSG to accelerate its work and swiftly reach consensus. We agree to continue to undertake previously agreed actions on the understanding that should the NSG not reach consensus on appropriate criteria by 2008, we will seriously consider alternative strategies to reduce the proliferation risks associated with the transfer of enrichment and reprocessing goods and technologies. We also stress the importance of developing and implementing mechanisms of multilateral approaches to the nuclear fuel cycle as a possible alternative to pursuing national enrichment and reprocessing activities. Following the IAEA special event in September last year we are now looking forward to the suggestions that the IAEA Director General will be presenting to the IAEA Board of Governors later this month. In considering the suggestions we will be guided by the criteria of added value to the non-proliferation regime, confidence in the reliability of supply assurances, compatibility with Article IV of the NPT, and the need to avoid any unnecessary interference or disturbance with the functioning of existing commercial markets. In this context, we reaffirm our commitment to ensure that the highest possible non-proliferation, safety and security standards for the peaceful use of nuclear energy are observed. We appreciate suggested initiatives in the field of multilateral approaches to the nuclear fuel cycle, including the Russian initiative on multinational centres to provide nuclear fuel cycle services, the US initiative on the Global Nuclear Energy Partnership, the Six-Party proposal of a standing mechanism for reliable access to nuclear fuel, the Japanese initiative on an IAEA standby arrangements system for the assurance of nuclear fuel supply, the UK proposal for non-revocable advanced export approval and the German initiative to establish a special territory under the exclusive control of the IAEA where enrichment could take place on a commercial basis. We reiterate that participation in any mechanism dealing with multilateral approaches should be carried out on a voluntary basis and should not preclude any state from purchasing nuclear fuel cycle services on the existing market, beyond the frameworks of multilateral mechanisms.

14. We are committed to resolving regional proliferation challenges by diplomatic means. We remain united in our commitment to resolve the proliferation concerns posed by Iran’s nuclear programme. We deplore the fact that Iran has so far failed to meet its obligations under UNSC Resolutions 1696, 1737 and 1747 and will support adopting further measures, should Iran refuse to comply with its obligations. We again urge Iran to take the steps required by the international community, and made mandatory by these resolutions, to suspend all its enrichment-related and reprocessing activities, including research and development, and allow negotiations to begin. International confidence in the exclusively peaceful nature of the Iranian nuclear programme would permit a completely new chapter to be opened in our relations with Iran not only in the nuclear but also more broadly in the political, economic and technological fields. In this regard, we support the action of the IAEA and call on Iran to fully cooperate with the Agency.

15. Regarding the Korean Peninsula we are continuing to support the Six-Party Talks and swift implementation of the initial actions agreed on 13 February, 2007 as a first step towards full implementation of the Joint Statement of 19 September, 2005, including the resolution of the outstanding issues of concern. At the same time, we condemn the DPRK’s nuclear test which is a clear threat to international peace and security. We urge the DPRK to comply with the UNSC Resolutions 1695 and 1718, strictly to refrain from any further nuclear test or missile launch, and to abandon all nuclear weapons and existing nuclear programmes as well as all other existing
WMD and ballistic missile programmes in a complete, verifiable and irreversible manner. We urge the DPRK to return to full compliance with the NPT and IAEA safeguards. At the same time, we expect all states to fully implement the UNSC resolutions.

16. We look forward to reinforcing our partnership with India. We note the commitments India has made, and encourage India to take further steps towards integration into the mainstream of strengthening the non-proliferation regime so as to facilitate a more forthcoming approach towards nuclear cooperation to address its energy requirements, in a manner that enhances and reinforces the global non-proliferation regime.

17. The threat of nuclear terrorism continues to be a matter of grave concern to us. We are therefore committed to broaden participation in and further develop the Global Initiative to Combat Nuclear Terrorism that was launched last year at St. Petersburg. We invite all EU member states to join the initiative, the EU to support our efforts and the EU-institutions to join the initiative as observer. We call on all states to endorse the Statement of Principles adopted at the Initiative's meeting in Rabat on 30 and 31 October 2006 and join in strengthening our preparedness and defenses against this threat consistent with national legal authorities and obligations under relevant international legal frameworks. We urge States that have not done so to sign and to ratify the International Convention for the Suppression of Acts of Nuclear Terrorism and the Convention on the Physical Protection of Nuclear Materials in its amended version.

18. This year marks the tenth anniversary of the entry into force of the CWC, which is the first disarmament treaty freeing the world from a whole category of weapons of mass destruction under international verification and within a specific timeframe. The anniversary is an opportunity to take stock of the implementation of that Convention so far and to set the stage for the Second Review Conference scheduled to take place in April 2008. We believe that at the Conference States Parties should reaffirm their commitment to full compliance with the obligations under the Convention and to further strengthen the regime established by it.

19. Determined to exclude completely the possibility of biological agents and toxins being used as weapons, we welcome the outcome of the Sixth Review Conference of the BTWC in 2006, which made a significant contribution to strengthening the effectiveness of the Convention. We are committed to fully comply with the decisions taken by that conference and to work for successful outcomes of the meetings during the intercessional period leading to the next Review Conference in 2011.

20. We will continue to promote efforts to address the threat posed by proliferation of means of delivery of weapons of mass destruction. In this regard we remain committed to implementing the Hague Code of Conduct against Ballistic Missile Proliferation and call upon other subscribing States to follow suit. We also intend to render it more effective and urge all states which have not done so, to subscribe to the Code without delay.
Proliferation Security Initiative: Statement of Interdiction Principles

The Proliferation Security Initiative (PSI) is a response to the growing challenge posed by the proliferation of weapons of mass destruction (WMD), their delivery systems, and related materials worldwide. The PSI builds on efforts by the international community to prevent proliferation of such items, including existing treaties and regimes. It is consistent with and a step in the implementation of the UN Security Council Presidential Statement of January 1992, which states that the proliferation of all WMD constitutes a threat to international peace and security, and underlines the need for member states of the UN to prevent proliferation. The PSI is also consistent with recent statements of the G8 and the European Union, establishing that more coherent and concerted efforts are needed to prevent the proliferation of WMD, their delivery systems, and related materials. PSI participants are deeply concerned about this threat and of the danger that these items could fall into the hands of terrorists, and are committed to working together to stop the flow of these items to and from states and non-state actors of proliferation concern.

The PSI seeks to involve in some capacity all states that have a stake in nonproliferation and the ability and willingness to take steps to stop the flow of such items at sea, in the air, or on land. The PSI also seeks cooperation from any state whose vessels, flags, ports, territorial waters, airspace, or land might be used for proliferation purposes by states and non-state actors of proliferation concern. The increasingly aggressive efforts by proliferators to stand outside or to circumvent existing nonproliferation norms, and to profit from such trade, requires new and stronger actions by the international community. We look forward to working with all concerned states on measures they are able and willing to take in support of the PSI, as outlined in the following set of "Interdiction Principles."

Interdiction Principles for the Proliferation Security Initiative

PSI participants are committed to the following interdiction principles to establish a more coordinated and effective basis through which to impede and stop shipments of WMD, delivery systems, and related materials flowing to and from states and non-state actors of proliferation concern, consistent with national legal authorities and relevant international law and frameworks, including the UN Security Council. They call on all states concerned with this threat to international peace and security to join in similarly committing to:

1. Undertake effective measures, either alone or in concert with other states, for interdicting the transfer or transport of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern. "States or non-state actors of proliferation concern" generally refers to those countries or entities that the PSI participants involved establish should be subject to interdiction activities because they are engaged in proliferation through: (1) efforts to develop or acquire chemical, biological, or nuclear weapons and associated delivery systems; or (2) transfers (either selling, receiving, or facilitating) of WMD, their delivery systems, or related materials.

2. Adopt streamlined procedures for rapid exchange of relevant information concerning suspected proliferation activity, protecting the confidential character of classified information provided by other states as part of this initiative, dedicate appropriate resources and efforts to interdiction operations and capabilities, and maximize coordination among participants in interdiction efforts.
3. Review and work to strengthen their relevant national legal authorities where necessary to accomplish these objectives, and work to strengthen when necessary relevant international law and frameworks in appropriate ways to support these commitments.

4. Take specific actions in support of interdiction efforts regarding cargoes of WMD, their delivery systems, or related materials, to the extent their national legal authorities permit and consistent with their obligations under international law and frameworks, to include:

   a. Not to transport or assist in the transport of any such cargoes to or from states or non-state actors of proliferation concern, and not to allow any persons subject to their jurisdiction to do so.

   b. At their own initiative, or at the request and good cause shown by another state, to take action to board and search any vessel flying their flag in their internal waters or territorial seas, or areas beyond the territorial seas of any other state, that is reasonably suspected of transporting such cargoes to or from states or non-state actors of proliferation concern, and to seize such cargoes that are identified.

   c. To seriously consider providing consent under the appropriate circumstances to the boarding and searching of its own flag vessels by other states, and to the seizure of such WMD-related cargoes in such vessels that may be identified by such states.

   d. To take appropriate actions to (1) stop and/or search in their internal waters, territorial seas, or contiguous zones (when declared) vessels that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and to seize such cargoes that are identified; and (2) to enforce conditions on vessels entering or leaving their ports, internal waters or territorial seas that are reasonably suspected of carrying such cargoes, such as requiring that such vessels be subject to boarding, search, and seizure of such cargoes prior to entry.

   e. At their own initiative or upon the request and good cause shown by another state, to (a) require aircraft that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and that are transiting their airspace to land for inspection and seize any such cargoes that are identified; and/or (b) deny aircraft reasonably suspected of carrying such cargoes transit rights through their airspace in advance of such flights.

   f. If their ports, airfields, or other facilities are used as transshipment points for shipment of such cargoes to or from states or non-state actors of proliferation concern, to inspect vessels, aircraft, or other modes of transport reasonably suspected of carrying such cargoes, and to seize such cargoes that are identified.

[Also: Principles for the Proliferation Security Initiative and Proliferation Security Initiative – Paris Meeting of Core Participants, September 3-4, 2003]

[End]
7. Other Documents

This section provides an overview of some of the contributions that have been made by members of civil society, such as learned scientific bodies, think-tanks, academics and other researchers, to strengthen the regime against CW, and the norm embodied within the CWC. Historically, CW issues have not attracted civil society involvement on a scale comparable to their involvement in nuclear disarmament but those that are active form a highly specialised, albeit small, part of global civil society. Provided in this section of the Resource Guide are a number of documents produced by non-governmental actors. This is by no means intended as a comprehensive list but rather as an illustration of the contribution that civil society can make to strengthen the norm against CW.

7.1 International Union of Pure and Applied Chemistry

The International Union of Pure and Applied Chemistry (IUPAC) was formed in 1919 by chemists from industry and academia. It serves to advance the worldwide aspects of the chemical sciences and to contribute to the application of chemistry in the service of humanity. IUPAC is an association of bodies, National Adhering Organizations, which represent the chemists of different member countries. There are 45 National Adhering Organizations, and 20 other countries are also linked to IUPAC in the status of Associate National Adhering Organizations. Almost 1,000 chemists throughout the world are engaged on a voluntary basis in the scientific work of IUPAC, primarily through projects.

In 2002, IUPAC organized a workshop in Bergen, Norway to develop advice to the OPCW and the States Parties in their preparations for the First Review Conference on the impact of scientific developments on the CWC. The report from the workshop highlighted developments in organic synthesis and changes in chemical plant design that pose new challenges to the Convention, but also described recent and probable future developments in analytical chemistry that may assist in implementation of the CWC. IUPAC organized a similar meeting in Zagreb, Croatia in April 2007 to feed into preparations for the Second Review Conference. The report of the workshop highlighted the convergence of chemistry and biology, noting that this reinforced the importance of the overlap between the prohibitions and requirements of the CWC and the BWC. The report of the Zagreb workshop is included in this section of the Resource Guide.

As well as offering expert scientific advice, IUPAC has run, since 2001, a series of projects relating to the need for increased awareness among chemists and chemical engineers of the CWC and to implement this awareness raising into chemistry teaching. In July 2005, IUPAC and the OPCW co-hosted a meeting in Oxford (UK) at which the CWC and the role of chemists was discussed. A report explaining the background to the Oxford workshop and its outcomes is included in this section of the Resource Guide.

7.2 Harvard Sussex Program

The Harvard Sussex Program on Chemical and Biological Weapons (HSP) is an inter-university collaboration seeking to instil the traditions, practices and benefits of scholarship into the formation of public policy on issues involving chemical and biological weapons, and has contributed for over thirty years to debates regarding maintaining and enhancing the moral, political and legal constraints and prohibitions against the weaponization of toxicity and disease. HSP is also the publisher of the quarterly CBW Conventions Bulletin.

Recognising that the international conventions which prohibit biological and chemical weapons – the BWC and the CWC – are directed primarily to actions of states, and address the matter of individual responsibility to only a limited degree, and that neither the Convention for the Suppression of Terrorist Bombings nor the Rome Statute of the International Criminal Court adequately remedy these deficiencies, HSP has been considering how international legal methods might be applied to the
governance of dual use chemical and bio-technologies. Starting in 1996 and at workshops in 1997 and 1998, with advice from an international group of legal authorities, HSP has developed a draft convention that would make it a crime under international law for any person knowingly to develop, produce, acquire, retain, transfer or use chemical or biological weapons or to order, direct or knowingly render substantial assistance to those activities or to threaten use of chemical or biological weapons. Under such a convention any person who commits any of the prohibited acts would face the risk of apprehension, prosecution and punishment or of extradition should that person be found in the territory of a state that supports the convention.

The text of the Harvard Sussex Draft Convention is included in this section of the Resource Guide and more information is available at www.sussex.ac.uk/Units/spru/hsp/Harvard-Sussex-Program-draft-convention.htm.

### 7.3 The US National Academies

The US National Academies (which consists of four organizations, the National Academy of Sciences, the National Academy of Engineering, the Institute of Medicine and the National Research Council), brings together committees of experts in all areas of scientific and technological endeavour to address critical national issues and give advice to the US Government and the public. In recent years, the National Academies have published two reports, *Biotechnology Research in an Age of Terrorism: Confronting the Dual Use Dilemma*, in October 2003 and *Globalization, Biosecurity and the Future of the Life Sciences* in January 2006, that deal primarily with the threat of biological weapons. However, the latter report, known also as the Lemon-Relman report after the two co-chairmen of the authoring committee, highlights the “linkable features” between the BWC and the CWC and specifically mentions the Second CWC Review Conference:

> Such international conventions should not be considered the solution to the issues society confronts today with respect to potential harmful uses of advances in the life sciences, nor should they be cast aside and ignored. Despite their limitations, the Committee appreciates their value in articulating international norms of behaviour and conduct and suggests that these conventions serve as a basis for future international discussions and collaborative efforts to address and respond to the proliferation of biological threats. Important opportunities will arise when states parties conduct their next quinquennial reviews of the operation of the BWC (in 2006) and the CWC (in 2008).

The present report has several times noted that technologies are bringing chemistry and biology closer together. That toxins and synthetic biological agents, including bioregulators, immunoregulators and small interfering RNAs, fall within the scope of both treaties is one such linkable feature. These two review conferences will as always be dominated by political considerations, but, in view of the profound developments now under way in the life sciences, the Committee nevertheless draws attention to the possibilities held out by the 2008 conference for building upon the parallel or linkable features of the BWC and the CWC. (Lemon-Relman, p. 246).


### 7.4 WMD Commission

In 2003, the Weapons of Mass Destruction Commission, an independent international commission, was charged by the Swedish Government to examine how the world could tackle the problem of weapons of mass destruction. Chaired by Dr Hans Blix of Sweden, with fourteen commissioners, the Commission held ten formal meetings around the world between January 2004 and March 2006. More
information on the WMD Commission, including details of the Commissioners and the working papers provided to the Commission, are available on its website at www.wmdcommission.org The Commission was tasked with identifying desirable and achievable directions for international cooperation and presenting realistic proposals aimed at the greatest possible reduction of the dangers of weapons of mass destruction. In the case of the latter, the scope of the investigation was comprehensive and included nuclear, biological, chemical and radiological weapons and the means of delivering them, as well as possible links between these issues and terrorism.

After two years of deliberations, the WMD Commission completed its final report, Weapons of Terror: Freeing the World of Nuclear, Biological and Chemical Arms, which Hans Blix launched by presenting it to the UN Secretary-General on 1 June 2006. A copy of the full report is available on the internet at www.wmdcommission.org/files/Weapons_of_Terror.pdf In the chapter on CW in Weapons of Terror, the Commission offered six recommendations on CW destruction, national implementation and universality of the CWC, non-lethal weapons, challenge inspections, national monitoring of security standards and global standards for a chemical industry security culture. This section of the Resource Guide includes the CW chapter of the Commission's final report.
IMPACT OF SCIENTIFIC DEVELOPMENTS ON THE CHEMICAL WEAPONS CONVENTION

(IUPAC Technical Report)

Prepared for publication by

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Impact of scientific developments on the Chemical Weapons Convention

(IUPAC Technical Report)

Abstract: This report summarizes the findings and recommendations of an international workshop that was organized jointly by IUPAC and the Organisation for the Prohibition of Chemical Weapons (OPCW), and held in Zagreb, Croatia, from 22 to 25 April 2007. It was held to assist with preparation for the Second Review Conference of the Chemical Weapons Convention (CWC), which will commence in April 2008.

The CWC has been in force since 29 April 1997, and today 182 States have joined the Convention. The CWC aims at the total prohibition of all chemical weapons (CW) and the destruction of all CW stockpiles and production facilities by 2007. Extensions have been agreed upon and, for some CW stockpiles, the deadline is now 2012. This disarmament is subject to strict international verification by the OPCW. The CWC also prohibits the development, production, acquisition, stockpiling, and retention of CW and requires national implementation measures, including legislation, together with the international verification of chemical industry facilities. Furthermore, the CWC aims to strengthen States Parties’ capacities in the field of protection against CW, and encourages international cooperation in the peaceful application of chemistry.

The CWC requires that reviews of the operation of the Convention are carried out at five-year intervals and specifies that such reviews “shall take into account any relevant scientific and technological developments”, so as to ensure the continued effectiveness of the treaty and of its verification and implementation systems. This report has been prepared to assist the parties of the CWC with that review.

Keywords: Chemical Weapons Convention; verification; implementation; CWC; Second Review Conference.

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INTRODUCTION
IUPAC organized an international workshop from 22 to 25 April 2007 to review advances in science and technology with regard to their impact on the Chemical Weapons Convention (CWC) in Zagreb, Croatia. This was the second of its kind: In 2002, IUPAC held the first workshop (in Bergen, Norway)
and prepared a report with findings and recommendations to the States Parties of the CWC and the OPCW. This report was well received and made a recognized contribution to the preparation by States Parties and the OPCW Technical Secretariat for the First CWC Review Conference in 2003, and it was also the major source for the OPCW Scientific Advisory Board (SAB)’s report to the First CWC Review Conference.

IUPAC and the OPCW agreed to undertake a similar project in the preparation of the Second CWC Review Conference, which is scheduled to take place in April 2008. On 16 January 2006, the OPCW Director-General, Ambassador Rogelio Pfirter, suggested such a project to the incoming President of IUPAC, Bryan Henry. In February 2006, the OPCW SAB followed up this proposal and asked IUPAC to support its preparation for the Second CWC Review Conference. A project proposal was accepted at IUPAC’s Executive meeting in Dublin, and the workshop in Zagreb was set up. This report, which summarizes the results of the Zagreb workshop, will again be submitted to the States Parties and the OPCW to assist with their preparations for the Second CWC Review Conference.

Review Conferences of the CWC are convened approximately every five years. Their objective is to review the operation of the CWC, to assess the progress made with its implementation, and to provide strategic guidance for the coming years. The drafters of the CWC understood the need to review the impact of advances in science and technology on the CWC from time to time, and to organize specifically required Review Conferences to “take into account any relevant scientific and technological developments”. Such advances may relate to the scope of the prohibitions set out in the CWC, affect the way it is being implemented, and create opportunities for advancing international cooperation among States Parties in areas such as protection against chemical weapons (CW) and the peaceful application of chemistry. Dialogue between the OPCW and the scientific community in evaluating scientific and technological progress also creates opportunities to advance awareness of the CWC and its requirements in the scientific, technological, and industrial communities.

Advances in chemistry, the life sciences, and enabling technologies in recent years will undoubtedly create considerable benefits for humankind—advances which could lead to improved health, a better environment, and more sustainable development. At the same time, new scientific discovery may lead to new risks, including the potential of new chemical compounds as CW. In order to fully understand the impact of these new scientific and technological developments, IUPAC organized the Zagreb workshop and prepared this report.

SUMMARY OF FINDINGS AND CONCLUSIONS

The findings and recommendations of the workshop are organized into five groups: (a) technical challenges to the CWC itself; (b) technical challenges to the way the CWC is being implemented; (c) improvements in the field of chemical protection; (d) opportunities with regard to the fostering of international cooperation in the peaceful application of chemistry; and (e) requirements and opportunities with regard to raising awareness of the CWC in the scientific community, and the need for incorporating these issues into chemistry education.

I. Technical challenges to the CWC

1. Science and technology continue to advance rapidly in areas that directly relate to the scientific foundations of the CWC. A key feature in this process is that chemistry and biology are converging, thus reinforcing the importance of the overlap between the prohibitions and requirements of the CWC and the Biological Weapons Convention (BWC).

2. Three aspects converge in this regard: the ability to synthesize and test large numbers of new chemical entities for biological activity; significant advances in the understanding of complex life processes in a post-genomic area; and the ability to model life processes and develop synthetic

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and virtual replicas of living organisms. All this is further amplified by an increasing integration of chemistry into biology, together with engineering and the information sciences.

3. The expected benefits from these developments are significant, for example, in areas such as public health, food production, and pest control. However, there is also an increased potential for new chemicals with possible CW utility to be discovered by chance or developed by design. The advances in the life sciences may also lead to new risks in this regard. Simply expanding the Schedules will not be a practical way of dealing with this risk, given the wide range of chemical compounds relevant to the CWC that already exist or are being developed. While this risk is moderated by the fact that considerable time and effort are still required to turn a candidate novel agent into an effective weapon, it also emphasizes the need to ensure that the prohibitions in the CWC and its implementation by States Parties be comprehensive and apply to all toxic chemicals and their precursors, whether listed in the Schedules or not.

4. On the other hand, States and non-state proliferators may also opt for less effective CW (for example, by using readily available industrial chemicals). Nonproliferation efforts including measures to control access to relevant chemicals, equipment, and technologies remain important safeguards. It is important to note that effective self-governance by the scientific community must complement these control measures.

5. The risks associated with advances in science and technology would increase significantly, should dedicated CW programs be able to take advantage of them. There is, therefore, good reason to call for transparency in chemical defense programs, and to carefully assess the CWC compatibility of the development of devices that use toxic chemicals for law-enforcement purposes (including so-called “nonlethal weapons”). In order to promote transparency and build confidence, there would be advantages in considering extending the CWC’s declaration requirements to declare all toxic chemicals stockpiled by States Parties for law enforcement purposes (types, quantities, and delivery systems).

6. Technologies for the dissemination of biologically active chemicals are also continuing to evolve, driven by needs for effective drugs and pesticides. The advances in nanotechnology and particle engineering are creating new opportunities for more effective and targeted drug delivery via the respiratory system as well as other pathways. While this will improve drug delivery, it could also lead to the development of new materials based on nanoparticles that would allow for the “fine-tuning” of the desired properties of known as well as novel CW agents. For example, the delivery of chemical agents could be targeted to specific parts of the body, which may potentially enable a more effective use of smaller quantities of chemical agents.

7. At the same time, developments in the area of nanotechnology and particle engineering also create opportunities for enhanced medical countermeasures (for example, drug delivery, the development of new sensors, and diagnostics), and for the development of more effective filter materials for respirators, protective clothing, and decontaminants.

8. In short, the demands on the CWC by advances in science and technology are such that the scope of its prohibitions and the effective transformation of these prohibitions and norms into national laws and regulations, and thus the safeguarding of the comprehensive nature of the CWC—its general purpose criterion—are becoming ever more important. The OPCW should note the increasing relevance for the CWC of toxic chemicals that are not included in the Schedules, and take specific and determined action at the Second CWC Review Conference to address the effective implementation of the general purpose criterion.

II. Technical challenges relating to the implementation of the CWC

9. The CWC is one of a number of legal instruments that deal with the control of toxic chemicals. There are clear benefits from an integrated approach to the management of chemicals, both with regard to national capacity building and cooperation between international agencies. The OPCW
should consider more fully cooperating with such mechanisms as the Strategic Approach to International Chemicals Management (SAICM), United Nations Environmental Program (UNEP)'s action to prevent international trade in toxic chemicals, and the Green Customs Initiative. There are also opportunities for strengthening national implementation capacity emanating from such programs as the European Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) initiative, effective since 1 June 2007.

10. In coming years, CWC implementation will conceivably start shifting direction: As the completion of the elimination of CW stockpiles gets closer, measures to ensure the prevention of the recurrence of CW acquisition, development, production, and stockpiling are becoming more important. Nonproliferation in the form of comprehensive national implementation including measures to ensure the comprehensive nature of the prohibition, reliable controls of transfers of scheduled chemicals, and technically sound and well-targeted international verification will need the attention and support of the OPCW and its Member States.

11. Technological innovations and advances in chemical research and development continue to make chemical manufacturing more versatile and efficient. The flexibility of the chemical industry continues to increase (e.g., the widespread use of multipurpose production equipment and the emerging industrial use of microreactors). At the same time, chemical operations are increasingly being carried out at new, nontraditional production locations (countries as well as regions), and globalization leads to an increase in the worldwide trade in chemicals. The most important development in the chemical industry has been the dispersal of sophisticated chemical production capabilities to “less developed” nations.

12. As a result, the capability of certain chemical plants in the category of “other chemical production facilities” (OCPFs) for conversion to the production of CWC-relevant chemicals is increasing and spreading. At the same time, microreactors will most likely begin to move from research application to industrial-scale use, thus changing and potentially reducing the footprint of CW production. Finally, there is production of nonscheduled chemicals that may have CW utility or could be acquired by terrorists and used as CW.

13. These trends are directly relevant to the verification system of the Convention, which was designed against a more static and deterministic concept of CW production dependent on synthetic routes involving scheduled chemicals. The OCPF verification regime is becoming more important, not only in terms of numbers of inspections per year but also with regard to a more focused selection mechanism and the delineation of its inspection aims beyond the confirmation of the absence of scheduled chemicals. It is important that the CWC does not become “frozen in time”, but that it adapts to the changes in science, technology, and industrial practice.

14. The technology with regard to the destruction of CW appears to be matured. The implementation of the CWC’s requirements for the destruction of CW stockpiles does not depend on significant new technological innovation or scientific discovery—existing technology can do the job. Delays are not, as a rule, caused by technology gaps but by other factors. An exception is perhaps the safe recovery and destruction of old and abandoned CW, for which a range of technologies are available but where there remains a need for innovation and new approaches.

15. Advances in science and technology can help to further enhance the technical capabilities of the OPCW verification system. Much of this will be incremental, through improved ruggedness and transportability of instruments (including miniaturization), extended databases, improved software, and the like. Of particular relevance are advances that may affect the analytical methods and instruments used in inspections, or that may contribute to further verification optimization.

16. The on-site analytical system of the OPCW, which utilizes gas chromatography/mass spectrometry (GC/MS) analysis with a dedicated analytical database and specialized software, is basically fit for purpose and meets the established logistic and operational requirements for most inspection scenarios. Gaps relate, in particular, to inspection scenarios that may involve nonscheduled chemicals, and the use of sampling and analysis in OCPF inspections.

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With regard to off-site analysis at Designated Laboratories, advances in analytical methods and new analytical instruments are of particular relevance to trace and ultra-trace analysis, including for the analysis of biomedical samples. Some capability gaps with regard to chemical analysis exist (*inter alia*, the absence of nonscheduled chemicals, including riot control agents, from the OPCW Central Analytical Database and gaps with regard to toxin analysis and the analysis of biomedical samples). Work has only just begun at the OPCW to remedy the situation; much remains to be done to fill these verification gaps.

### III. Protection against the effects of chemical weapons

18. Advances in the life sciences, information technology, materials science, and nanotechnology all have the potential of helping States Parties to improve their protection against CW. This is important as it creates a deterrent against the use of CW. Also, enhanced international cooperation in this field can act as an incentive for some of the few remaining countries outside the CWC to join it.

19. With regard to detection devices, the conclusion from the 2002 IUPAC workshop stands that it takes much time and effort to move a new technology from laboratory to field use. Current mature technologies will continue to play a key role in the detection of CW agents during the next five years. Miniaturized versions of mature technologies capable of CW detection are now becoming commercially available. New ionization methods that enhance the ability of mass spectrometers to interrogate surfaces (liquids and solids) may greatly expand the effectiveness of inspections in the future—if these methods can be miniaturized and reduced in cost. Other trends that may lead to new detection devices include lab-on-the-chip, DNA arrays, protein arrays, and biosensors for CW agents.

20. In the field of medical countermeasures, improvements are necessary both with regard to the available treatments (e.g., antidotes that can be used against a broader range of agents), and with regard to the planning and management of medical countermeasures. Current emergency response procedures take much time, and treatment of victims is often delayed. Best practices need to be identified and applied. Training and exercises are essential to maintain the required levels of preparedness.

21. In the area of decontamination, requirements are taking account of the changing nature of such operations, which are more likely to take place in urban areas with civilians directly affected. Standard military decontamination equipment is often not effective under such conditions. There is a need for smaller and easier-to-transport decontamination equipment that requires fewer personnel to operate. Decontamination materials should be environmentally friendly and less corrosive/aggressive. Progress has been made with regard to new materials for skin decontamination. Advances in science and technology are expected to contribute to further improvements in the field of decontamination.

### IV. Opportunities in the field of international cooperation

22. The advances in the life sciences and related technological fields are expected to make significant contributions to the benefit of humankind. International cooperation and exchanges in these fields have great potential for improving public health, environmental protection, and economically sustainable development. Fostering international cooperation in these areas constitutes a desirable way of implementing Article XI of the CWC.

23. Such cooperation programs and exchanges should be pursued in recognition of the fact that they must be fully consistent with the disarmament and nonproliferation obligations of the CWC. In this context, the efforts made by the OPCW SAB and IUPAC to promote awareness of and com-
pliance with the principles and norms of the CWC by the world scientific community should be further encouraged.

24. OPCW should, in the further development of its international cooperation program, create partnerships with other international organizations that work in the field of national capacity building for chemicals management (see also paragraph 9 above).

V. Awareness-raising, education, and outreach

25. Awareness in the scientific and technological communities in all countries about the CWC and its norms, prohibitions, and implementation requirements remains poor. This calls for increased outreach by States Parties and the OPCW; at the same time, it also proves the need for further efforts to incorporate ethical norms and knowledge about the CWC and the dual-use nature of advances in science and technology into chemistry education. Cooperation with UNESCO (United Nations Educational, Scientific and Cultural Organization) could be explored in the development and adoption of ethical codes. IUPAC has started a project that is addressing these needs. However, it remains important that States Parties and the OPCW continue to reach out to the scientific community, promote the adoption of codes of conduct that take account of the CWC (either in the form of new codes or by adding CWC-related elements to existing codes), and maintain a dialogue with the scientific community and civil society. The requirements and norms of the CWC should become a regular part, at an early stage, of the education of every student of chemistry and chemical engineering.

VI. Proposals to the OPCW

The development of new nonscheduled toxic chemicals, other scientific and technological advances, and the difficulties of monitoring and controlling these chemicals to prevent their use in ways prohibited by the CWC pose significant challenges to the CWC. These need to be fully addressed by both the States Parties and the OPCW as a whole. The following measures should be considered by the Second CWC Review Conference:

- Additional efforts to ensure full and effective national implementation of the CWC, especially with regard to the implementation of the General Purpose Criterion.
- Agreement on the need for the declaration of toxic chemicals held by States Parties for law enforcement purposes (types, quantities and delivery systems).
- Further enhancement of OCPF verification (increase in the number of such inspections, improved selection mechanism, additional information available to the Technical Secretariat on the nature of activities and equipment at a site, longer inspection times, regular use of sampling and analysis).
- Further development of OPCW analytical capabilities to improve portability, reduce equipment weight and size, shorten the time needed to become operational, and reduce the time and cost to analyze samples.
- Establishment of a capability of the OPCW to analyze toxins and biomedical samples, and inclusion of relevant nonscheduled chemicals into the OPCW analytical database. The establishment of a separate and expanded database for investigations of alleged use should also be considered.
- Training of chemists, particularly in the developing world, in the use of these analytical methods and equipment so that national implementation of the CWC can be improved.
- Strengthening of linkages and collaboration with other international treaties and mechanisms related to managing chemicals and minimizing their adverse impacts (e.g., BTWC, SAICM, UNEP illegal trade action, Green Customs, REACH).
• Taking advantage of the opportunities provided by the advances in science and technology for the fostering of international cooperation in the peaceful uses of chemistry, as well as for the strengthening of capacities with regard to the protection against CW.
• Reaching out to the scientific community and to all those working with chemicals, and promoting the adoption of codes of conduct to ensure full CWC compliance as well as the incorporation of the norms and requirements of the CWC into chemistry education.

THE WORKSHOP
IUPAC and the OPCW organized a Workshop entitled Impact of Scientific Developments on the CWC in Zagreb, Croatia, from 22 to 25 April 2007. Financial support was provided by the Organisation for the Prohibition of Chemical Weapons (OPCW), the U.S. National Academies, IUPAC, several Croatian Ministries, the Faculty of Chemical Engineering and Technology of Zagreb University, and the Croatian Chemical and Chemical Engineering Societies. The Workshop was held under the auspices of the Zagreb city government.

There were 68 participants from 29 countries*, coming from government, chemical industry, chemical research institutes, and universities. Seventeen participants from 11 countries were representatives of governments from government departments, National Authorities, and laboratories. Eleven participants were members of the OPCW SAB. Fourteen participants had attended the previous workshop in Bergen, Norway in 2002. Technical input was also provided by the OPCW in the form of presentations and posters.

A. Presentations, posters, and discussions
There were six plenary sessions and one final wrap-up plenary, as follows:
• **Overview and background**: The first three speakers in this session outlined the background for the workshop, set out its objectives and provided background information on the CWC implementation process. To provide a basis for the subsequent discussions, they also elaborated on the evolution of the CWC verification regime, with particular emphasis on verification of nonproduction of CW in the chemical industry. The final two speakers provided an overview on trends in the chemical industry and future challenges to the CWC regime.
• **Synthesis**: This session provided an overview on advances in drug discovery and development, on the emergence of synthetic biology and DNA synthesis, and on issues related to post-genomic developments including in such areas as bioinformatics.
• **Production technology**: This session looked at how fine-chemicals manufacturing was evolving in a number of countries in Eastern Europe, Asia, and South America, using the BRIC (Brazil, Russia, India, and China) countries as a particular example of these current trends. It also provided an overview of the state of the art in catalysis and biocatalysis, the use and protection against toxic (industrial) gases, and the evolving application of microreactors in chemicals manufacturing.
• **Nanotechnology and aerosol drug delivery**: This plenary session reviewed two areas of science and technology that are of importance for the targeted delivery of drugs but could also be relevant for the potential emergence of new delivery means for CW, as well as for the development of more effective means of protection against them.

*Participants came from Argentina, Australia, Belgium, Brazil, Canada, Croatia, Czech Republic, Finland, France, Germany, India, Iran, Japan, Nigeria, The Netherlands, Norway, Poland, Romania, Russian Federation, Singapore, Slovenia, South Africa, South Korea, Spain, Switzerland, Turkey, United Kingdom, United States, and Ukraine.
• **Analysis:** The session reviewed the current state of the art with regard to the analysis of environmental (chemical) as well as biomedical samples. These trends were discussed in the context of the specific verification requirements of the CWC. The session also looked at the current trends with regard to CW agent detectors for field use.

• **Medical countermeasures and decontamination:** This session heard an overview on current trends in medical countermeasures, received background on the synthesis, use, and interaction of certain new potential antidotes for the treatment of nerve-agent poisoning, and discussed the state of the art with regard to decontamination.

A poster session provided background information on the way in which the OPCW is implementing CWC provisions in the areas of assistance and protection as well as international cooperation in the field of peaceful uses of chemistry. Furthermore, technical issues related to the destruction of CW and to countermeasures against CW were presented, as was information on an IUPAC awareness-raising and education project.

The workshop was organized into four parallel break-out groups which prepared suggestions for findings and recommendations. These were presented and discussed at plenary sessions, and consolidated after the workshop into this present report.

**B. Detailed discussions**

**I. Technical challenges to the CWC**

1. Advances in science and technology can affect the CWC in a variety of ways: The discovery of new biologically active chemicals and of new carriers that can transport such chemicals to specific parts of the body needs to be reviewed in the light of the scope of the prohibitions of the CWC, technological advances may affect the way it is being implemented (including with regard to CW destruction and verification), and they may create opportunities for advancing international cooperation between States Parties in such areas as protection against CW and enhanced international cooperation in the peaceful application of chemistry. This section looks at the first of these issues.

2. The pace of progress in the life sciences and related enabling technologies has increased considerably in recent years. So has the complexity of the knowledge gained about the molecular mechanisms of life’s fundamental processes. Chemistry and biology are overlapping scientific fields in the discovery and development of new drugs. Starting with the selection of a disease and a related drug target, large numbers of chemical compounds are being synthesized and screened in order to identify suitable lead compounds. This process is being facilitated as well as complemented by advances in molecular genetics and the mapping of the DNA of humans as well as microorganisms, the use of computer-aided design of new lead compounds, and at the same time by the availability of combinatorial synthesis methods and automated high-throughput screening procedures. This involves the automated testing of large numbers of compounds against a large number of targets where, typically, several thousand compounds can be tested in 30–50 biochemical tests at the same time.

3. In addition, there is interest in furthering the understanding of the action of naturally occurring toxic chemicals (toxins). Studies involve the isolation and characterization of such molecules from natural reservoirs, the development of modifications and derivatives of such chemicals, and studies to mimic their action—all the way to the synthesis and study of what may be called “artificial toxins”. As a consequence, the future toxin spectrum will be more complex and more unpredictable than that of the presently known chemical and biological agents.

4. Developments in synthetic biology (the design and assemblage of interacting genes into circuits in order to direct cells to perform new tasks) promise further advances that are relevant for the discovery of new drugs. And finally, systems biology (in a post-genomic area) is beginning to
shape our understanding of the complex interactions of physiological systems. It is extremely difficult to assess the consequences of targeting these systems with chemicals designed to modulate a particular function in one of the systems.

5. One consequence of these advances is that the capability to synthesize and screen chemical compounds for biological activity that may be developed for CW purposes is also increasing. Furthermore, a large number of biologically active chemicals are being synthesized and tested in legitimate research and development—among them will inevitably be toxic chemicals some of which may have other properties that could make them candidate CW agents.

6. It will not be practical to approach this increase in the number of known toxic chemicals with potential CW utility through an expansion of the Schedules. On the one hand, the number of chemical compounds that are so being synthesized and screened is huge. On the other hand, the amounts synthesized are such that the application of the industry verification system (for which the Schedules have been designed) would not be triggered. Also, these developments have to be assessed in context: there are already a very large number of toxic chemicals that have not been included into the Schedules because their inclusion would not be practical.

7. As for the prohibitions of the CWC, any such new chemical will fall under the provisions of the CWC should it ever be used for CW purposes. This is the consequence of the definition of chemical weapons, which covers all toxic chemicals and their precursors (irrespective of their origin or method of production) unless they are intended for legitimate purposes, and as long as their types and quantities are consistent with these legitimate purposes (“General Purpose Criterion”). Implementing this criterion through appropriate legislation and enforcement measures is clearly a challenge for States Parties. It is also a challenge for the verification system of the CWC, which is to a large degree driven by the Schedules.

8. On the other hand, despite this dramatic increase in knowledge and in the number of chemicals that could have CW utility given their toxicological and chemical profile, the risk to the object and purpose of the CWC posed by these scientific advances may not have increased as much as one might fear. To use a new toxic compound as an effective CW requires a number of developments before it can successfully be used. However, the risks from such novel toxic chemicals should not be ignored.

9. On the other hand, States as well as non-state proliferators may also opt for less effective CW (using well-known agents or readily available industrial materials). Nonproliferation efforts including verification and national implementation measures, inter alia to control access to relevant chemicals, equipment, and technologies, remain important safeguards. At the same time, effective self-governance by the scientific community must complement these control measures.

10. The risks associated with these advances in science and technology would increase significantly, were there dedicated CW programs that would take advantage of them. There is therefore good reason to call for transparency in chemical defense programs, and the recent progress made by the OPCW with regard to the annual submission of information on national protective programs will help in this regard.

11. Advances in nanotechnology and aerosol drug delivery, driven by the needs of such sectors as the pharmaceutical or pesticide industries, are also significant. They may be exploited for more effective and targeted delivery methods for toxic chemicals. Many of the considerations that promote the design of particles for effective and targeted drug delivery via the respiratory system would equally be applicable in a program to improve the dispersion of a CW agent in the atmosphere. An example is the use of large porous aerosol particles that allow the delivery of drugs into the deep regions of the lungs to promote absorption in the alveolar region—if used for CW purposes this could increase the systemic toxicity of a given agent. The spray-drying equipment needed to create such particles is relatively cheap and widely available—yet the optimization of a well-engineered particle requires considerable time and skill. The technology can be combined with nanotechnology to deliver nanoparticle aggregates that will disperse in the body once ad-
sorbed. Furthermore, particle design (e.g., multifunctional polymeric design) can be used to improve drug targeting and selective delivery.

12. In a more general sense, advances in nanotechnology can be used to engineer/design biologically active systems and “smart” materials that respond to specific stimuli and deliver active ingredients to specific targets in the body. Nanotechnology may allow the development of capsules for safe enclosure and targeted delivery of biologically active chemicals. It may enhance the use of active groups for bonding to specific targets in organs or cells. It may provide new means of facilitating entry into the body or cells, in particular in the brain, for selective reaction with specific gene patterns or proteins, or for overcoming the immune reaction of the target organism. These developments promise significant benefits in the form of new medicines but at the same time could be used in a program aimed at developing more effective CW. It should also be noted that at the nanolevel, the boundaries between biological, chemical and physical action become blurred. Therefore, it may be desirable for the States Parties to clarify and affirm that the CWC’s reference to toxic chemicals and their chemical action on life processes includes the action by nanotechnology-enabled microscopic agents.

13. At the same time, nanotechnology enables faster, cheaper, more sensitive, and more selective sensors, as well as better filtering and decontamination methods. Therefore, it is expected to contribute to improvements of the means of protection against CW.

14. In the absence of dedicated State programs to develop and produce CW, which are forbidden to the parties of the CWC, the risk to the object and purpose of the CWC emanating from the advances in science and technology described above is moderate at this stage. Transparency in chemical defense programs of States Parties through regular submission of information on them to the OPCW, as required under Article X of the CWC, provides reassurances that such offensive programs have not been initiated.

15. However, the risks emanating from these advances in science and technology cannot be ignored as long as there remain States outside the CWC regime that may have active CW programs. These advances may also attract the attention of non-state actors including terrorists who may have an interest in acquiring a CW capability. On the other hand, when compared to other risk factors, including the presence of significant amounts of toxic chemicals in industry and in transportation systems, the advances in science and technology described above do not seem to change the situation significantly, at least not for the time being. They should be monitored and reviewed, and the increasing pace of progress in chemistry, the life sciences, and enabling technologies may well call for more frequent reviews than provided for by the five-year cycle of CWC Review Conferences.

16. Many of the chemicals that are being synthesized and screened as part of the drug discovery efforts described above will have incapacitating properties that could make them suitable as so-called “nonlethal” agents. They interact with the central nervous system or other physiological systems, and one of their “design criteria” is that the margin between their lethal and incapacitating doses is wider than for previously employed CW agents such as nerve or blister agents. Some may argue that such compounds may have utility for use in law enforcement, a specific use of toxic chemicals that is not prohibited by the CWC. Efforts are reportedly underway in some States Parties to develop weapons with nonlethal properties for use in law enforcement situations. But such weapons may also be thought to have utility in counter-terrorism or urban warfare situations.

17. If these developments were to continue unchecked (with regard to the possible use of toxic chemicals for these purposes), there is a serious danger that the prohibitions of the CWC would be undermined. Activities to develop “nonlethal” weapons based on incapacitating agents would not easily be distinguishable from aspects of an offensive CW program: The agents would actually be weaponized, and the considerations with regard to the time between the discovery of a new toxic chemical that might be a candidate novel CW agent and its emergence as a CW may no longer apply.

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18. Therefore, a clear need exists for States Parties of the CWC to address these risks to the object and purpose of the CWC and to agree on the CWC compatibility (or incompatibility) of endeavors to develop and field “nonlethal” weapons that utilize toxic (e.g., incapacitating) chemicals for law enforcement purposes. Should the development and acquisition of such weapons be accepted, there would clearly be a need (as is the case of riot control agents) to agree on declaration provisions for such weapons (types, quantities, and delivery systems).

II. Technical challenges to the implementation of the CWC

19. Technical challenges to the implementation of the CWC relate to a range of issues:

- the effectiveness of the verification system in the light of changes in the chemical industry (new technologies, equipment, and chemicals as well as structural changes in the manufacturing of and trade with chemicals);
- technical challenges regarding the destruction of CW, including old and abandoned CW; and
- advances in science and technology that may enhance the technical capacity of the CWC verification system or help in reducing verification costs.

Changes in the chemical industry

20. The chemical industry continues to change under the impact of globalization and market pressures. As a result of differences in market growths and labor costs, industrial production of chemicals is migrating from Western Europe to Eastern Europe and Asia, from North America to South America and Asia, as well as from developed to developing countries. Industrial societies are becoming service societies, supported by trends in information and communications technologies, demographics, and regulation. There is limited growth potential in the North American Free Trade Agreement (NAFTA) countries, Europe, and Japan as more and more consumer industries migrate to low-cost countries. A number of these countries, including Brazil/Russia/India/China (the BRIC countries), are likely to become major players in the fine chemicals market, whilst the Middle East is likely to take the lead in the field of basic petrochemicals.

21. These trends had already been observed in the preparation of the First CWC Review Conference. They affect the industry verification system of the CWC in several ways:

- the emergence of “world chemical plants” where a single plant supplies a significant part of the total world demand of a certain chemical, which leads to increased transfers of chemicals and may make certain verification principles more difficult to apply;
- a high degree of standardization, which can assist verification and increase transparency in industry operations;
- an increase in trade volumes for chemicals, which poses a challenge to the CWC declaration and data monitoring system regarding aggregate national data of exports and imports of scheduled chemicals (a particular issue is the differences between national regulations to account for mixtures containing scheduled chemicals);
- chemical production in countries which had no chemical industry in the past, which creates challenges for national CWC implementation, for the support by OPCW to States Parties in the identification of declarable industrial facilities, and for the geographical spread of industry verification activities;
- sourcing, production, and trade, which are global and make verification by data monitoring more complex;
- more specialist production in traditional chemicals-producing countries, with facilities that may have chemical, technological, and equipment features that make them highly relevant from a verification perspective;
• new technological advances used in chemicals production create new challenges to the verification system and continue changing the footprint of CWC-relevant facilities (e.g., new catalysts, new types of equipment and technology including microreactors, biotechnology in chemicals manufacturing, nanotechnology); and
• new international initiatives such as SAICM and the UNEP action to prevent illegal trade in toxic chemicals as well as new regulatory mechanisms for chemicals and chemical manufacturers (e.g., REACH in Europe) create pressures on the industry, but also new opportunities for international cooperation as well as integrated national capacity building. These initiatives also contribute to efforts to maintain a level playing field for the industry worldwide, and create additional transparency that may ease verification.

22. The chemical industry has been implementing its Responsible Care® program in the International Council of Chemical Associations (ICCA) member countries to improve product stewardship, workers’ safety and health, plant safety, and transport safety. In the industry’s own words: “Responsible Care promotes co-operation with governments and organizations in the development and implementation of effective regulations and standards, and helps companies meet or exceed these requirements” (for more information, see [1]). These self-regulatory measures provide transparency, facilitate verification, and provide additional safeguards with respect to the security of chemical plants.

23. The technological advances in the manufacturing of chemicals are significant. The synthesis of new chemicals and the evolution of chemical production technology are both relevant to the CWC. In the future, traditional chemical operations based on oil- or gas-based feedstocks will be combined with a renewable resource base utilizing farming and bioprocessing technologies. Process efficiency is becoming ever more important. It helps to minimize the environmental impact of chemicals manufacturing and to better utilize renewable feedstocks. It also makes it possible to apply energy-efficient processes with (near)-100% efficiency in the utilization of raw materials leading to drastically reduced generation of unwanted by-products and waste. Catalysis increases selectivity (chemo-, regio-, stereoselective processes) and improves the economy of reactions using standard equipment.

24. One area where much progress is being made is catalysis and biocatalysis. Catalysis is important for the efficient production of mass as well as fine chemicals. It can also be utilized both for the production and the destruction of CW. Some 85% of the industrial chemical processes are catalytic in nature (of which 85% are using heterogeneous catalysts, 17% homogeneous, and 3% biocatalysts). Nanotechnology offers new avenues for the design of catalysts which will increase reactivity, selectivity, and efficiency of chemical processes. An example is the development of catalytic support for chemical synthesis. At the same time, photocatalytic effects offer opportunities for the degradation of known CW agents, which may be useful for protective purposes (decontamination, water purification). In general, it has been argued that catalysis is the most important of the cross-sectional technologies in the chemical, refining, and polymer industries, as well as in emission control. With regard to the CWC, advances in catalysis enhance the efficiency, selectivity, and economy with which biologically active chemicals of potential CWC relevance can be produced. At the same time, they offer new solutions with regard to the destruction of and protection against CW agents.

25. The increased use of multipurpose production equipment and technologies was already observed five years ago, when IUPAC reviewed advances in science and technology in preparation of the First CWC Review Conference. The use of multipurpose (batch) production equipment has become commonplace in certain branches of the industry. It is used to optimize the manufacturing of medicines, pesticides, fine chemicals, and other high-value products, and to synchronize their production with changing market demands. Furthermore, the custom manufacturing of fine chemicals (intermediates, additives, etc.) has further contributed to the spread of small-to-medium scale highly versatile producers in the chemical industry. These producers have the technological
capability and know-how as well as access to a chemical raw material base to manufacture more or less any chemical on demand. The conclusion from IUPAC’s study in 2002 stands—there is a need to review the verification regime for OCPF to ensure that it is effective, as it is in such OCPF plant sites where many of these multipurpose plants are located.

26. Another trend identified five years ago relates to the emerging use of microreactors in industrial production. One of the driving factors is safety: Chemicals that are otherwise hazardous to manufacture, handle, or store can be produced on-site when needed. Other important factors include the smaller amounts of reaction by-products, better kinetic data for reaction optimization, and lower capital costs. Microreactors achieve advantageously high surface-to-volume ratios, short retention times of the reactants, and continuous and very precise control of the reaction parameters. Many chemical reactions have now been demonstrated to show improved reactivity, product yield, and selectivity when performed in microreactors compared to those generated using conventional laboratory equipment. Furthermore, many of the traditional problems associated with scaling-up production from laboratory to industrial-scale volumes can be avoided by what is called “numbering-up” (i.e., running large numbers of microreactors in parallel).

27. Assessed in the context of the CWC, microreactors pose several issues. From a verification perspective, many of the traditional features associated with the manufacturing of volatile highly toxic (or corrosive) materials (high stacks, heavy-duty ventilation and scrubbing equipment, and the like) may lose their relevance, as they may not be needed in a production line using microreactors. Combined with combinatorial techniques of drug discovery, the use of microreactors can significantly shorten the time required to synthesize new toxic chemicals for testing and development purposes. Furthermore, the times needed to scale up production of a novel agent from the development phase to full-scale production can be significantly shortened by “numbering-up”. Also, certain reaction steps that in traditional reaction environments pose significant challenges (e.g., because of the corrosiveness of the reaction medium) or extreme exothermicity can more easily be controlled in microreactors. The inherent versatility and adaptability of chemical manufacturing is increasing as a result, and thereby (at least in theory and from a merely technological point of view) the ability of certain chemical operations to be converted for the manufacturing of CW agents. It should also be noted that microreactors have become an interesting research tool and are increasingly used in universities and applied research around the world. As for industrial manufacturing, they appear to be slowly but steadily becoming a true alternative to conventional batch reactors for specific types of reactions (e.g., highly exothermic, or requiring a specific catalyst that does not work well in a bulk reactor). At the same time, it appears that the introduction of microreactors into industrial-scale production is progressing more slowly and selectively than originally predicted by some proponents of microreactors. It remains to be seen to what extent microreactors will be used for industrial-scale production. The developments should be further monitored, but in the meantime the effect on the CWC regime is largely in the area of development of new chemicals, not the industrial production of relevant (scheduled or nonscheduled discrete organic) chemicals.

28. These trends in chemical production technology progress alongside developments, at present predominantly in the research and development areas, toward a more frequent use of biological processes for chemicals manufacturing (e.g., the use of transgenic organisms to manufacture materials that are difficult or costly to extract from natural resources, and where traditional chemical synthesis is also technically difficult and costly). These technological advances are driven by the needs of a multitude of industries and users, and are spreading at a global scale.

29. The CWC’s response to these evolving capabilities in the manufacturing of toxic chemicals with CWC relevance is in the comprehensive nature of its prohibitions—its General Purpose Criterion—implemented by States Parties. From a verification perspective, the OCPF verification regime becomes more important as a safeguard against regime break-out. The OCPF regime was included in the CWC industry verification system at the end of the negotiations, and it was de-
liberately set up as an evolutionary, dynamic system that could take account of experiences gathered in the implementation process, and adapt to new requirements emanating from science and technology as well as industrial practice. The regime needs to evolve further (in terms of how many inspections are being conducted, how plant sites are selected for inspection, how the inspection aims are defined in particular with regard to chemicals that are not listed in any of the Schedules, and how biological manufacturing processes are covered by the regime) if it is to provide reliable assurances of compliance with the CWC in the future. Many technological advances in the chemical industry are of a dual-use nature and affect directly the intrinsic capability that would be needed if chemicals manufacturing was diverted to CW purposes. All of these developments underline the importance of effective implementation of the General Purpose Criterion by States Parties, and because change in the industry is taking effect fast, attention needs to be given to how best to adapt the chemical industry verification system in the future.

Destruction of chemical weapons

30. Technologies for the destruction of stockpile CW have matured to a point, and timelines for the completion of CW destruction operations are such, that there is little point in reviewing emerging technology options for these destruction operations. Although there remain CW destruction facilities that have yet to be commissioned, the technology choices are well known and assessed [2,3]. Issues that may influence outstanding decisions on technology choices are largely in the legal, policy, regulatory, public awareness/education, and economic domains.

31. On the other hand, there remains an interest in technologies that are suitable for the destruction of non-stockpile CW and CW remnants (old and abandoned CW), partly driven by anticipated future recovery operations of such items, partly also because of the characteristics of some of the smaller stockpiles that are awaiting destruction. The key difference is that while stockpile CW, as a rule, are in good and consistent condition, non-stockpile items usually are not. For stockpile CW, it is therefore possible to design disassembly lines to separate the agents from the munitions or containers, as well as from any explosive fills, and to subsequently treat these material streams separately. Explosive materials are burned off, contaminated metal parts are burned out and subsequently mutilated, and the agent fills are destroyed by incineration or chemical neutralization followed by further treatment processes of the reaction masses such as incineration, stabilization in bitumen, or biodegradation.

32. Old and abandoned CW, on the other hand, are usually found in conditions that pose additional complications: lack of uniformity, corrosion/deterioration of munitions/shells/containers as the result of environmental degradation, instability of fused weapons which could lead to unexpected explosions, and agent degradation that are incompatible with a standardized disassembly line typically used for stockpile materials. Consequently, technologies for the destruction of non-stockpile CW have taken a somewhat different route from the destruction of stockpile CW, and are usually “total solutions”: They access the agent, destroy the energetics and agents, and decontaminate the munitions bodies without an initial process step that separates agent from energetics and munitions bodies. Nor is there a separate agent neutralization step. Solutions include technologies such as “cold” detonations of the munitions/devices (using an explosive charge) inside an explosive-containment structure combined with off-gas treatment and “hot” explosion of old chemical munitions/containers in, for example, a rotary or static kiln combined with an off-gas treatment system. Other options are acid digestion of whole munitions, bulk vitrification and destruction in firing pools, as well as a number of processes to destroy bulk agent (neutralization with addition of bitumen, incineration, destruction in an electrical furnace, biological processes, electrochemical oxidation, photocatalysis, and destruction in a plasma).

33. The workshop did not discuss issues related to the recovery and destruction of sea-dumped CW. No operations of such kind are currently under way at any significant scale. Satisfactory (safe,
economical, and efficient) technological approaches to the recovery and destruction of these CW, however, have yet to be developed.

34. In summary, it appears that advances in science and technology have an incremental impact on the availability of efficient, safe, reliable, and economically viable technologies for the destruction of CW, including their remnants in the environment. The technology in the field has matured to a stage where the implementation of the CWC’s requirements does not depend on new technological innovation or scientific discovery—existing technology can do the job well. Delays in the elimination of CW stockpiles are not, as a rule, caused by technology gaps, but other factors.

Verification

35. Advances in science and technology can be utilized to improve the effectiveness, efficiency, and selectivity of methods and techniques used to verify the CWC, and to reduce the logistical burden associated with the transportation, storage, and use of the inspection equipment. OPCW inspection teams employ a wide range of inspection equipment, ranging from communications, IT and other administrative equipment to location finding equipment, photographic equipment, conventional and fiber-optical seals, weighing and measuring devices, health and safety equipment (including CW agent detectors and individual protective equipment), medical equipment, and a range of analytical equipment including instruments for on-site chemical analysis and for non-destructive interrogation of munitions and containers.

36. The workshop did not seek to address technological advances in all these areas. There was no need to do so: The OPCW Technical Secretariat is constantly analyzing its requirements and the trends on the instruments market so as to ensure that any gaps in its equipment suite can be filled or the cost-effectiveness, ruggedness, and reliability of inspection equipment improved. The workshop therefore focused on trends related to equipment and methods used for chemical analysis for verification purposes.

37. The OPCW has established a system for the collection, processing, and analysis of process and environmental (chemical) samples that is based on:

• validated sample collection, handling, splitting, and processing procedures including chain-of-custody procedures for a variety of sample matrices (surface-wipe samples, bulk chemicals, organic liquids, water-based samples, soil samples, solid samples);

• a validated spectral databank for GC/MS (as well as certain other) analytical data, covering several thousand scheduled chemicals (the OPCW Central Analytical Database or “OCAD”);

• a specifically developed software package (OPCW Dual Mode Software, ODMS) that allows to run an instrument in “blinded” mode, thereby preventing the analyst from having access to the full spectral run data but displaying data of any chemical from the target library (the OCAD) that was detected in the sample (this “blinded” mode of the software is used when so requested by an inspected State Party to protect confidential information that may be contained in a sample);

• the use of portable (bench-top) GC/MS for on-site (field) analysis; and

• a network of Designated Laboratories for off-site analysis of authentic verification samples, whose performance is tested regularly in proficiency tests. These laboratories must maintain accreditation under ISO standard 17025.

38. The on-site part of the system has been tested on various occasions, in training, exercises, and actual inspections. It has been used routinely at CW destruction sites. Since the second half of 2006, its use in routine inspections of chemical industry facilities (Schedule 2 facilities) has been piloted. Current experience is that the system is working well. The logistics are manageable, the set-up times correspond to standard inspection requirements (the system is ready to receive a sample for analysis after approximately three hours), and the analysis itself is reliable and reasonably fast.
39. The number of samples that can be analyzed during a given inspection, on the other hand, is fairly limited. This is largely because of the requirements related to sample preparation. The logistical burden associated with sample processing on-site could also be reduced. The adopted procedures depend on solvent extraction followed by solvent concentration through evaporation (water and organic solvent). Evaporation carries a certain risk of losing some of the analyte and, more importantly, in the case of water is time-consuming and energy-intensive. Supplementary sample preparation techniques such as solid-phase extraction have been proposed. These should be tested, and if found suitable validated and introduced for on-site use by OPCW inspection teams.

40. Another analytical method that has been identified is the possible use of liquid chromatography coupled with mass spectrometry (LC/MS), which allows direct analysis of aqueous matrices and undervatized analytes. The potential use of LC/MS in on-site inspections should be evaluated. Another potential complement to GC/MS analysis is infrared spectrometry—a technique already approved by the OPCW as a possible on-site inspection method but currently not in use owing to the additional logistical burden its use would cause compared to the limited benefits that this additional method would contribute to an inspection.

41. At the same time, the number and variety of analytical instruments and techniques for on-site use by inspection teams should be kept small, given the ramifications that an “inflation" of on-site analytical instruments and techniques would have with regard to inspector qualification/skill levels that can realistically be maintained, resulting training needs, and additional requirements with regard to database development, validation of procedures and spectral data, quality control, inspection logistics, and inspection costs.

42. The OPCW has over the past number of years established a fully validated and quality-controlled central analytical database (OCAD) for verification purposes. The database holds GC/MS data, as well as some IR and NMR spectra, of scheduled chemicals. The vast majority are GC/MS data (i.e., mass spectra and GC retention indices). OCAD is today a powerful specialized database that provides valuable analytical data for most OPCW inspection scenarios. For routine purposes, it meets most requirements. It does not, however, contain data for unscheduled chemicals (such as riot control agents, nonscheduled degradation products of scheduled chemicals, toxic industrial chemicals, toxins, “mid-spectrum agents” or toxic chemicals with utility as “nonlethal” weapons). This limits its utility under certain inspection scenarios (in particular with regard to investigations of alleged CW use, allegations of the use of riot control agents as a method of warfare, and certain scenarios in challenge inspection). Therefore, an extended version of the OCAD also containing unscheduled chemicals for use in investigations of alleged as well as challenge inspections should be prepared.

43. With regard to off-site analysis, the OPCW has established a network of currently 18 analytical laboratories of States Parties, whose performance is regularly ascertained in proficiency tests. Samples are screened using such techniques as GC with element-specific detectors, GC/EI/MS, $^{19}$F and/or $^{31}$P/$^1$H NMR spectroscopy, and subsequently analyzed for the identification of CWC-relevant compounds using a variety of instruments and techniques, depending on matrix and target compounds. Structural elucidation techniques are carried out. The workhorse is GC/MS, although a range of other analytical instruments and techniques are also being used. Positive identification requires the use of at least two independent techniques, one of which must be spectroscopic. A consistent result from all used techniques is required for unambiguous identification. Final confirmation is obtained when the suspected chemical is synthesized as a reference chemical, and the data recorded from the suspected and the synthesized chemical are shown to match.

44. Technical challenges for this system of Designated Laboratories relate in particular to samples with very low concentrations of the target chemical(s), or very dirty sample backgrounds. Another challenge is the analysis of samples that also contain biological or radiological agents. Advances in science and technology are likely to have an incremental effect on the capability of these
laboratories. The continuation of proficiency testing is essential, and the differences between the laboratories should be taken into account when they are tasked to perform analysis of authentic samples collected in actual CWC inspections.

45. However, there are also gaps in the analytical capabilities of the OPCW. With regard to on-site analysis, the main gap is the absence of nonscheduled chemicals from the OCAD database. With regard to off-site analysis, the main gaps relate to toxin analysis and the analysis of biomedical samples. In both cases, some of the Designated Laboratories have demonstrated capabilities to perform such analysis, but that capability has yet to be evaluated in OPCW Proficiency Testing and the OPCW has no formal basis for designating laboratories for such types of analysis. This affects, in particular, the OPCW’s capability to conduct investigations of alleged use of CW as well as challenge inspections involving compliance concerns related to such chemicals. This carries serious consequences and should be addressed by the OPCW.

46. The capability to analyze biomedical samples to confirm previous exposure to CW agents is today only available in a small number of laboratories world-wide. Biomarkers of previous poisoning for most nerve and blister agents have been identified. Sensitive GC/MS/MS and LC/MS/MS methods are applied to identify them. The analysis requires usually the capability to measure at trace concentration levels (sub-ppb) and involves the processing of complex biological matrices. It is target-compound-driven rather than a screening for a wide range of chemicals. While, at an early stage after poisoning, the free agent may still be detectable, after days or weeks the target compounds are urinary metabolites, DNA adducts in tissue, and protein adducts in blood. Challenges that need to be overcome include the low detection levels required (which call for research-grade instrumentation), the need to acquire or synthesize analytical standards (which often are not commercially available, or very expensive), and the variability of biological matrices. Evaluation criteria for the acceptance of the analytical results (e.g., on the basis of identification points) also need to be further developed because it is usually not possible to obtain full-scan spectra given the low concentration levels of the analytes.

47. The OPCW has addressed these issues, and through its SAB developed a strategy for how it will establish a capability in the field of analysis of biomedical samples. This will involve the sharing of expertise, methods, standards, and protocols between laboratories and a period of confidence building before issues related to proficiency testing and designation can be taken up. On the other hand, the issue of toxin analysis still needs to be addressed by the OPCW.

III. Protection against the effects of chemical weapons

48. Effective protection against CW is one of the safeguards that States Parties have against regime breakout as well as against any CW threats by non-parties and non-State actors. Protection against CW is among the purposes not prohibited by the CWC, and under Article X States Parties maintain the right to apply protective measures, undertake to facilitate international cooperation between States Parties in the area of protection, and pledge to provide assistance should a State Party be threatened or attacked with CW.

49. With an increased threat of terrorist use of toxic chemicals, the requirements for chemical protection increasingly have to take account of situations where toxic and dangerous chemicals may be used against civilians in urban areas. Advances in science and technology will help improve these means of protection. Protective measures, in these evolving circumstances, have to address both the threat posed by traditional CW agents and the possibility that novel agents or “nontraditional” toxic chemicals, including toxic industrial chemicals or toxins, may be used.

50. With regard to medical response systems, many of the problems are procedural and managerial. Given the nature of chemical incidents, and in situations when considerable numbers of people may be concerned that they have been exposed, ways must be found to shorten the time it takes before victims actually receive medical treatment. This treatment is often considerably delayed,
it may only start after the victims have been moved out of the hot zone (scoop and run), initially medically assessed (triaged), and decontaminated. Early forward treatment/triage of victims prior to hospital decontamination is very important. Another difficult issue is the initial medical assessment (triage) in the hot zone, when medical personnel have donned protective equipment which impairs vision, hearing, and tactile sensing.

51. Planning and preparedness are essential for an effective medical response to chemical incidents, whether they are deliberate releases or accidents. Therefore, there is a need for regular exercises. As for deliberate releases, intelligence is another important factor. So are the speed of the initial diagnosis and the identification of the agent(s) involved. Toxicity data are often scarce, and acquiring the right expert advice in a timely manner is critical. Decontamination is slow, and the medical systems can easily be overwhelmed by self-referral of walking victims (or even the “walking well”).

52. Best practices in an emergency medical response for casualties in the hot zone of a suspected CBR incident have yet to be determined. There is a need to develop workable, pragmatic approaches to the rapid identification of responsible agents, the assessment of treatment needs, and the delivery of emergency medical care to casualties in the hot and warm zones that is appropriate for their resuscitation and stabilization prior to evacuation, while maintaining adequate protection of the responders. Furthermore, there is a need to define the training and equipment needs of medical first responders to ensure the effective delivery of these protocols.

53. With regard to medical treatments for poisoning, both supportive treatment strategies (for vesicants) and specific treatments [for nerve agents: pyridostigmine (systematic name (1-methylpyridin-1-ium-3-yl) dimethylcarbamate) pretreatment, anticholinergics (atropine (systematic name (1H,5H-tropan-3-yl) 3-hydroxy-2-phenylpropanoate)), enzyme reactivators (a variety of oximes) as well as anticonvulsants (diazepam (systematic name 7-chloro-1-methyl-5-phenyl-1,3-dihydro-2H-1,4-benzodiazepin-2-one))] are available. A variety of pyridinium, imidazolium, and quinuclidinium derivatives have been developed that show a broader spectrum than the traditional oxime reactivators. However, further funding is needed if that research were to be transformed into available treatments. In the event of terrorist use of toxic chemicals, the possible spectrum of toxic chemicals that might be used is likely to be broader than, and different from, the traditional range of CW agents. This also needs to be considered in the planning for the treatment of victims in such circumstances.

54. As for the detection of CW agents under field conditions, techniques that are currently in use or development include gas chromatography using a flame photometric detector (GC/FPD) or coupled to a mass spectrometer (GC/MS), multicapillary chromatography with ion-coupled plasma detection, portable isotope neutron spectrometry (PINS), polymer-based lanthanoid fluorescence spectroscopy, surface acoustic wave (SAW) spectroscopy, ion-mobility spectrometry (IMS and IMS/IMS), nuclear magnetic spectrometry, and lab-on-a-chip devices. A range of new detectors, ranging from flame photometric detectors to miniaturized mass spectrometers, ion traps, and hand-portable GC/MS systems, have been developed in recent years. Miniaturization has led to the development of devices such as a micro-machined field-asymmetric ion mobility spectrometer (FAIMS).

55. These developments are driven by the needs to improve protection against CW, and at the same time by the specific requirements of CW destruction programs which need detectors that can respond to low agent exposure levels [at the nationally established eight-hour time-weighted average (TWA) concentrations or equivalents]. For the latter application, fully automated continuous air monitoring systems are being used.

56. The conclusion from the 2002 Bergen workshop still stands that “many new chromatographic and spectroscopic methods show promise for detection of chemical weapon agents at low levels or in difficult sample matrices, [but] the transition of such developments from the laboratory to rugged, field portable instruments...is a slow, expensive process”. There are technical and engineering
reasons for that, such as software design, testing and debugging, preparation and testing of doc-
umentation for manufacturing (production) and for routine instrument operations as well as for
use in training operators and other personnel, laboratory validation and field testing in compari-
tion to already-existing instruments. There are also economic/market reasons: companies are not
prepared to invest very large sums in developing a new item of equipment if there is only a lim-
ited market for such equipment.

57. In conclusion, current mature technologies are expected to continue to play a key role in the de-
tection of CW agents during the next five years (in particular: GC/FPD, GC/MS, IMS). Miniaturized
versions of mature technologies capable of CW detection are now becoming commer-
cially available (GC/FPD, GC/FAIMS, MS). New ionization methods that enhance the abil-
ity of mass spectrometers to interrogate surfaces (liquids and solids) may greatly expand the ef-
f ectiveness of inspections in the future—if these methods can be miniaturized and reduced in cost.
Biosensors should be considered for their utility as detection devices given their specificity and
sensitivity.

58. With regard to decontamination, improvements in cost, portability, and environmental friend-
liness are needed. Requirements are taking account of the changing nature of military operations,
which are more likely to take place in urban areas with civilians present. Experience has shown
that standard (military) decontamination methods do not work effectively in urban areas. There is
a need for smaller and easier-to-transport decontamination equipment that requires fewer person-
 nel to operate. Decontamination chemicals should be environmentally friendly and less corro-
sive/aggressive so they can be used in urban areas as well as on sensitive military equipment (e.g.,
 microemulsions, enzymatic systems or reactive nanoparticles). Progress has also been made with
regard to new materials for skin decontamination.

59. Systematic research and development over recent decades has led to the introduction of new de-
contamination solutions, emulsions, ointments, gels, pastes, foams, and adsorption (chemi-
sorption) powders. New directions for personnel decontamination include, for example, the use
of sodium peroxide-surfactant mixtures, alcohohates in aprotic solvents, or chemisorptive powders
based on bentonite. For the decontamination of personnel as well as equipment, vehicles, and the
like, universal decontamination solutions have been introduced, and equipment for the decon-
tamination can deal with anything from an individual to the mass decontamination of troops and
their equipment and vehicles (in drive-through mode).

60. In sum, the advances in the life sciences, medicine, chemistry, and enabling technologies (in-
cluding nanotechnology, engineering, and information technology) are all expected to improve
chemical protection systems and methods. The current investment in research and development
for protective purposes is significant, partly driven by terrorism concerns—which need to recog-
nize that toxic chemicals different from the traditional CW agents may be used in such cases.
Expectations should, however, remain realistic: As with other developments, there is a long way
from demonstrating the suitability of a new method or material for protective purposes (which
may work well under idealized laboratory conditions) to actually fielding a new instrument, pro-
tective material/device, or medical treatment for practical use.

IV. Opportunities in the field of international cooperation

61. The promotion of the economic and technological development of the States Parties through en-
hanced international cooperation and exchanges in the field of peaceful uses of chemistry is one
of the core objectives of the CWC. In 2006, the OPCW adopted a decision on how this aspect of
the CWC is to be implemented [4]. Of particular relevance for this report is paragraph 3 of that
decision, which stated that the OPCW Secretariat shall develop international cooperation pro-
grams:
that meet the needs of the States Parties for capacity-building and economic and technological development through international cooperation in the field of chemical activities for purposes not prohibited under the CWC, within the budgetary resources of the OPCW;

- that contribute to the effective and nondiscriminatory implementation of the CWC;
- that focus on the specific competencies of the OPCW;
- that avoid duplicating the efforts of other international organizations; and
- whose high quality and cost-effectiveness are ensured through continuous evaluation by the Secretariat, in consultation with the States Parties.

62. One area of international cooperation that the CWC explicitly mentions, in Article X, is the protection against CW. Scientific and technological developments that are relevant in this respect have been discussed above. A call for enhanced international cooperation among States Parties in these areas of science and technology would be consistent with the objectives of the CWC, and meet the criteria adopted in 2006 for the development of OPCW international cooperation programs.

63. Another area where the OPCW has over the years acquired competence in facilitating international cooperation is the destruction of CW. Relevant scientific and technical advances have already been discussed in a previous section of this report. The OPCW is accumulating data about protective measures and technologies to manage old and abandoned munitions locations. Such a “data bank” would be useful for States Parties in case they discover such sites and need to take remedial action.

64. The workshop in Zagreb reaffirmed the conclusion of many recent reviews of advances in science and technology, namely, that the advances in the life sciences and related technological fields are likely to make significant contributions to the benefit of humankind. International cooperation and exchanges in these fields of science and technology have great potential for improving public health and for environmentally and economically sustainable development. Therefore, the OPCW would be well advised to focus its international cooperation efforts on the kinds of scientific and technological research reviewed in this report, consistent with its own decision on the implementation of CWC Article XI. International cooperation and exchanges in these areas should be pursued in recognition of the fact that they must be fully consistent with the disarmament and nonproliferation obligations of the CWC.

65. The OPCW should, in the further development of its international cooperation program, create partnerships with other international organizations that work in the field of national capacity-building for chemicals management. In particular, the OPCW should consider more fully cooperating with such mechanisms as the SAICM, UNEP’s action to prevent international trade in toxic chemicals, and the Green Customs Initiative as well as the European REACH initiative.

V. Awareness-raising, education, and outreach

66. The First CWC Review Conference observed that “a valuable aspect of national implementation measures involves ensuring that the chemical industry, the scientific and technological communities, the armed forces of the States Parties, and the public at large are aware of and knowledgeable about the prohibitions and requirements of the Convention”. After the First CWC Review Conference, a proposal for a joint project on chemistry education, outreach, and the professional conduct of chemists was agreed in early 2004 between the OPCW and IUPAC. The SAB considered and encouraged the project at its meeting in March 2005, and the Director-General of the OPCW issued a note to the Executive Council in May 2005 stating that “[a]s regards education and outreach, the Director-General notes the state of preparations for an international workshop being organized jointly by the OPCW and the International Union of Pure and Applied Chemistry, which will focus on how the requirements of the Convention can be better reflected in codes of professional conduct and ethics as well as in chemistry education.” Following the international
workshop in Oxford, UK, in July 2005, an international project was launched by IUPAC to develop educational material on the multiple uses of chemicals and related ethical matters. The results of this project so far were presented in Zagreb in a poster. The project has resulted in the preparation of a series of materials and case studies—now available in all six CWC languages—that will enable chemistry teachers at university level (and also high school level) to provide lectures on the issue as well as run interactive workshops. The material will be distributed through various IUPAC channels as well as posted on the Web.

67. These developments are evolving in parallel with efforts in the life sciences community under the BWC to provide for effective governance of the life sciences to prevent abuse as well as unintentional adverse consequences of new discoveries or scientific work. It is worth noting the conclusion drawn by a representative scientific group that assessed similar issues in the field of biological risks: It concluded that “[n]ational and international scientific organizations and industry should encourage and engage those involved with scientific endeavours to increase awareness of the Convention and dual use issues, thereby both promoting in depth implementation of the Convention and ensuring vigilance when work with dual use potential is undertaken.” [5]

68. The Zagreb workshop concluded that further efforts should be made in reaching out to the scientific community and to all those engaged in chemicals, and in promoting the adoption of codes of conduct to ensure full CWC compliance as well as the incorporation of the norms and requirements of the CWC into chemistry education.

REFERENCES

APPENDIX 1: THE CHEMICAL WEAPONS CONVENTION: AN OVERVIEW

Introduction

The CWC [6] totally prohibits the development, production, acquisition, stockpiling, or retention of CW. It defines chemical weapons as meaning the following, together or separately:

(a) Toxic 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; [Emphasis added]

(b) Munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices.

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The text in bold is referred to as the **general purpose criterion**, which ensures that all toxic chemicals and their precursors are embraced by the Convention except where intended for purposes not prohibited under the Convention. Toxic chemicals are defined in the Convention as meaning:

Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.

All chemicals that can cause death, temporary incapacitation, or permanent harm to humans or animals are thus prohibited unless they are in types and quantities consistent with their intended uses for purposes not prohibited under the Convention which are defined in the Convention as:

(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.

The CWC was opened for signature in January 1993 and entered into force on 29 April 1997, which was 180 days after the 65th State Party had deposited its instrument of ratification. In July 2007, the Convention has 182 States Parties [7].

Article VIII of the Convention, which establishes the Organization to achieve the object and purpose of the Convention, includes the requirement to undertake periodic reviews of the operation of the Convention:

22. The Conference shall not later than one year after the expiry of the fifth and the tenth year after the entry into force of this Convention, and at such other times within that time period as may be decided upon, convene in special sessions to undertake reviews of the operation of this Convention. Such reviews shall take into account any relevant scientific and technological developments. At intervals of five years thereafter, unless otherwise decided upon, further sessions of the Conference shall be convened with the same objective.

It will be noted that such reviews are required to take into account “any relevant scientific and technological developments.”

In addition, Part IX of the Verification Annex to the Convention which addresses the regime for OCPFs includes a requirement that:

26. At the first special session of the Conference convened pursuant to Article VIII, paragraph 22, the provisions of this Part of the Verification Annex shall be re-examined in the light of a comprehensive review of the overall verification regime for the chemical industry (Article VI, Parts VII to IX of this Annex) on the basis of the experience gained. The Conference shall then make recommendations so as to improve the effectiveness of the verification regime.

The First CWC Review Conference initiated this comprehensive review of the overall verification regime for the chemical industry in order to re-examine the provisions for OCPFs, and made initial recommendations so as to improve the effectiveness of the verification regime. The issue remains on the
agenda of the OPCW’s Executive Council, however, and the Second CWC Review Conference may be expected to address it again.

The regime for the chemical industry is specified in Article VI of the Convention which addresses “Activities Not Prohibited under this Convention”. The key requirement is stated in paragraph 2 that:

2. Each State Party shall 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.

The Convention in its Annex on Chemicals assigns chemicals judged to present a risk to the Convention into three Schedules according to the following criteria:

**Guidelines for Schedule 1**

1. The following criteria shall be taken into account in considering whether a toxic chemical or precursor should be included in Schedule 1:

   (a) It has been developed, produced, stockpiled or used as a chemical weapon as defined in Article II;

   (b) It poses otherwise a high risk to the object and purpose of this Convention by virtue of its high potential for use in activities prohibited under this Convention because one or more of the following conditions are met:

      (i) It possesses a chemical structure closely related to that of other toxic chemicals listed in Schedule 1, and has, or can be expected to have, comparable properties;

      (ii) It possesses such lethal or incapacitating toxicity as well as other properties that would enable it to be used as a chemical weapon;

      (iii) It may be used as a precursor in the final single technological stage of production of a toxic chemical listed in Schedule 1, regardless of whether this stage takes place in facilities, in munitions or elsewhere;

   (c) It has little or no use for purposes not prohibited under this Convention.

**Guidelines for Schedule 2**

2. The following criteria shall be taken into account in considering whether a toxic chemical not listed in Schedule 1 or a precursor to a Schedule 1 chemical or to a chemical listed in Schedule 2, part A, should be included in Schedule 2:

   (a) It poses a significant risk to the object and purpose of this Convention because it possesses such lethal or incapacitating toxicity as well as other properties that could enable it to be used as a chemical weapon;

   (b) It may be used as a precursor in one of the chemical reactions at the final stage of formation of a chemical listed in Schedule 1 or Schedule 2, part A;
(c) It poses a significant risk to the object and purpose of this Convention by virtue of its importance in the production of a chemical listed in Schedule 1 or Schedule 2, part A;

(d) It is not produced in large commercial quantities for purposes not prohibited under this Convention.

Guidelines for Schedule 3

3. The following criteria shall be taken into account in considering whether a toxic chemical or precursor, not listed in other Schedules, should be included in Schedule 3:

(a) It has been produced, stockpiled or used as a chemical weapon;

(b) It poses otherwise a risk to the object and purpose of this Convention because it possesses such lethal or incapacitating toxicity as well as other properties that might enable it to be used as a chemical weapon;

(c) It poses a risk to the object and purpose of this Convention by virtue of its importance in the production of one or more chemicals listed in Schedule 1 or Schedule 2, part B;

It may be produced in large commercial quantities for purposes not prohibited under this Convention.

APPENDIX 2: ACRONYMS AND INITIALISMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>BTWC</td>
<td>Biological and Toxin Weapons Convention or Biological Weapons Convention (BWC)</td>
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<tr>
<td>CBR</td>
<td>chemical, biological, radiological</td>
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<td>CW</td>
<td>chemical weapons</td>
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<tr>
<td>CWC</td>
<td>Chemical Weapons Convention</td>
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<td>FAIMS</td>
<td>field-asymmetric ion-mobility spectrometry</td>
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<td>GC</td>
<td>gas chromatography</td>
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<tr>
<td>GC/FPD</td>
<td>gas chromatography/flame photometric detector</td>
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<td>GC/EI/MS</td>
<td>gas chromatography/element isotope/mass spectrometry</td>
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<td>GC/MS</td>
<td>gas chromatography/mass spectrometry</td>
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<td>ICCA</td>
<td>International Council of Chemical Associations</td>
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<td>IMS</td>
<td>ion-mobility spectrometry</td>
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<td>IR</td>
<td>infrared</td>
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<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
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<td>IT</td>
<td>information technology</td>
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<tr>
<td>IUPAC</td>
<td>International Union of Pure and Applied Chemistry</td>
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<tr>
<td>LC/MS</td>
<td>liquid chromatography/mass spectrometry</td>
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<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
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<td>NMR</td>
<td>nuclear magnetic resonance</td>
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<td>OCAD</td>
<td>OPCW Central Analytical Database</td>
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<td>OCPF</td>
<td>other chemical production facilities</td>
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<td>ODMS</td>
<td>OPCW Dual Mode Software</td>
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<td>OPCW</td>
<td>Organisation for the Prohibition of Chemical Weapons</td>
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<td>PINS</td>
<td>portable isotope neutron spectrometer</td>
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<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorization, and Restriction of Chemicals (European Union Chemicals Agency)</td>
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</tbody>
</table>

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SAB  Scientific Advisory Board
SAICM  Strategic Approach to International Chemicals Management
SAW  surface acoustic wave
TWA  time-weighted average
UNEP  United Nations Environmental Program
EDUCATION, OUTREACH, AND CODES OF CONDUCT
TO FURTHER THE NORMS AND OBLIGATIONS OF
THE CHEMICAL WEAPONS CONVENTION

(IUPAC Technical Report)

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Education, outreach, and codes of conduct to further the norms and obligations of the Chemical Weapons Convention

(IUPAC Technical Report)

Abstract: The 2002 IUPAC evaluation of scientific and technological advances relevant to the operation of the Chemical Weapons Convention (CWC) included a recommendation that greater efforts are required in education and outreach to the worldwide scientific and technical community to increase awareness of the CWC and its benefits. In 2004, the President of IUPAC and the Director-General of the Organisation for the Prohibition of Chemical Weapons (OPCW) agreed on a proposal for a joint project on chemistry education, outreach, and the professional conduct of chemists. This led to a joint IUPAC/OPCW international workshop held in Oxford, UK on 9–12 July 2005 with 27 participants from 18 different countries. This report sets out the background to the workshop, the scope of the presentations and discussions, the outcomes of the workshop, and the recommended steps to further chemical education, outreach, and codes of conduct in regard to the obligations of the CWC.

Keywords: chemical weapons; codes of conduct; OPCW; Chemical Weapons Convention; outreach; ethics; responsible use; public understanding of chemistry; IUPAC Committee on Chemistry Education.

INTRODUCTION AND BACKGROUND

In 2002, the International Union of Pure and Applied Chemistry (IUPAC) undertook an evaluation of scientific and technological advances in the chemical sciences that might have an impact on the implementation of the Chemical Weapons Convention (CWC). This evaluation [1] was published in Pure and Applied Chemistry (PAC) in December 2002 prior to the First Review Conference of the CWC held on 28 April 2003. The Director-General of the Organisation for the Prohibition of Chemical Weapons (OPCW) summarized the importance of this IUPAC evaluation in his opening statement to the Sixth Session of the Conference of States Parties on 14 May 2001:

An important aspect of the preparations for the review conference is an assessment of the scientific foundations of the Convention. Does the present verification regime under Article VI, and the Schedules contained in the Annex on Chemicals, adequately reflect the scientific and technological progress that has been made over the past decade, and the current trends in science and technology? Much has changed, as is evidenced by the completion of the human genome project and the emergence of genomics, as well as by advances in chemical production technologies, a better understanding of the functioning of certain biomolecules and receptors, etc. The International Union of Pure and Applied Chemistry has proposed to the Secretariat that it undertake a review of key areas of science, with a view to identifying developments and trends that are relevant to the CWC. We welcome this offer, and look forward to the results of this international scientific re-
view. Its results will, of course, be passed on to Member States for advice and action well before the review conference.

As the only independent, nongovernmental, international organization devoted to the chemical sciences and their applications, IUPAC was regarded as very well placed to conduct this review. Formed in 1919, IUPAC is an association of bodies—National Adhering Organizations (NAOs)—that represent the chemists of different member countries. IUPAC has 49 NAOs, and 21 Associate NAOs (ANAOs).

The CWC totally prohibits the development, production, stockpiling, and use of chemical weapons. In 2002, the CWC had 145 States Parties, 29 Signatory States, who have signed the Convention but have yet to ratify the Convention, and 20 non-signatory States. Some of the Signatory and non-signatory States might not have ratified or acceded to the Convention because of a lack of awareness of the benefits that the Convention would bring. It is noted that education and outreach are vitally important to promote both the universality and the implementation of the Convention.

The report of the 2002 evaluation included a section entitled “Education and Outreach”. Summary findings included statements that:

1. Greater efforts on education and outreach to the worldwide scientific and technical community are needed in order to increase awareness of the CWC and its benefits. An informed scientific community within each country can be helpful in providing advice to States Parties and in disseminating unbiased information to the public.

2. Education of and outreach to Signatory States and non-signatory States could be helpful in increasing awareness of the importance of universal adherence to the Convention thereby enhancing safety and security for all States.

The rationale for these findings included the observations that an informed scientific and technical community within each country could be very helpful in providing advice and disseminating information to the public. Consequently, IUPAC, together with its NAOs, could play an important role in this education and outreach program by working in cooperation with the National Authorities responsible for the implementation of the CWC within States Parties to enhance awareness by chemists of the obligations and undertakings of the Convention. A parallel approach could usefully be taken worldwide by chemical industry associations in cooperation with National Authorities of CWC States Parties and signatories. In due course, this might lead to incorporating chemical weapon prohibition and non-proliferation considerations into university and school curricula as part of chemistry education in a similar way to that in which environmental issues, ethics of genetics, and similar issues have been incorporated into chemistry and biology education.

The IUPAC evaluation was considered by the Scientific Advisory Board (SAB) of the OPCW in its report forwarded by the Director-General [2] to the States Parties for consideration at the First Review Conference of the CWC in April 2003. In his covering note, the Director-General observed that:

2.20 In relation to international cooperation and related matters, the SAB has concluded that the OPCW needs to clearly establish what it requires in the field of education, outreach, and international cooperation. At the same time, the SAB has observed that current OPCW international cooperation programmes appear to be making useful contributions to the development of States Parties’ national capacities in the peaceful uses of chemistry. OPCW international cooperation programmes and its educational and outreach activities would benefit from increased cooperation with other international, regional, and national organisations.

The SAB report addressed these aspects in more detail:

9.1 Greater publicity is needed by OPCW about its aims and objectives, and about the key issues it faces. This must include information on the requirements in relation to the
declaration, destruction, and verification of CW and related facilities; the methodologies
the OPCW uses (particularly for analysis); the nature of and the reasons for industrial
declarations; the nature of and reasons for industrial inspections and the value gained
from such inspections; the role of National Authorities; and the requirements to provide
assistance and to foster international cooperation.

9.2 Greater efforts in terms of education and outreach to the worldwide scientific and
technical community are needed in order to increase awareness of the Convention and its
benefits. An informed scientific community within each country can be helpful in providing
advice to States Parties and in disseminating unbiased information to the public.
Education of, and outreach to, signatory States and non-signatory States could be helpful
in increasing the awareness of the importance of universal adherence to the
Convention, thereby enhancing the safety and security of all states.

9.3 The SAB noted that the Secretariat had developed certain projects that supported
these goals, in particular the Associate Programme and the Ethics Project.

9.4 The SAB was convinced that efforts in the area of education and outreach are impor-
tant to further the objectives of the Convention; these efforts include raising awareness,
assuring that the principles of the Convention become firmly anchored in professional
ethics and teaching, and promoting international cooperation in the field of chemistry.
International cooperation and outreach were also important with respect to attracting ad-
ditional countries to adhere to the Convention. The SAB expressed a strong desire to fur-
ther discuss and clarify its own role in relation to education, outreach, and international
cooperation. At the same time, the SAB noted and welcomed the contributions that cer-
tain non-governmental organisations, as well as national chemical societies and science
academies, have been making in relation to creating awareness about the Convention.
Public awareness and education about the Convention can contribute significantly to en-
couraging compliance with its norms and provisions.

9.5 There are a number of opportunities in the area of outreach, education, and interna-
tional cooperation. In particular, the SAB reviewed the OPCW’s programmes in the area
of international cooperation in the light of the developments in science and technology,
and concluded as follows:

(a) there is good reason for close cooperation between the OPCW and other rele-
vant international organisations, such as UNITAR, WHO, or UNEP, in further de-
veloping the international cooperation programmes of the OPCW;

(b) the programmes and projects currently being implemented by the OPCW in the
area of international cooperation appear to be contributing to the development of
the national capacities of the States Parties in the area of the peaceful uses of chem-
istry. Two members of the SAB are involved in one of these programmes (i.e. the pro-
gramme for support of research projects implemented by the ICA (International
Cooperation and Assistance) Division); and

(c) in further enhancing these programmes, particular attention should be given to
projects aimed at improving the capabilities of the States Parties to monitor chemi-
cal compounds.

9.6 The SAB considered it useful for the OPCW to continue and intensify its dialogue with
other organisations, such as the IUPAC and its chemistry education division; with other
international science unions in relevant fields such as biochemistry and molecular biol-
ogy (IUBMB) or biological sciences (IUBS); with professional and chemical industry as-

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sociations; with international institutes and programmes; with organisations of engineers and scientists committed to CW disarmament; and with national as well as regional science academies.

9.7 The SAB concluded that it will need to continue discussing practical and useful measures in relation to education, outreach, and international cooperation as part of its future work programme.

The report of the First Review Conference [3], whilst not explicitly addressing education and outreach, included the following conclusion:

7.79 The First Review Conference noted that a valuable aspect of national implementation measures involves ensuring that the chemical industry, the scientific and technological communities, the armed forces of the States Parties, and the public at large are aware of and knowledgeable about the prohibitions and requirements of the Convention.

In addition, the First Review Conference in paragraph 7.83

(d) encouraged States Parties to take measures to raise awareness about the prohibitions and requirements of the Convention, inter alia in their armed forces, in industry, and in their scientific and technological communities;

Subsequent to the First Review Conference, a proposal for a joint project on chemistry education, outreach, and the professional conduct of chemists was agreed between the Director-General of the OPCW, Ambassador Rogelio Pfirter, and the President of IUPAC, Prof. Leiv Sydnes, in early 2004. It also built upon the Ethics Project of OPCW’s Technical Secretariat, which recognized that the CWC affects the work of all those using chemicals in academia, industry, or government and that the ethical conduct of those using chemicals is important for the effective implementation of the CWC.

The proposed objectives for the joint project were to:

• increase awareness of the CWC and its requirements in the chemical and chemical engineers communities (and more generally in the international scientific community);
• enhance knowledge of the CWC’s key provisions and requirements;
• integrate issues related to the CWC and its implementation into chemistry teaching; and
• promote professional conduct of chemists and chemical engineers that is fully in line with the CWC.

The project was discussed by representatives of the OPCW, its SAB, and IUPAC at a meeting in The Hague on 17 January 2005. This meeting agreed the project outline and decided to take it forward through a meeting to be held in Oxford in July 2005.

The SAB met for its 7th session from 9–11 March 2005 when it received a report on the joint project, including information on the planned Oxford meeting, from Alberto Fratadocchi, chair-designate of the temporary working group on education and outreach. The SAB encouraged the continuation of this work [4], on the understanding that over the long term it would lead, inter alia, to awareness-raising, efforts to provide educational materials, guidance to school and university science teachers, and the incorporation of the Convention’s requirements into codes of conduct and ethics for scientists and engineers. Subsequently, on 25 May 2005, the Director-General of the OPCW issued a note [5] to the Executive Council on the 7th SAB report, stating:

12. As regards education and outreach, the Director-General notes the state of preparations for an international workshop being organised jointly by the OPCW and the International Union of Pure and Applied Chemistry, which will focus on how the requirements of the Convention can be better reflected in codes of professional conduct and ethics as well as in chemistry education. The workshop is scheduled for 10 to 12 July
2005 in Oxford, the United Kingdom of Great Britain and Northern Ireland, and the Secretariat will render the support required to ensure that it is success.

The international workshop took place as planned in Oxford from 9 to 12 July 2005 with the aim of developing concrete proposals for follow-up measures, both at the level of governments of CWC States Parties and through the existing mechanisms of science unions such as IUPAC and its constituent NAOs and network of national chemical societies and science academies.

JOINT OPCW/IUPAC WORKSHOP: THE CHEMICAL WEAPONS CONVENTION, CHEMISTRY EDUCATION, AND THE PROFESSIONAL CONDUCT OF CHEMISTS

The OPCW and IUPAC organized a workshop entitled The Chemical Weapons Convention, Chemistry Education and the Professional Conduct of Chemists at St. Anne’s College, Oxford, UK on 9 to 12 July 2005. Financial support was provided by the OPCW and IUPAC.

Twenty-seven participants from 18 countries [6] participated in the workshop, which included plenary sessions and presentations by leading international scientists and engineers engaged in chemistry education and in codes of conduct. The workshop successfully brought together the collective knowledge of academia, industry, government, and the OPCW in order to address how education, outreach, and codes of conduct could facilitate the implementation of the CWC within States Parties and how awareness of the CWC could be placed in a broader educational context of ethical concerns in chemistry. Plenary presentations provided background for six discussion sessions in which the participants in two working groups addressed how under- and postgraduate education might address the ethical and practical aspects of preventing the misuse of chemistry and how academia, industry, and government might be encouraged to reflect CWC issues in their codes of conduct or practice.

Key findings by the workshop participants are summarized below in three sections, as follows:

A. Presentations and Discussions
B. Workshop Outcomes
C. Summary Findings and Observations

A. PRESENTATIONS AND DISCUSSIONS
Presentations at the workshop were divided into six sessions, as follows:

• Background and Context for the Workshop
  Workshop organizers Peter Atkins, Chair of the IUPAC Committee on Chemistry Education, and Ralf Trapp of the OPCW Secretariat, set out the workshop objective to develop concrete proposals for follow-up measures, both at the level of governments of CWC States Parties and through the existing mechanisms of science unions, such as IUPAC and its constituent NAOs and network of national chemical societies and science academies.
  Jiri Matousek, Chair of the OPCW SAB, then set out a conceptual framework for the discussion of how issues relating to the CWC might be incorporated into chemistry education.

• Codes of Conduct I
  Three speakers addressed different aspects relating to codes of conduct. Bob Mathews of the Australian Defence Science and Technology Organization examined the role of codes of conduct in the context of the CWC and why it is important to raise awareness of the CWC among chemists. A layered approach to codes was outlined with a universal code containing guiding principles, a code of ethics developed by scientific or professional societies, and a code of practice developed...
by the institution or workplace. These various codes would be seen as complementary and may be most effective if developed as a package. Attention needs to be given to bioregulators and toxins, which fall between classical chemical weapons and traditional biological agents; the prohibitions of both the Biological and Toxin Weapons Convention (BTWC), and the CWC applied to such mid-spectrum agents.

Graham Pearson of the Department of Peace Studies, University of Bradford, UK then spoke on behalf of the UNESCO Division of Ethics and Science to outline current UNESCO activities on a code of conduct for scientists. The World Conference for Science in Budapest in 1999 organized by UNESCO and ICSU (International Council for Science) had paid special attention to ethical principles and responsibilities in the practice of science and had agreed that UNESCO’s COMEST (World Commission on the Ethics of Scientific Knowledge and Technology) had a special responsibility to follow up on this issue. A draft recommendation for feasibility studies on a universal declaration of science ethics to be carried out in 2005 to 2007 had been prepared for consideration at the 33rd General Conference of UNESCO in Paris in October 2005.

Alastair Hay of the Unit of Molecular Epidemiology of the University of Leeds, UK then outlined the Royal Society’s recent activities in regard to the roles of codes of conduct in preventing the misuse of scientific research. Although wide consultation was needed when developing codes, the Royal Society found clear value in having such codes. It was pointed out that many valuable guidelines for professional conduct already exist such as the existing health and safety regulations in the UK, which require risk assessments to be carried out in regard to both those carrying out an activity and also those who might be affected by the activity. The presentation concluded by considering the seven questions raised by John Freeman, UK Ambassador to the Conference on Disarmament, as chair of the 2005 BTWC Geneva meetings to address the content, promulgation, and adoption of codes of conduct for scientists.

• Codes of Conduct II

Graham Pearson of the Department of Peace Studies, University of Bradford, UK examined what could be gained from the experience of the States Parties to the BTWC who were, in 2005, addressing the content, promulgation, and adoption of codes of conduct for scientists. The BTWC is the international treaty providing the closest parallel to the CWC, with both Conventions containing general-purpose criteria [7] which prohibit entire classes of weapons. The BTWC Meeting of Experts held in Geneva on 13 to 24 June 2005 had seen the participation of over 500 individuals with over 280 from capitals coming from 82 States Parties and 3 Signatory States, 8 intergovernmental organizations (including the OPCW), 23 guests of the Meeting and 16 nongovernmental organizations (NGOs). The seven questions posed by the Chair, John Freeman, were reviewed, and it was noted that these were equally applicable to codes for the CWC.

Brian Rappert of the University of Exeter, UK set out a strategy for engaging life scientists regarding dual-use research [8]. In 2003, Rappert and Dando led a series of 26 seminars to over 600 participants in university life science departments in England, Scotland, Wales, Northern Ireland, and Germany during the 2004–5 academic year. These interactive seminars on dual-use research were introduced with nine slides, followed by discussion of questions selected by the seminar organizers. This approach was suggested as a useful model for the chemical sciences. The key was to go to the people engaged in the science of interest and to create a situation in which they discussed issues with each other. Such an approach went beyond awareness-raising to enabling debate about the key issues.
• **Education I**

Alastair Hay of the Unit of Molecular Epidemiology of the University of Leeds, UK described how codes of conduct for scientists had been successfully discussed with A-level students at a local school. Hay also spoke recently to 200 teachers of chemistry and pointed out the opportunities that are already in the current UK A-level and GCSE level curricula to explore “spiritual, moral and cultural dimensions in addition to gaining scientific knowledge and understanding of chemical topics” and to consider moral and ethical issues “through discussion of the uses of scientific knowledge including the recognition that such uses can have both beneficial and harmful effects.”

Jiri Matousek of the Faculty of Science of Masaryk University, Brno, Czech Republic described a course he has developed at the Masaryk University entitled “Military Chemistry, Toxicology and Protection against Highly Toxic Chemicals”, which addresses issues related to the CWC. This 28-hour course comprises four main parts: an introduction that sets the scene regarding chemical weapons; the chemistry and toxicology of the basic types of chemical warfare agents; the fundamentals for protection of military and civilian personnel against chemical weapons and highly toxic chemicals; and issues related to chemical disarmament, including the historical development of treaties prohibiting chemical weapons, the CWC, and technologies for chemical weapon destruction.

Alberto Fratadocchi of the Academy of Science of the Institute of Bologna, Italy then described a 2005 meeting that considered how the Bologna Academy of Science could support the CWC and the OPCW. This initiative focused on chemistry education in high schools and universities, with particular attention given to ethics and professional responsibility of chemists, chemical engineers, and industrial chemists. One recommendation was that the authors and editors of chemical education books should include a chapter on ethics and responsibility. The need had also been recognized for a degree course that would help chemists to be trained as possible OPCW inspectors and to provide information relating to the implementation of the CWC. The Bologna Academy of Science decided to establish a committee to study the curricula of high school students and university students.

• **Education II**

Ferruccio Trifiró of the University of Bologna, Italy addressed chemical weapons in scientific literature and in education. He examined the treatment of chemical weapons in scientific journals by comparing the number of references to terms such as “lewisite” and “sarin” in the past year to the previous 50 years. He then considered what should be done in Italy to increase awareness of chemists about the CWC, referring to three papers recently published in the Italian journal of the chemical society La Chimica e L’Industria. Finally, consideration was given to what was useful to publish or teach to make chemists more aware of the CWC.

• **International Law and the Role of the Chemical Industry**

Kobi-Renee Leins of the Mines-Arms Unit in the Legal Division in the International Committee of the Red Cross (ICRC) in Geneva, Switzerland spoke on international law and norms governing work in the life sciences. She referred to historical laws relevant to poisoning and the deliberate spread of disease, recalling ancient taboos and the customary rules of international law that prohibit the use of poison or poisoned weapons or chemical weapons. The international treaties—the Geneva Protocol of 1925, the Biological and Toxin Weapons Convention of 1972, and the Chemical Weapons Convention of 1993—and the requirements for national laws under Article IV of the BTWC and Article VII of the CWC apply to all persons within the States Parties to these Conventions. Consequently, all scientists, physicians, and those who employ them have a respon-
sibility under specific treaties and under customary international law to prevent the hostile use of chemistry and the life sciences.

Richard Robson of the European Chemical Industry Council (CEFIC), Belgium described the global chemical industry’s Responsible Care program, and then examined the role for chemical industry in the implementation of the CWC. The Responsible Care program was a public commitment by the chemical industry to improve the safety, health, and environmental performance of chemical products and processes. The program was launched in Canada in 1985 and is now an International Council of Chemical Associations (ICCA) initiative operating in 85 countries worldwide, covering over 90% of the world’s chemical production. The Responsible Care Global Charter calls for those involved to abide by global principles to continuously improve and report performance, advance sustainable development, enhance product stewardship, promote Responsible Care through the value chain, support national and global Responsible Care governance processes, and address stakeholder concerns and expectations.

Robson’s second presentation examined the role of the chemical industry in the implementation of the CWC. He first outlined current voluntary contributions by industry to implement the CWC. Robson then considered codes of conduct, noting that these exist in several States Parties to the CWC. The aim of these codes of conduct is to strengthen the cooperation between industry and the national authorities, to provide a basis for more effective control, and to reduce the administrative burden wherever possible. This was illustrated by the UK code of conduct on chemicals subject to trade controls and voluntary requirements, drawn up jointly by the CIA (Chemical Industries Association), BCTDA (British Chemical Distributors and Traders Association), and CPA (Crop Protection Association). The UK code addresses chemical weapon and drug precursors, chemicals subject to export licensing, chemicals subject to the prior informed consent (PIC) convention, and persistent organic pollutants (POPs). The objective of the UK code is to increase awareness throughout the industry, establish and improve standards of control, protect against diversion of chemicals in the illicit production of drugs and weapons of mass destruction, cooperate fully with government and law enforcement authorities, promote environmentally sound management of chemicals in international trade, and safeguard the chemical industry’s good reputation.

B. WORKSHOP OUTCOMES

In the opening session of the workshop, participants discussed ways to increase awareness of the CWC and its requirements and obligations and examined how these can be advanced in the communities of chemists and chemical engineers and, more generally, in the international scientific community. They also examined how to promote professional conduct consistent with these requirements and obligations and how to more fully reflect in chemistry education the knowledge of the CWC and its requirements.

The OPCW noted that it had been engaged in an ethics project with the States Parties to the CWC to promote awareness of the CWC among chemistry/engineering professionals, to promote a culture of compliance with the requirements of the Convention, and to integrate ethical and scientific aspects of chemical weapons disarmament into chemistry and chemical engineering education. The OPCW recalled that the 2003 First Review Conference had noted that a valuable aspect of national implementation measures involves ensuring that the chemical industry, the scientific and technological communities, the armed forces of the States Parties, and the public at large are aware of the prohibitions and requirements of the CWC. Appendix 1 provides extracts from relevant sections of the Convention.

Each participant was assigned to one of two discussion groups, on education/outreach issues and codes of conduct and practice. Reports from the discussion groups were presented in the final session of the workshop, which identified key issues to be addressed in this IUPAC technical report.

The wide-ranging deliberations of the two discussion groups are summarized below.
I. Chemistry Education and Outreach

The education and outreach working group (Natalia Tarasova of Russia, convenor; Peter Mahaffy of Canada, reporter) began by considering several science communication principles identified in the draft report on IUPAC’s niche in enhancing the public understanding of chemistry from IUPAC Project #2004-047-1-050, chaired by Peter Mahaffy. This framework led to the following formulation of how the requirements and obligations of the CWC could be communicated in an educational context:

- Who are the target audiences?
- What should be communicated?
- How should this be communicated?
- Strategies for implementation
  - Short term
  - Longer term
- How to assess the effectiveness of these communications

Target audiences

The following were identified as being the primary target audiences:

a. Educators, especially secondary and postsecondary school teachers, through whom citizens and the public at large can be reached.

b. Scientists, chemical engineers, and technologists, as they are primarily engaged in science and technology using chemicals—and these chemicals fall under the CWC.

c. The preferred approach is to work through undergraduate and postgraduate programs to reach these target audiences.

d. Neither IUPAC nor the OPCW has the resources needed to work directly with teachers and students. However, both IUPAC and the OPCW can influence and work with other organizations.

e. IUPAC chemists were recognized as a primary target for educational initiatives to reach chemists. Furthermore, many IUPAC chemists work in educational contexts.

f. Authorities responsible for accreditation of educational programs such as ACS and EuCheMS should also be targeted, to foster a culture of incorporating ethical issues into curriculum.

g. In some countries and contexts, an appropriate target will be ministries of education.

What should be communicated?

Currently, many people know that there is some kind of treaty relating to chemical weapons but most are unable to summarize key features or know what is specifically prohibited. One measure of success for any educational initiative would be improving awareness in the target audiences that the CWC is relevant to them. In considering what needs to be communicated, it was recognized that this depends on understanding what the target audience needs to know and is willing to know.

It was suggested that education start with the positive uses of chemicals, leading into the potential for multiple uses of some chemicals and thus the concept of dual-use chemicals and the prohibitions and obligations under the CWC. This needs to be put into the context of professional responsibility of each individual for the beneficial use of chemicals and chemical technologies.

In developing codes of conduct for the next generation of chemists and users of chemicals, the workshop emphasized the importance of using pedagogical strategies to help each cohort of students engage the topic and take ownership. This led to the suggestion that students formulate their own codes of behavior with respect to the use of dual-use chemicals.

In considering how such communication should be achieved, it was recognized that the National Authorities within each State Party to the CWC are the primary conduits at present. However, National Authorities have very limited resources and are generally not well connected within the State Party with other government bodies that have responsibility in the area of education, or with educational institu-
tions. Communication should therefore involve working with national ministries of education and of the environment where appropriate.

Above all, the need was to motivate involvement by scientists and teachers at all levels. The workshop highlighted the importance of working with organizations that represent the target audiences (such as scientists and educators), enabling them to communicate with students and other members of the public.

**Strategies for implementation**

Short-term action items

1. Support international science education conferences for teachers where chemicals and the prohibitions and obligations arising from the CWC can be raised in the broader context of the responsible use of chemistry.

   **Implementation, timeline, and responsibility:**
   - Chemistry Education for Sustainable Development Conference and workshop on dual-use materials and the CWC (Moscow, 2005), Tarasova
   - ICCE (Seoul, 2006; Mauritius, 2008), IUPAC CCE

2. Use of IUPAC Web site for disseminating information regarding CWC-related courses and initiatives already in place.

   **Implementation, timeline, and responsibility:**
   - Courses reported in this workshop by speakers and participants—e-mail information to Ferruccio Trifirò (Trifiro@fci.unibo.it), 15 August 2005
   - IUPAC (NR) representatives survey, Peter Atkins for CCE, 15 Sept. 2005
   - CCE will look after placement on IUPAC Web site

3. Letter from IUPAC president to select graduating chemistry students. Convey a simplified code of ethics, information about CCW—in the context of building enthusiasm for the profession of chemistry.

   **Implementation, timeline, and responsibility:**
   - Leiv Sydnes, with feedback from others, December 2005
   - Pilot this letter through several national societies, including some with existing mechanisms for communicating with graduates.

4. IUPAC/OPCW joint project

   A central part of the strategy is to develop educational materials to be used with secondary and postsecondary teachers, with the following components:
   a. White paper explaining the CWC, starting with general-purpose criterion.
   b. Case studies on chemicals that fall under CWC that also have beneficial uses.
   c. Materials and guidelines to help students develop their own code of ethics/behavior—perhaps making use of historical codes.
   d. Include suggestions on target audiences, and ways to disseminate materials more broadly.
   e. Include code of ethics and supporting materials.
   f. Include materials that could form the basis for one or more undergraduate lectures.
   g. Propose mechanism for translation into native languages, starting with the six UN languages used by OPCW.
   h. Address from the outset how success will be measured.

   **Scope and limitations:**
   - Project will prepare a basic set of materials to pilot in several contexts (Moscow, 2005; UK, 2006). Project will propose, but not implement wide-scale dissemination, including the identification of future partners.

   **Implementation, timeline, and responsibility:**
   - Alastair Hay (project leader, UK), Ted Becker (USA), Alberto Fratadocchi (Italy), Peter
Mahaffy (Canada), Robert Mathews (Australia), Brian Rappert (UK), Richard Robson (Belgium), O.P. Sharma (India), Rolando Spanevello (Argentina), Natalia Tarasova (Russia), Ralf Trapp (Netherlands).

- 15 Sept. 2005—Draft white paper (Trapp), draft toxicology materials (Hay)
- 1 Nov. 2005—Pilot materials at conference in Moscow, followed by (1) day workshop to further develop integrated set of materials (Tarasova, various)
- 1 March 2006—Pilot of materials in UK (Hay)
- 1 Aug. 2006—Possible further pilot and dissemination of materials at ICCE in Seoul (Mahaffy, Tarasova, various)
- 1 Nov. 2006—Final project report (Hay)

5. Dissemination of workshop outcomes

Implementation, timeline, and responsibility:
- Prepare report of outcomes for PAC (Pearson, assistance Mahaffy, 15 November 2005)
- Summarize key findings for Chemistry International (CI) (Pearson, assistance Mahaffy, 15 November 2005)
- Possible further dissemination of detailed papers from workshop through Chemistry Education International (CEI)—CCE

Longer-term action items

6. Identification of appropriate accreditation agencies for undergraduate programs for chemists and teachers

Implementation, timeline, and responsibility:
- CCE—Beijing, August 2005 (Atkins)

7. IUPAC/OPCW-sponsored debates where the topic would relate to CWC—perhaps at the IUPAC General Assembly (undergraduate level), and the Chemistry Olympiad (secondary schools)

Implementation, timeline, and responsibility:
- Topic to be considered at CCE meeting, Beijing, August 2005 (Atkins)

How to assess the effectiveness of these communications

This would be addressed as part of the IUPAC/OPCW joint project.

II. Codes of Conduct

The codes of conduct working group (Graham Pearson of the UK, convenor; Jo Husbands of the USA, reporter) considered the following aspects of developing codes for those engaged in science and technology using chemicals:

- Scope of code of conduct
- Who needs the code?
- Why is a code necessary?
- What codes are needed?
- What should codes include?
- Drafting elements for a society-level code of conduct
- Subsequent activities
- Next steps
- Review of the seven Freeman questions

Scope of a code of conduct

It was recognized that any code needed to address the potential misuse of chemicals to cause harm to humans, animals, and the environment. Particularly from an IUPAC viewpoint, the potential misuse...
needed to be widely crafted so as to include pesticides, illicit drugs, chemical and biological weapons, hazardous wastes, etc.

Who needs the code?
A code is required for all those engaged in science and technology using chemicals. The code needs to be widely crafted so as to be applicable to chemists, physicists, mathematicians, life scientists, etc. A code should not be restricted to scientists and engineers but should also be applicable to those making policy decisions, administrators, funding organizations and bodies, sales personnel, etc., and should apply throughout academia, industry, and government.

Why is a code necessary?
To fully implement the CWC, a code is necessary:
- To complement national implementation legislation and regulations.
- To achieve in-depth compliance throughout academia, industry, and government of all those engaged in science and technology using chemicals.
- To implement the general-purpose criterion of the CWC under which chemical weapons are defined as *Toxic 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.* The text in bold is known as the general-purpose criterion which embraces all toxic chemicals and their precursors unless in types and quantities for purposes not prohibited under the Convention.
- To protect public health and the environment.

It was recognized that the reasons why a code is important would be different in different States Parties.

What codes are needed?
There has been much attention paid to codes of conduct during the past decade, notably following the UNESCO/ICSU World Conference on Science in Budapest, Hungary in 1999 and subsequently by UNESCO/COMEST as well as by ICSU. The States Parties to the BTWC recently addressed the content, promulgation and adoption of a code of conduct for scientists. From these different perspectives, benefit was seen from a tiered or layered approach:
- Universal principles/declarations—an aspirational code
- Society codes—guidance on conduct
- Institutional or workplace codes—setting out workplace practices

These three types of code were seen as complementary. The responsibility for developing such codes could be different according to the layer or tier concerned. Thus, the universal principles/declaration were being actively studied by UNESCO/COMEST who plan feasibility studies leading to an ethical declaration of principles in science and technology. Another initiative by Sir David King, the Chief Scientific Adviser to the British government, who, following a Carnegie meeting in 2004 of the Ministers of Science of the G-8 Nations, developed seven key principles *Rigour, Respect and Responsibility*. These are being piloted with scientists in the British government and have also been sent to the G-8 Nations and to the EU.

At the professional society code level, IUPAC and national societies could play a key role. In the context of the CWC, National Authorities in the States Parties should also play a role. The next layer, the institutional or workplace codes, would need to reflect the particular characteristics and requirements of the institution or workplace.

What should codes include?
Focus should be on the extension of existing codes, where such codes existed, rather than on the creation of new codes. For example, at the level of institutional/workplace codes, existing requirements for
risk assessments for health and safety purposes might be extended to considering whether proposed activities were lawful and consistent with national implementing legislation for the CWC.

For any code to be effective, it needs to involve those concerned in a continuing process. This applies to the development and updating of codes, and also to their implementation, particularly at the institutional/workplace level. All elements of the community to be subject to a code need to be involved, to create a sense of shared ownership. This engagement needs to continue during implementation.

At the Meeting of Experts held by the States Parties to the BTWC in June 2005, many elements of the community had been successfully engaged through the open sessions with participation of both intergovernmental organizations (IGOs) and “guests of the Meeting of Experts” which included 23 NGOs. Clear benefits would result from considering codes of conduct in the context of the CWC in a similar open session involving both the States Parties to the CWC and relevant IGOs and NGOs.

Education and outreach are critical components of any approach to effective codes of conduct. A research study by Brian Rappert (University of Exeter) and Malcolm Dando (University of Bradford) carried out 26 seminars for over 600 participants in university life science departments in London (6), the rest of England (13), Scotland (3), Wales (2), Northern Ireland (1), and Germany (1) showed that there was little knowledge of the BTWC or of dual-use issues in the life sciences. The situation was likely to be similar in regard to knowledge of the CWC in university natural science departments.

Case studies/examples help to demonstrate why codes matter to every element of the community engaged in science and technology using chemicals. However, specific examples need to be identified that are seen as relevant to each part of the community. The workshop recommended using positive examples first and then illustrating how misuse may occur, such as the following:

Positive examples

• New tools and techniques—microreactors
• Synthesis of new chemicals and development of new processes
• Research in the interface between traditional chemical and biological agents
• Intangible technology—the answers to the question “How did you do that?”

Negative examples

• Illicit drugs
• Aum Shinrikyo sarin attacks in the Tokyo subway
• Bhopal methyl isocyanate accident
• Chemical warfare images of Halabjah

Drafting elements for a society-level code of conduct

Consideration was given to identifying the sort of language that might be included in a code of conduct at the intermediate society level such as in a model code that might be promulgated by IUPAC to its NAOs. Such a code could start by recalling why codes are important—namely, to complement national implementing legislation for the CWC, to achieve in-depth compliance throughout academia, industry, and government, to implement the general-purpose criterion, which makes the CWC relevant to all toxic chemicals and their precursors, and to protect public health and the environment. The sequence in which these reasons might be listed in a code could well differ depending on which points were particularly relevant in a specific country.

In considering possible language for codes, the discussion group had copies of the Rigour, Respect and Responsibility code taken forward by Sir David King (UK), the American Chemical Society Code, the Royal Australian Institute Code, and the Royal Society of Chemistry code. None of these include specific mention of the CWC. Bearing these codes in mind, the discussion group considered the sort of language that might usefully appear in a society-level code.

Three considerations might be helpful in providing transition from general to specific codes relevant to implementation of the CWC:
• Extraordinary benefits to the quality of life, public health, and agriculture throughout the world are made available by the knowledge, methods, and techniques in science and technology using chemicals.

• The possible misuse of this knowledge, methods, and techniques in science and technology using chemicals places moral and ethical responsibilities on those engaged in science and technology using chemicals to ensure that their activity is aimed only at bringing benefit to humankind and the environment.

• The stewardship responsibilities of those engaged in science and technology using chemicals for sustainable development and the needs of future generations underlines the importance of complying with and supporting relevant international treaties and conventions.

Consequently, the responsibilities of all those engaged in science and technology using chemicals are to ensure that their work is, and is perceived to be, in compliance with the international treaties and national laws and regulations prohibiting chemical or biological weapons or illicit drugs and relating to banned and severely restricted chemicals, the PIC convention, POPs, the Basel Convention, etc.

These were subsequently developed into a model code of principles which might be proposed for adoption by the IUPAC Council as an IUPAC Recommendation.

Additional drafting elements were identified which might be incorporated into professional society-level codes or institutional/workplace codes:

• Acknowledge that minimizing risks from misuse of science and technology using chemicals is a responsibility of members of professional societies and the workplace.

• Recognize that personal benign intent is an insufficient justification for setting aside such responsibilities.

• Be aware of the possible misuses of science and technology using chemicals.

• Consider the direct and indirect benefits and harms of science and technology using chemicals to colleagues, their professional communities, and society at large.

• Ensure that all are knowledgeable about and comply with relevant international and national laws and regulations.

• Where inadequacies are identified in regard to existing laws and regulations, such concerns should be raised with relevant policy officials and professional organizations.

• Take actions within spheres of influence to reduce the risk of misuse of knowledge, methods, and techniques in science and technology using chemicals.

Responsibility for minimizing the risk that science and technology using chemicals may be misused is both a matter for individuals and for the professional and technical communities. Collectively, it was important to:

• Recognize that their expertise brings additional responsibility to reduce the risk that science and technology using chemicals may be misused.

• Set up procedures so that those concerned about possible misuse or perceived misuse can address such concerns and resolve them.

• Educate the members of professional and technical communities and the public about the potential for the misuse of science and technology using chemicals and how the risk of such misuse may be minimized, including through increased awareness of codes.

Subsequent activities
The considerations above for providing the transition from the general to the specific were subsequently developed into a model code of principles which might be proposed for adoption by the IUPAC Council as an IUPAC Recommendation.

In addition, the drafting elements, which might be incorporated into the society-level code or into the institutional/workplace codes, were subsequently developed into a set that might be considered for
approval and inclusion in their own codes by regional and national chemical societies and other IUPAC NAOs. These will be developed into an IUPAC Recommendation for approval by the IUPAC Council.

**Next steps**

Action is needed to take forward codes of conduct for those engaged in science and technology using chemicals. This will require concerted effort at the three levels—OPCW, IUPAC, and the National Authorities of the States Parties to the CWC.

**OPCW**

OPCW needs to give evidence of support for the IUPAC education and codes of conduct initiative that IUPAC NAOs can refer to in taking national action and approaching their National Authorities as well as other national government agencies.

The objective of the IUPAC education and codes of conduct initiative is to achieve in-depth compliance with the CWC, which complements national implementation measures. OPCW and its States Parties might adopt complementary measures to achieve in-depth compliance through education and codes, in parallel to and after completion of the follow-up to the current OPCW Action Plan on the Implementation of Article VII Obligations (National Implementation), which the Conference of the States Parties will discuss and decide on at its 10th Session in November 2005, to achieve in-depth compliance through education/outreach/codes. Such complimentary measures might be proposed by a group of like-minded States Parties and could be linked with offers of assistance in education/awareness-raising/codes to any States Parties that wished to receive such assistance.

**IUPAC**

The first step should be the preparation of an IUPAC technical report based on the model of the technical report following the IUPAC Bergen, Norway meeting in 2002. The technical report should be published in *PAC* with short reports in other appropriate IUPAC publications such as *CI*.

Further action by IUPAC should be through the NAOs and ANAOs as well as the Committee on Chemical Education (CCE). IUPAC should consider adopting a code of principles and/or providing “model” codes for adoption by NAOs and ANAOs.

**National authorities**

As the primary responsibility for the national implementation of the CWC within a State Party rests with the National Authority of the State Party, actions by NAOs and ANAOs are more likely to be effective if they work with National Authorities in engaging education and science ministries, professional associations, and trade associations to promote education and codes of conduct. There would be clear benefits from harmonization nationally across academia, industry, and government of such efforts in regard to all areas of science and technology using chemicals.

**Review of the seven Freeman questions**

The discussion group noted that in 2004, John Freeman (UK Ambassador and Chair of the 2005 BTWC meetings) circulated to the BTWC States Parties seven questions about the content, promulgation, and adoption of codes of conduct for scientists to be examined at the 2005 Geneva meetings. If “BTWC” is replaced by “CWC”, these questions are equally applicable to a code of conduct in relation to the CWC. The discussion group considered whether they had been sufficiently addressed during the OPCW/IUPAC workshop in Oxford.

1. **How can we raise awareness of the CWC provisions in the global scientific community and reinforce the responsibilities of scientists?**
   This had been addressed as the central theme of the OPCW/IUPAC Oxford workshop.

2. **Should under-graduate and post-graduate education programmes address the ethical and practical aspects of preventing the misuse of science? How can we encourage due consideration of the possible consequences of the misuse of research?**
   This had also been addressed as a central theme of the OPCW/IUPAC Oxford workshop.
3. How can we encourage universities, industry, research bodies and government to reflect CWC issues in their own in-house codes of practice and operational frameworks? Might we consider the introduction of guidance or instructions into existing structures that deal with the safety and ethics of individual experiments and research?
This had also been addressed as a central theme of the OPCW/IUPAC Oxford workshop.

4. How can we promote the proper use of science-based activities and knowledge and encourage appropriate oversight of such work?
There had been less attention given to the question of oversight. The discussion group noted the potential concern about chemicals in the mid-spectrum region between traditional chemical agents and biological agents such as calmatives and bioregulators. It was important to ensure that any work in this region was carefully considered to ensure that it was neither in breach nor perceived to be in breach of the CWC or the BTWC.

The question of national chemical defense programs was also considered. It was noted that in 2004 the OPCW adopted a format for the annual submission by States Parties of information on national protective programs. Transparency of such programs between States Parties and more widely to the public is important to demonstrate that States Parties are both compliant and perceived to be compliant with the obligations of the CWC and the BTWC.

Finally, it was noted that special attention might be given in codes for those engaged in science and technology using chemicals within government to ensure that perceptions of their activities are in compliance with international treaties and national laws and regulations.

5. Is it necessary to provide guidance on how to deal with research that throws up unexpected or unpredictable results of relevance to the CWC prohibitions?
This was another area to which less attention had been given. The discussion group considered that this was especially relevant in the mid-spectrum region between traditional chemical and biological agents and in regard to synthetic chemicals that mimic biological functions. Unexpected/unpredicted results should be addressed in codes especially at the institutional/workplace level.

6. How might we promote consideration among research and project funders of CWC issues when considering proposals, e.g., whether the research could be misused in the future and what steps might help prevent this?
This had also been addressed as a central theme of the OPCW/IUPAC Oxford workshop.

7. To whom or to what body might an individual turn if he/she suspects that someone else’s conduct is in breach of CWC prohibitions? What safeguards might there be for such individuals? And how might any malign accusations be filtered out?
This had also been addressed in the OPCW/IUPAC Oxford workshop.

It was thus evident that the OPCW/IUPAC workshop had addressed most if not all of the questions raised by Ambassador Freeman in the context of the BTWC meetings to address codes of conduct for scientists.

C. SUMMARY FINDINGS AND OBSERVATIONS

I. Chemistry Education and Outreach

1. Outreach to those engaged in science and technology using chemicals and efforts to ensure that the education of all chemists includes an awareness of the requirements and obligations of the CWC will contribute to achieving in-depth compliance within States Parties to the Convention. An informed scientific and technological community within each country can help provide advice to the States Parties and disseminate unbiased and accurate information to the public.

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2. Steps need to be taken in chemistry education both at secondary and postsecondary levels to enhance the awareness of both the benefits that science and technology using chemicals can bring and of the potential for misuse in regard to illicit drugs, chemical and biological weapons, PIC chemicals, POPs, etc.

3. Those engaged in science and technology using chemicals need to recognize their role in ensuring sustainable development and that compliance and implementation of international treaties such as the CWC and the BTWC contribute to sustainable development.

4. From the point of view of the implementation of the CWC and achieving in-depth compliance, a concerted effort is needed involving both the OPCW and the National Authorities of the States Parties and IUPAC, its NAOs and ANAOs.

5. OPCW needs to clearly endorse the education and codes initiative, which can be referred to by NAOs and ANAOs in approaching their respective National Authorities and other national ministries.

6. An IUPAC/OPCW joint project is proposed to take forward the proposed chemistry education and outreach initiative. This project will prepare a basic set of materials, such as a white paper on the CWC emphasizing the general-purpose criterion, case studies to demonstrate why education/outreach/codes are important, and a model code of ethics and supporting materials, to pilot in several countries and contexts.

7. The President of IUPAC will consider writing to students graduating in chemistry, to build enthusiasm for the profession of chemistry whilst alerting them to their responsibilities to protect health and the environment and be aware of the potential misuse of chemicals. The letter should emphasize the importance of ensuring that their activities are, and are perceived to be, in compliance with international treaties, national laws, and regulations such as those relating to illicit drugs, chemical and biological weapons, banned and severely restricted chemicals, PIC chemicals, POPs, etc. The letter, which might include a model code, could be piloted through appropriate NAOs and ANAOs or national societies that already communicate with chemistry graduates.

II. Codes of Conduct

8. Codes of conduct are needed for all those engaged in science and technology using chemicals to protect public health and the environment and to ensure that activities in science and technology using chemicals are, and are perceived to be, in compliance, with international treaties, national laws and regulations such as those relating to illicit drugs, chemical and biological weapons, banned and severely restricted chemicals, PIC chemicals, persistent organic pollutants (POPs), etc.

9. Such codes of conduct are complementary to national implementing legislation for the CWC and will help to achieve in-depth compliance throughout academia, industry, and government of those engaged in science and technology using chemicals. They will extend awareness of the general-purpose criteria of both the CWC and the BTWC and thus help ensure its effective implementation.

10. Codes of conduct might be developed in the following layers:
   • Universal principles/declarations such as those being developed by UNESCO/COMEST
   • Society codes such as those of or being developed by professional and industrial associations
   • Institutional/workplace codes such as those in or being developed by individual institutions/workplaces

   The three layers are complementary and mutually reinforcing. The approach to be adopted throughout should be to extend existing codes rather than seeking to create new codes.
11. Successful codes require the involvement of all elements of the community engaged in science and technology using chemicals to create a sense of shared ownership and increase their effectiveness. At the institutional/workplace level, creating processes in which the ethical aspects of each new piece of work is considered, would be similar to the process for health and safety risk assessments already required in many countries.

12. IUPAC should develop a model code of principles as well as draft elements for codes which might be promulgated to IUPAC NAOs and ANAOs urging them to review any existing codes to ensure these elements are included.

13. As with the chemistry education/outreach initiative, OPCW needs to clearly endorse the benefits that can arise from in-depth compliance as a result of codes of conduct for all those engaged in science and technology using chemicals. Consideration should be given to taking complementary measures to achieve in-depth compliance through education/awareness raising/codes, in parallel to and after completion of the follow-up to the current OPCW Action Plan on the Implementation of Article VII Obligations (National Implementation), which the Conference of the States Parties will consider at its 10th Session in November 2005.

REFERENCES AND NOTES

6. Participants came from the following countries: Argentina, Australia, Belgium, Canada, Croatia, Cuba, Czech Republic, Germany, India, Iran, Italy, Norway, Russia, Sweden, Switzerland, Ukraine, UK, and USA.
7. In the BTWC, the general-purpose criterion is embodied in Article I that states: Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain:

   (1) Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;

   The text in bold is the general-purpose criterion. At successive BTWC Review Conferences, the States Parties have agreed extended understanding to this prohibition. At the Fourth Review Conference in 1996, it was agreed that the Convention unequivocally covers all microbial or other biological agents or toxins, naturally or artificially created or altered, as well as their components, whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes. The extended understanding makes it clear that the prohibitions of the BTWC apply to chemicals in the mid-spectrum region between classical chemical agents and traditional biological agents.
8. Dual-use research is research which could be used for permitted or prohibited uses. This term is applicable to much work in science and technology.


**LIST OF ACRONYMS**

- **BCTDA**: British Chemical Distributors and Traders Association
- **BTWC**: Biological and Toxin Weapons Convention
- **CCE**: Committee on Chemistry Education (IUPAC)
- **CIA**: Chemical Industries Association
- **COMEST**: World Council on the Ethics of Scientific Knowledge and Technology
- **CPA**: Crop Protection Association
- **CW**: chemical weapons
- **CWC**: Chemical Weapons Convention
- **ICCA**: International Council of Chemical Associations
- **ICCE**: International Committee for Chemistry Education
- **ICRC**: International Committee of the Red Cross
- **ICSU**: International Council of Science
- **IUBMB**: International Union of Biochemistry and Molecular Biology
- **IUBS**: International Union of Biological Sciences
- **IUPAC**: International Union of Pure and Applied Chemistry
- **NAO**: National Adhering Organization (IUPAC)
- **OPCW**: Organisation for the Prohibition of Chemical Weapons
- **PIC**: prior informed consent
- **POP**: persistent organic pollutant
- **SAB**: Scientific Advisory Board of the OPCW
- **UNEP**: United Nations Environment Programme
- **UNESCO**: United Nations Educational, Scientific and Cultural Organization
- **UNITAR**: United Nations Institute for Training and Research
- **WHO**: World Health Organization
APPENDIX 1. THE CHEMICAL WEAPONS CONVENTION

Introduction

The Chemical Weapons Convention (CWC) [9] totally prohibits the development, production, acquisition, stockpiling, or retention of chemical weapons. It defines chemical weapons as meaning the following, together or separately:

(a) Toxic 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; [Emphasis added]

(b) Munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;

(c) Any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b).

The text in bold is referred to as the general-purpose criterion, which ensures that all toxic chemicals and their precursors are embraced by the Convention except where intended for purposes not prohibited under the Convention. Toxic chemicals are defined in the Convention as meaning:

Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.

All chemicals that can cause death, temporary incapacitation, or permanent harm to humans or animals are thus prohibited unless they are in types and quantities consistent with their intended uses for purposes not prohibited under the Convention, which are defined in the Convention as:

(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.

The CWC was opened for signature in January 1993 and entered into force on 29 April 1997, which was 180 days after the 65th State Party had deposited its instrument of ratification. In July 2005, the Convention has 145 States Parties [10].

Article VII of the Convention, which sets out the measures to be taken by the States Parties to implement the CWC nationally, states that:

General undertakings

1. Each State Party shall, in accordance with its constitutional processes, adopt the necessary measures to implement its obligations under this 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 undertak-
ing 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; and

(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.

2. Each State Party shall cooperate with other States Parties and afford the appropriate form of legal assistance to facilitate the implementation of the obligations under paragraph 1.

3. Each State Party, during the implementation of its obligations under this Convention, shall assign the highest priority to ensuring the safety of people and to protecting the environment, and shall cooperate as appropriate with other States Parties in this regard.

Relations between the State Party and the Organization

4. In order to fulfil its obligations under this Convention, each State Party shall designate or establish a National Authority to serve as the national focal point for effective liaison with the Organization and other States Parties. Each State Party shall notify the Organization of its National Authority at the time that this Convention enters into force for it.

5. Each State Party shall inform the Organization of the legislative and administrative measures taken to implement this Convention.

6. Each State Party shall treat as confidential and afford special handling to information and data that it receives in confidence from the Organization in connection with the implementation of this Convention. It shall treat such information and data exclusively in connection with its rights and obligations under this Convention and in accordance with the provisions set forth in the Confidentiality Annex.

7. Each State Party undertakes to cooperate with the Organization in the exercise of all its functions and in particular to provide assistance to the Technical Secretariat.

The regime that States Parties have to implement in regard to chemicals is specified in Article VI of the Convention which addresses “Activities Not Prohibited under this Convention”. The key requirement is stated in paragraph 2 that:

2. Each State Party shall 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.

The Convention in its Annex on Chemicals assigns chemicals judged to present a risk to the Convention into three Schedules according to the following criteria:
Guidelines for Schedule 1

1. The following criteria shall be taken into account in considering whether a toxic chemical or precursor should be included in Schedule 1:

   (a) It has been developed, produced, stockpiled or used as a chemical weapon as defined in Article II;

   (b) It poses otherwise a high risk to the object and purpose of this Convention by virtue of its high potential for use in activities prohibited under this Convention because one or more of the following conditions are met:

      (i) It possesses a chemical structure closely related to that of other toxic chemicals listed in Schedule 1, and has, or can be expected to have, comparable properties;

      (ii) It possesses such lethal or incapacitating toxicity as well as other properties that would enable it to be used as a chemical weapon;

      (iii) It may be used as a precursor in the final single technological stage of production of a toxic chemical listed in Schedule 1, regardless of whether this stage takes place in facilities, in munitions or elsewhere;

   (c) It has little or no use for purposes not prohibited under this Convention.

Guidelines for Schedule 2

2. The following criteria shall be taken into account in considering whether a toxic chemical not listed in Schedule 1 or a precursor to a Schedule 1 chemical or to a chemical listed in Schedule 2, part A, should be included in Schedule 2:

   (a) It poses a significant risk to the object and purpose of this Convention because it possesses such lethal or incapacitating toxicity as well as other properties that could enable it to be used as a chemical weapon;

   (b) It may be used as a precursor in one of the chemical reactions at the final stage of formation of a chemical listed in Schedule 1 or Schedule 2, part A;

   (c) It poses a significant risk to the object and purpose of this Convention by virtue of its importance in the production of a chemical listed in Schedule 1 or Schedule 2, part A;

   (d) It is not produced in large commercial quantities for purposes not prohibited under this Convention.

Guidelines for Schedule 3

3. The following criteria shall be taken into account in considering whether a toxic chemical or precursor, not listed in other Schedules, should be included in Schedule 3:

   (a) It has been produced, stockpiled or used as a chemical weapon;

   (b) It poses otherwise a risk to the object and purpose of this Convention because it possesses such lethal or incapacitating toxicity as well as other properties that might enable it to be used as a chemical weapon;
(c) It poses a risk to the object and purpose of this Convention by virtue of its importance in the production of one or more chemicals listed in Schedule 1 or Schedule 2, part B;

(d) It may be produced in large commercial quantities for purposes not prohibited under this Convention.
DRAFT CONVENTION ON THE PREVENTION AND PUNISHMENT OF THE CRIME OF DEVELOPING, PRODUCING, ACQUIRING, STOCKPILING, RETAINING, TRANSFERRING OR USING BIOLOGICAL OR CHEMICAL WEAPONS

PREAMBLE

The States Parties to this Convention,

Recalling that States are prohibited by the Geneva Protocol of 1925, the Biological Weapons Convention of 1972 and the Chemical Weapons Convention of 1993, and other international agreements, from developing, producing, stockpiling, acquiring, retaining, transferring or using biological and chemical weapons, and that these prohibitions reflect a worldwide norm against these weapons;

Recognizing that any development, production, acquisition or use of biological or chemical weapons is the result of the decisions and actions of individual persons, including government officials, and that these activities are within the capability not only of States but also of other entities and of individuals;

Affirming that all persons and entities should be prohibited from engaging in these activities, and should be subject to effective penal sanctions, thereby enhancing the effectiveness of the Geneva Protocol, the Biological Weapons Convention and the Chemical Weapons Convention;

Reaffirming that any use of disease or poison for hostile purposes is repugnant to the conscience of humankind;

Considering that biological and chemical weapons pose a threat to the well-being of all humanity and to future generations;

Resolving that knowledge and achievements in biology, chemistry and medicine should be used exclusively for the health and well-being of humanity;

Desiring to encourage the peaceful and beneficial advance and application of these sciences by protecting them from adverse consequences that would result from their hostile exploitation;

Determined, for the sake of human beings everywhere and of future generations, to eliminate the threat of biological and chemical weapons;

Have agreed as follows:
ARTICLE I

1. Any person commits an offence who knowingly:

(a) develops, produces, otherwise acquires, stockpiles or retains any biological or chemical weapon, or transfers, directly or indirectly, to anyone, any biological or chemical weapon;

(b) uses any biological or chemical weapon;

(c) engages in preparations to use any biological or chemical weapon;

(d) constructs, acquires or retains any facility intended for the production of biological or chemical weapons;

(e) assists, encourages or induces, in any way, anyone to engage in any of the above activities;

(f) orders or directs anyone to engage in any of the above activities;

(g) attempts to commit any of the above offences;

(h) threatens to use biological or chemical weapons.

ARTICLE II

1. Nothing in this Convention shall be construed as prohibiting activities that are permitted under:

(a) the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, of 10 April 1972, or

(b) the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, done at Paris on 13 January 1993, or that are directed toward the fulfillment of a State's obligations under either Convention and are conducted in accordance with its provisions.

2. In a prosecution for an offence set forth in Article I, it shall be a defense that the accused person reasonably believed that the conduct in question was not prohibited under this Convention.

3. It is not a defense that a person charged with an offence set forth in Article I acted in an official capacity, under the orders or instructions of a superior, or otherwise in accordance with internal law.

ARTICLE III

For the purposes of the present Convention:
1. **Biological weapons** means:
   (a) microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;
   (b) weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

2. **Chemical weapons** means the following, together or separately:
   (a) toxic chemicals and their precursors, except where intended for:
      (i) industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;
      (ii) protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons;
      (iii) 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;
      (iv) law enforcement including domestic riot control purposes,
   as long as the types and quantities are consistent with such purposes.
   (b) munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;
   (c) any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b).

3. **Toxic chemical** means any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.

4. **Precursor** means any chemical reactant which takes part at any stage in the production by whatever method of a toxic chemical. This includes any key component of a binary or multi component chemical system, that is to say, the precursor which plays the most important role on determining the toxic properties of the final product and reacts rapidly with other chemicals in the binary or multi component system.

5. **Person** means any natural person or, to the extent consistent with internal law as to criminal responsibility, any legal entity.

**ARTICLE IV**

Each State Party shall adopt such measures as may be necessary:

(a) to establish as criminal offences under its internal law the offences set forth in Article I;
(b) to make those offences punishable by appropriate penalties which take into account their grave nature.

ARTICLE V

1. Each State Party to this Convention shall take such measures as may be necessary to establish its jurisdiction over the offences set forth in Article I in the following cases:

(a) when the offence was committed in the territory of that State or in any other place under its jurisdiction as recognized by international law;

(b) when the alleged offender is a national of that State;

(c) when, if that State considers it appropriate, the alleged offender is a stateless person whose habitual residence is in its territory;

(d) when the offence was committed with intent to harm that State or its nationals or to compel that State to do or abstain from doing any act;

(e) when the offence involved the intentional use of biological or chemical weapons and a victim of the offence was a national of that State;

(f) when the offence involved the intentional use of biological or chemical weapons against any persons, irrespective of their nationality.

2. Each State Party shall likewise take such measures as may be necessary to establish its jurisdiction over the offences set forth in Article I in cases where the alleged offender is present in its territory and it does not extradite such person pursuant to Articles VII and VIII.

3. This Convention does not exclude any criminal jurisdiction exercised in accordance with internal law, including any internal law giving effect to Article I.

4. Jurisdiction with respect to the offences set forth in Article I may also be exercised by any international criminal court that may have jurisdiction in the matter in accordance with its Statute.

ARTICLE VI

1. Upon receiving information that a person who has committed or who is alleged to have committed an offence as set forth in Article I may be present in its territory, a State Party shall take such measures as may be necessary under its internal law to investigate the facts contained in the information.

2. If it is satisfied that the circumstances so warrant, a State Party in the territory of which an alleged offender is present shall take that person into custody or shall take such other measures as are necessary to ensure the presence of that person for the purpose of prosecution or extradition.

3. Any person regarding whom the measures referred to in paragraph 2 are being taken shall be entitled to:

(a) communicate without delay with the nearest appropriate representative of the State of which that person is a national or which is otherwise entitled to protect that person's rights or,
if that person is a stateless person, the State in the territory of which that person habitually resides;

(b) be visited by a representative of that State;

(c) be informed of that person's rights under subparagraphs (a) and (b).

4. The rights referred to in paragraph 3 shall be exercised in conformity with the laws and regulations of the State in the territory of which the offender or alleged offender is present, provided that the said laws and regulations must enable full effect to be given to the purposes for which the rights accorded under paragraph 3 are intended.

5. When a State Party, pursuant to the present Article, has taken a person into custody, it shall promptly notify, directly or through the Secretary-General of the United Nations, the States Parties which have established jurisdiction in accordance with Article V, paragraph 1, subparagraphs (a) through (e), and, if it considers it advisable, any other interested States Parties, of the fact that such person is in custody and of the circumstances which warrant that person's detention. The State which makes the investigation contemplated in paragraph 1 of the present Article shall promptly inform those States Parties of its findings and shall indicate whether it intends to exercise jurisdiction.

ARTICLE VII

1. The offences set forth in Article I shall be deemed to be included as extraditable offences in any extradition treaty existing between States Parties. States Parties undertake to include those offences as extraditable offences in every extradition treaty subsequently concluded between them.

2. If a State Party which makes extradition conditional on the existence of a treaty receives a request for extradition from another State Party with which it has no extradition treaty, it may, if it decides to extradite, consider this Convention as the legal basis for extradition in respect of the offences set forth in Article I. Extradition shall be subject to the other conditions provided by the law of the requested State.

3. States Parties which do not make extradition conditional on the existence of a treaty shall recognize the offences set forth in Article I as extraditable offences as between themselves subject to the conditions provided by the law of the requested State.

4. The offences set forth under Article I shall be treated, for the purpose of extradition between States Parties, as if they had been committed not only in the place in which they occurred but also in the territories of the States required to establish their jurisdiction in accordance with paragraph 1, subparagraphs (a) through (e) of Article V.

5. The provisions of all extradition treaties and arrangements between States Parties with regard to offences set forth in Article I shall be deemed to be modified as between State Parties to the extent that they are incompatible with this Convention.

ARTICLE VIII

The State Party in the territory of which the alleged offender is found shall, if it does not extradite such person, be obliged, without exception whatsoever and whether or not the offence was committed in its territory, to submit the case without delay to competent authorities for the purpose of prosecution, through proceedings in accordance with the laws of
that State. Those authorities shall take their decision in the same manner as in the case of any other offence of a grave nature under the law of that State.

**ARTICLE IX**

1. States Parties shall afford one another the greatest measure of assistance in connection with investigations or criminal or extradition proceedings brought in respect of the offences set forth in Article I, including assistance in obtaining evidence at their disposal which is necessary for the proceedings.

2. States Parties shall carry out their obligations under paragraph 1 in conformity with any treaties or other arrangements on mutual legal assistance that may exist between them. In the absence of such treaties or arrangements, States Parties shall afford one another assistance in accordance with their internal law.

3. States Parties may request technical assistance from competent international bodies in connection with investigations or criminal or extradition proceedings brought in respect of the offences set forth in Article I.

**ARTICLE X**

None of the offences set forth in Article I shall be regarded, for the purposes of extradition or mutual legal assistance, as a political offence or as an offence connected with a political offence or as an offence inspired by political motives. Accordingly, a request for extradition or for mutual legal assistance based on such an offence may not be refused on the sole ground that it concerns a political offence or an offence connected with a political offence or an offence inspired by political motives.

**ARTICLE XI**

Nothing in this Convention shall be interpreted as imposing an obligation to extradite or to afford mutual legal assistance, if the requested State Party has substantial grounds for believing that the request for extradition for offences set forth in Article I or for mutual legal assistance with respect to such offences has been made for the purpose of prosecuting or punishing a person on account of that person’s race, religion, nationality, ethnic origin or political opinion or that compliance with the request would cause prejudice to that person’s position for any of these reasons.

**ARTICLE XII**

States Parties shall cooperate in the prevention of the offences set forth in Article I, particularly by:

(a) taking all practicable measures to prevent preparations in their respective territories for the commission of those offences within or outside their territories;

(b) exchanging information and coordinating the taking of administrative and other measures as appropriate to prevent commission of those offences.
ARTICLE XIII

1. Each State Party shall inform the Secretary-General of the United Nations of the legislative and administrative measures taken to implement this Convention. In particular, each State Party shall notify the Secretary-General of the United Nations of the jurisdiction it has established under its internal law in accordance with paragraph 3 of Article V. Should any change take place, the State Party concerned shall immediately notify the Secretary-General.

2. Each State Party shall, in accordance with its national law, promptly provide to the Secretary-General of the United Nations any relevant information in its possession concerning:

(a) the circumstances of any offence over which it has established its jurisdiction pursuant to paragraph 1 or paragraph 3 of Article V;

(b) the measures taken in relation to the alleged offender, and, in particular, the results of any extradition proceedings or other legal proceedings.

3. The State Party where an alleged offender is prosecuted shall communicate the final outcome of the proceedings to the Secretary-General of the United Nations, who shall transmit the information to the other States Parties.

4. Each State Party shall designate a contact point within its government to which other States Parties may communicate in matters relevant to this Convention. Each State Party shall make such designation known to the Secretary-General.

ARTICLE XIV

Any dispute between States Parties concerning the interpretation or application of this Convention which is not settled by negotiation shall, at the request of one of them, be submitted to arbitration. If within six months from the date of the request for arbitration the parties are unable to agree on the organization of the arbitration, any one of those parties may refer the dispute to the International Court of Justice.

ARTICLE XV

1. Ten years after the entry into force of this Convention, or earlier if it is requested by a majority of Parties to the Convention by submitting a proposal to this effect to the Secretary-General of the United Nations, a Conference of States Parties shall be held at [Geneva, Switzerland], to review the operation of the Convention with a view to assuring that the purposes of the preamble and the provisions of the Convention are being realized.

2. At intervals of seven years thereafter, unless otherwise decided upon, further sessions of the Conference may be convened with the same objective.

ARTICLE XVI

1. This Convention shall be open for signature by all States from [DATE] until [DATE] at United Nations Headquarters in New York.
2. This Convention is subject to ratification, acceptance or approval. The instruments of ratification, acceptance or approval shall be deposited with the Secretary-General of the United Nations.

3. This Convention shall be open to accession by any State. The instruments of accession shall be deposited with the Secretary-General of the United Nations.

ARTICLE XVII

1. This Convention shall enter into force on the thirtieth day following the date of the deposit of the [NUMBER] instrument of ratification, acceptance, approval or accession with the Secretary-General of the United Nations.

2. For each State ratifying, accepting, approving or acceding to the Convention after the deposit of the [NUMBER] instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the thirtieth day after deposit by such State of its instrument of ratification, acceptance, approval or accession.

ARTICLE XVIII

The Articles of this Convention shall not be subject to reservation.

ARTICLE XIX

The original of this Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations, who shall send certified copies thereof to all States.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed this Convention, opened for signature at United Nations Headquarters in New York on [DATE].

The above draft of the proposed convention was prepared during 8-9 August 1998 by a working group consisting of James Crawford (Cambridge University), John Dugard (Leiden University), Philip Heymann (Harvard University), Matthew Meselson (Harvard University) and Julian Robinson (University of Sussex). It was developed from earlier drafts discussed at Harvard Sussex workshops on criminalizing biological and chemical weapons held during 13-14 January 1996 at Harvard University and 1-2 May 1998 at the Lauterpacht Research Centre for International Law at Cambridge University. See The CBW Conventions Bulletin, issue number 42, December 1998.
Workshop Participants, Lauterpacht Research Centre for International Law, University of Cambridge, 1-2 May 1998 (all participated in their personal capacities)

Dr. Awn Al-Khasawneh, Member, International Law Commission. Amman, Jordan

Professor Igor Blichtchenko, Faculty of Law, Peoples’ Friendship University of Russia. Moscow, Russia

Kathleen Corken, Senior Trial Attorney, Terrorism and Violent Crime Section, Justice Department. Washington, DC, USA

Professor James Crawford, Director, Lauterpacht Research Centre for International Law; Member, International Law Commission. Cambridge, UK

Mr. Rajesh De, Harvard Law School, Cambridge, USA

Professor John Dugard, University of Witwatersrand; Member, International Law Commission. Johannesburg, South Africa

Ambassador Rolf Ekeus, Ambassador of Sweden to the US; Executive Chairman of the United Nations Special Commission for Iraq, 1991-1997. Washington, DC, USA

Professor Philip Heymann, Harvard Law School; Deputy Attorney General, Department of Justice, 1993-94. Cambridge, MA, USA

Dr. Marie Jacobsson, Deputy Director, Division for International Law and Human Rights, Ministry for Foreign Affairs. Stockholm, Sweden

Mr. Stuart Maslen, Legal Advisor to the Mines/Arms Unit, International Committee of the Red Cross. Geneva, Switzerland

Dame Anne McLaren, Wellcome / CRC Institute of Cancer and Developmental Biology. Cambridge, UK

Professor Matthew Meselson, Co-Director, Harvard Sussex Program; Department of Molecular & Cellular Biology, Harvard University. Cambridge, MA, USA

Mr. Paul O’Sullivan, Minister and Deputy Chief of Mission, Embassy of Australia. Washington, DC, USA

Dr. Graham Pearson, Director, Chemical & Biological Defence Establishment, Porton Down, 1984-95; HSP Advisory Board. Wiltshire, UK

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Mr. Justin Smith, US Courthouse. Washington, DC, USA

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Free Executive Summary

Globalization, Biosecurity, and the Future of the Life Sciences

Committee on Advances in Technology and the Prevention of Their Application to Next Generation Biowarfare Threats, National Research Council


This free executive summary is provided by the National Academies as part of our mission to educate the world on issues of science, engineering, and health. If you are interested in reading the full book, please visit us online at http://www.nap.edu/catalog/11567.html. You may browse and search the full, authoritative version for free; you may also purchase a print or electronic version of the book. If you have questions or just want more information about the books published by the National Academies Press, please contact our customer service department toll-free at 888-624-8373.

The risks posed by bioterrorism and the proliferation of biological weapons capabilities have increased concern about how the rapid advances in genetic engineering and biotechnology could enable the production of biological weapons with unique and unpredictable characteristics. This report examines current trends and future objectives of research in public health, life sciences, and biomedical science that contain applications relevant to developments in biological weapons 5 to 10 years into the future and ways to anticipate, identify and mitigate these dangers.

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Executive Summary

Knowledge, materials, and technologies with applications to the life sciences enterprise are advancing with tremendous speed, making it possible to identify and manipulate features of living systems in ways never before possible. On a daily basis and in laboratories around the world, biomedical researchers are using sophisticated technologies to manipulate microorganisms in an effort to understand how microbes cause disease and to develop better preventative and therapeutic measures against these diseases. Plant biologists are applying similar tools in their studies of crops and other plants in an effort to improve agricultural yield and explore the potential for the use of plants as inexpensive manufacturing platforms for vaccine, antibody, and other products. Similar efforts are underway with animal husbandry. Scientists and engineers in many fields are relying on continuing advances in the life sciences to identify pharmaceuticals for the treatment of cancer and other chronic diseases, develop environmental remediation technologies, improve biodefense capabilities, and create new materials and even energy sources.

Moreover, other fields not traditionally viewed as biotechnologies—such as materials science, information technology, and nanotechnology—are becoming integrated and synergistic with traditional biotechnologies in extraordinary ways enabling the development of previously unimaginable technological applications. It is undeniable that this new knowledge and these advancing technologies hold enormous potential to improve public health and agriculture, strengthen national economies, and close
the development gap between resource-rich and resource-poor countries. However, as with all scientific revolutions, there is a potential dark side to the advancing power and global spread of these and other technologies. For millennia, every major new technology has been used for hostile purposes, and most experts believe it naive to think that the extraordinary growth in the life sciences and its associated technologies might not similarly be exploited for destructive purposes.

This is true despite formal prohibitions against the use of biological weapons and even though, since antiquity, humans have reviled the use of disease-causing agents for hostile purposes. In its most recent unclassified report on the future global landscape, the National Intelligence Council predicted that a major terrorist attack employing biological agents will likely occur by 2020, although it suggested that most future (i.e., over the course of the next 15 years) terrorist attacks are expected to involve conventional weapons. Official U.S. statements continue to cite around a dozen countries that are believed to have or to be pursuing a biological weapons capability. In addition to the efforts by terrorists or states with malevolent intent, we must be concerned about the grave harm that may result from misuse of the life sciences and related technologies by individuals or groups that are simply careless or irresponsible.

The continuing threat of bioterrorism, coupled with the global spread of expertise and information in biotechnology and biological manufacturing processes, has raised concerns about how advancing technological prowess could enable the creation and production of new threats of biological origin possessing unique and dangerous but largely unpredictable characteristics. The Committee on Advances in Technology and the Prevention of Their Application to Next Generation Biowarfare Threats, an ad hoc committee of the National Research Council and the Institute of Medicine, was constituted to examine current trends and future objectives of research in the life sciences, as well as technologies convergent with the life sciences enterprise from other disciplines, such as materials science and nanotechnology, that may enable the development of a new generation of biological threats over the next five to ten years, with the aim of identifying ways to anticipate, identify, and mitigate these dangers.

Specifically, the charge to the committee was to:

1. Examine current scientific trends and the likely trajectory of future research activities in public health, life sciences, and biomedical and materials science that contain applications relevant to the development of “next generation” agents of biological origin five to ten years into the future.
2. Evaluate the potential for hostile uses of research advances in ge-
netic engineering and biotechnology that will make biological agents more potent or damaging. Included in this evaluation will be the degree to which the integration of multiple advancing technologies over the next five to ten years could result in a synergistic effect.

3. Identify the current and potential future capabilities that could enable the ability of individuals, organizations, or countries to identify, acquire, master, and independently advance these technologies for both beneficial and hostile purposes.

4. Identify and recommend the knowledge and tools that will be needed by the national security, biomedical science, and public health communities to anticipate, prevent, recognize, mitigate, and respond to the destructive potential associated with advancing technologies.

This report is part of a larger body of work that the National Academies has undertaken in recent years on science and security and the contributions that science and technology could make to countering terrorism, beginning with Scientific Communication and National Security in 1982 and continuing with Chemical and Biological Terrorism: Research and Development to Improve Civilian Medical Responses (1999), Firepower in the Lab: Automation in the Fight Against Infectious Diseases and Bioterrorism (2001), Making the Nation Safer: The Role of Science and Technology in Countering Terrorism (2002), Biological Threats and Terrorism: Assessing the Science and Response Capabilities (2002), and Countering Agricultural Terrorism (2002). Most recently and of particular relevance to this report is the National Research Council report Biotechnology Research in an Age of Terrorism (2004).

The principal difference between that report and the present report is that the former revolves around issues pertaining to the regulatory oversight of research employing biotechnology and the flow of scientific knowledge derived from the use of biotechnology, with a focus on the United States. In contrast, this report adopts a more global perspective, addressing the increasing pace of advances in the life sciences and related convergent technologies likely to alter the biological threat spectrum over the next five to ten years and broadly considering ways to prevent or mitigate the consequences of malevolent exploitation or naïve misapplication of these technologies.

While many readers might hope to find a well-defined, prioritized list or set of lists of future threats, the pace of research discovery in the life sciences is such that the useful lifespan of any such list would likely be measured in months, not years. Instead, the committee sought to define more broadly how continuing advances in life sciences technologies could contribute to the development of novel biological weapons and to develop a logical framework for analysts to consider as they evaluate the evolving technology threat spectrum. The committee concluded that there
are classes or categories of advances that share important features relevant to their potential to contribute to the future development of new biological weapons. These shared characteristics are based on common purposes, common conceptual underpinnings, and common technical enabling platforms. Thinking of technologies within this framework should help in evaluating the potential they present for beneficial and destructive applications or technological surprise(s).

The committee classified new technologies according to a scheme organized around four groupings: (1) technologies that seek to acquire novel biological or molecular diversity; (2) technologies that seek to generate novel but pre-determined and specific biological or molecular entities through directed design; (3) technologies that seek to understand and manipulate biological systems in a more comprehensive and effective manner; and (4) technologies that seek to enhance production, delivery, and "packaging" of biologically active materials. This classification scheme highlights commonalities among technologies and, by so doing, draws attention to critical enabling features; provides insight into some of the drivers behind life sciences-related technologies; facilitates predictions about future emerging technologies; and lends insight into the basis for complementarities or synergies among technologies and, as such, facilitates the analysis of interactions that lead to either beneficial or potentially malevolent ends.

To a considerable extent, new advances in the life sciences and related technologies are being generated not just domestically but also internationally. The preeminent position that the United States has enjoyed in the life sciences has been dependent upon the flow of foreign scientific talent to its shores and is now threatened by the increasing globalization of science and the international dispersion of a wide variety of related technologies. The increasing pace of scientific discovery abroad and the fact that the United States may no longer hold a monopoly on these leading technologies means that this country is, as never before, dependent on international collaboration, a theme that is explored in depth in Chapter 2.

Foreign scientific exchange is an integral and essential component of the culture of science. The training of scientists from other countries in the United States has played an important role in fostering these interactions and has contributed substantially to the productivity of the American scientific enterprise. It has, however, been threatened recently by increased scrutiny of visa applications as well as the growing attractiveness of science and technology training opportunities outside of the United States. As technological growth becomes increasingly dependent on the global commons, international scientific exchanges and collaborations become an ever more vital component of U.S. technological capacity, including
biodefense technological capacity. Weakening this link by prohibiting or discouraging bi-directional foreign scientific exchange—including the engagement of foreign students and scientists in U.S. laboratories, meetings, and business enterprises—could impede scientific and technological growth and have counterproductive, unintended consequences for the biodefense research and development enterprise.

Although this Report is concerned with the evolution of scientific and technological capabilities over the next five to ten years with implications for next-generation threats, it is clear that today’s capabilities in the life sciences and related technologies have already changed the nature of the biothreat “space.” The accelerating pace of discovery in the life sciences has fundamentally altered the threat spectrum. The immune, neurological, and endocrine systems are particularly vulnerable to disruption by manipulation of bioregulators. Some experts contend that bioregulators, which are small, biologically active compounds, pose an increasingly apparent dual-use risk. This risk is magnified by improvements in targeted delivery technologies that have made the potential dissemination of these compounds much more feasible than in the past.

The viruses, microbes, and toxins listed as “select agents” or “category A/B/C agents” and on which U.S. biodefense research and development activities are so strongly focused today are just one aspect of the changing landscape of threats. Although some of them may be the most accessible or apparent threat agents to a potential attacker, particularly one lacking a high degree of technical expertise, this situation is likely to change as a result of the increasing globalization and international dispersion of the most cutting-edge aspects of life sciences research.

The committee concluded that a broad array of mutually reinforcing actions are required to successfully manage the threats that face society. These must be implemented in a manner that engages a wide variety of communities that share stakes in the outcome. As in fire prevention, where the best protection against the occurrence of and damage from catastrophic fires comprises a multitude of interacting preventive and mitigating actions (e.g., fire codes, smoke detectors, sprinkler systems, fire trucks, fire hydrants, and fire insurance) rather than any single “best” but impractical or improbable measure (e.g., stationing a fire truck on every block), the same is true here. The committee, therefore, envisions a broad-based, intertwined network of steps—a web of protection—for reducing the likelihood that the technologies discussed in this report will be used successfully for malevolent purposes. It believes that the actions suggested in its recommendations (Box ES-1), taken in aggregate, will likely decrease the risk of inappropriate application or unintended misuse of these increasingly widely available technologies.
BOX ES-1 Recommendations

1. The committee endorses and affirms policies and practices that, to the maximum extent possible, promote the free and open exchange of information in the life sciences.

   1a. Ensure that, to the maximum extent possible, the results of fundamental research remain unrestricted except in cases where national security requires classification, as stated in National Security Decision Directive 189 (NSDD-189) and endorsed more recently by a number of groups and organizations.

   1b. Ensure that any biosecurity policies or regulations implemented are scientifically sound and are likely to reduce risks without unduly hindering progress in the biological sciences and associated technologies.

   1c. Promote international scientific exchanges and the training of foreign scientists in the United States.

2. The committee recommends adopting a broader perspective on the “threat spectrum.”

   2a. Recognize the limitations inherent in any agent-specific threat list and consider instead the intrinsic properties of pathogens and toxins that render them a threat and how such properties have been or could be manipulated by evolving technologies.

   2b. Adopt a broadened awareness of threats beyond the classical “select agents” and other pathogenic organisms and toxins, so as to include, for example, approaches for disrupting host homeostatic and defense systems and for creating synthetic organisms.

3. The committee recommends strengthening and enhancing the scientific and technical expertise within and across the security communities.

   3a. Create by statute an independent science and technology advisory group for the intelligence community.

   3b. The best available scientific expertise and knowledge should inform the concepts, plans, activities, and decisions of the intelligence, law enforcement, homeland security, and public policy communities and the national political leadership about advancing technologies and their potential impact on the development and use of future biological weapons.
EXECUTIVE SUMMARY

3c. Build and support a robust and sustained cutting-edge analytical capability for the life sciences and related technologies within the national security community.

3d. Encourage the sharing and coordination, to the maximum extent possible, of future biological threat analysis between the domestic national security community and its international counterparts.

4. The committee recommends the adoption and promotion of a common culture of awareness and a shared sense of responsibility within the global community of life scientists.

4a. Recognize the value of formal international treaties and conventions, including the 1972 Biological and Toxin Weapons Convention (BWC) and the 1993 Chemical Weapons Convention (CWC).

4b. Develop explicit national and international codes of ethics and conduct for life scientists.

4c. Support programs promoting beneficial uses of technology in developing countries.

4d. Establish globally distributed, decentralized, and adaptive mechanisms with the capacity for surveillance and intervention in the event of malevolent applications of tools and technologies derived from the life sciences.

5. The committee recommends strengthening the public health infrastructure and existing response and recovery capabilities.

5a. Strengthen response capabilities and achieve greater coordination of local, state, and federal public health agencies.

5b. Strengthen efforts related to the early detection of biological agents in the environment and early population-based recognition of disease outbreaks, but deploy sensors and other technologies for environmental detection only when solid scientific evidence suggests they are effective.

5c. Improve the capabilities for early detection of host exposure to biological agents, and early diagnosis of the diseases they cause.

5d. Provide suitable incentives for the development and production of novel classes of preventative and therapeutic agents with activity against a broad range of biological threats, as well as flexible, agile, and generic technology platforms for the rapid generation of vaccines and therapeutics against unanticipated threats.
Recommendation 1

The committee endorses and affirms policies and practices that, to the maximum extent possible, promote the free and open exchange of information in the life sciences.

Overall, society has gained from advances in the life sciences because of the open exchange of data and concepts. The many ways that biological knowledge and its associated technologies have improved and can continue to improve biosecurity, health, agriculture, and other life sciences industries are highlighted in Chapter 2. Conversely, restrictive regulations and the imposition of constraints on the flow of information are not likely to reduce the risks that advances in the life sciences will be utilized with malevolent intent in the future. In fact, they will make it more difficult for civil society to protect itself against such threats and ultimately are likely to weaken national and human security. Such regulations and constraints would also limit the tremendous potential for continuing advances in the life sciences and its related technologies to improve health, provide secure sources of food and energy, contribute to economic development in both resource-rich and resource-poor parts of the world, and enhance the overall quality of human life.

The potential to develop effective countermeasures against biological threats is strongly enhanced by the nation’s leadership position in the life sciences. However, implementation of the regulatory regime imposed by the PATRIOT and Bioterrorism Response acts on the life sciences community has raised concerns that qualified individuals may be discouraged from conducting biomedical and agricultural research of value to the United States for a variety of reasons. Moreover, many features of these statutes are considered unlikely to be effective in accomplishing their desired effect—limiting access to select agents by would-be terrorists—and may, in fact, lead to unintended consequences.

Recommendation 2

The committee recommends adopting a broader perspective on the “threat spectrum.”

U.S. national biodefense programs currently focus on a relatively small number of specific agents or toxins, chosen as priorities in part because of their history of development as candidate biological weapons agents by some countries during the 20th century. The committee believes that a much broader perspective on the “threat spectrum” is needed. Recent advances in understanding the mechanisms of action of bioregulatory compounds, signaling processes, and the regulation of human gene expression—combined with advances in chemistry, synthetic biology,
nanotechnology, and other technologies—have opened up new and exceedingly challenging frontiers of concern.

The limitations of the current select agent lists, and indeed any list, point to the need for a broadened awareness of the threat spectrum. Mechanisms must be put in place to ensure regular and deliberate reassessments of advances in science and technology and identification of those advances with the greatest potential for changing the nature of the threat spectrum. The process of identifying potential threats needs to be improved. This process needs to incorporate newer scientific methodologies that permit more rigorous assessment of net overall risks. Rather than adopting a static perspective, it will be important to identify and continually reassess the degree to which scientific advances or current or future biological “platforms” hold the potential for being put to use by potential adversaries. This will require the engagement of the scientific community in new ways and an expansion of the science and technology expertise available to the intelligence community.

**Recommendation 3**

The committee recommends strengthening and enhancing the scientific and technical expertise within and across the security communities.

A sound defense against misuse of the life sciences and related technologies is one that anticipates future threats that result from misuse, one that seeks to understand the origins of these threats, and one that strives to preempt the misuse of science and technology. It would be tragic if society failed to consider, on a continuing basis, the nature of future biological threats, using the best available scientific expertise, and did not make a serious effort to identify possible methods for averting such threats. Interdiction and prevention of malevolent acts are far more appealing than treatment and remediation. The committee, therefore, urges a proactive, anticipatory perspective and action plan for the national and international security communities.

There are several existing problems within the national security community and national political leadership related to the task of anticipating future biological threats. First, these groups have not developed the kinds of working relationships with the “outside” (non-governmental) science and technology communities that are needed (and are feasible). Second, “inside” groups (national security community and national political leadership) have been unable to establish and maintain the breadth, depth, and currency of knowledge and subject matter expertise in the life sciences and related technologies that are needed. The number of analysts in the national security community that have professional training in the life
sciences and related technologies is small and insufficient; these analysts lose touch with the cutting edge of science and technology over time and tend to be moved from position to position, preventing them from developing any particular depth of expertise and experience. To the degree that the right kinds of expertise do exist in the analysis sectors, they do not adequately penetrate the intelligence collection process, and the expertise is distributed unevenly across these inside communities without sufficient coordination and integration. Moreover, intelligence assessments are not always shared among the different member agencies of the national security community. Finally, historical, political, and cultural barriers have prevented the national security community from working closely with counterparts from other nations and regions of the world. Yet the life sciences and related technologies are globally distributed in a seamless fashion, and future threats that arise from this science and technology will be globally distributed as well.

The committee, therefore, recommends the creation of an independent advisory group that would work closely with the national security community for the purpose of anticipating future biological threats based on an analysis of the current and future science and technology landscape, and current intelligence. In proposing the creation of this group, the committee supports Recommendation 13.1 of The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction (March 31, 2005) that suggests the creation of a similar group, which they named the Biological Sciences Advisory Group. While the committee is mindful of the recent creation of the National Science Advisory Board for Biosecurity (NSABB) by the secretary of the U.S. Department of Health and Human Services, the current charter of the NSABB does not provide for the critical anticipatory and analytical functions that the committee envisions this new advisory group should provide to the intelligence community.

While the exact structure and specific charge of the entity that might fill this role are beyond the purview of this committee, the committee believes that the features of the advisory group, described in more detail in Chapter 4, will address critical unmet needs.

**Recommendation 4**

The committee recommends the adoption and promotion of a common culture of awareness and a shared sense of responsibility within the global community of life scientists.

The 1972 Biological and Toxin Weapons Convention (BWC) and the 1993 Chemical Weapons Convention (CWC) serve as cornerstones of the global biological-chemical regime, which has expanded to include rules
and procedures rooted in measures ancillary to the two treaties. The biological-chemical regime as it currently exists—including the BWC, CWC, Australia Group, Security Council Resolution (SCR) 1540, and other measures—must be recognized for its positive contributions and placed within the overall array of measures taken to prevent biological warfare. Such international conventions should not be considered the solution to the issues society confronts today with respect to potential harmful use of advances in the life sciences, nor should they be cast aside and ignored. Despite their limitations, the committee appreciates their value in articulating international norms of behavior and conduct and suggests that these conventions serve as a basis for future international discussions and collaborative efforts to address and respond to the proliferation of biological threats.

The committee also appreciates the potential for codes of conduct or codes of ethics to mitigate the risk that advances in the life sciences might be applied to the development or dissemination of biological weapons. The committee concluded that the primary effect of such codes would be to create an enabling environment that would facilitate the recognition of potentially malevolent behavior (i.e., experiments aimed at purposefully developing potential weapons of biological origin) or potentially inappropriate experiments that might unwittingly promote the creation of a more dangerous infectious agent. The committee also recognized that such codes could generally be expected to achieve their desired effect only when reinforced by a substantial educational effort and appropriate role modeling on the part of scientific leaders. The “informal curriculum” probably drives what students learn and emulate more powerfully than the formal curriculum. Identifying, celebrating, and rewarding senior scientists who through word and deed serve as role models in preventing the malicious application of advances in biotechnology is perhaps the most important element in creating an environment that enables ethical and appropriate behavior.

The committee also envisions the establishment of a decentralized, globally distributed, network of informed and concerned scientists who have the capacity to recognize when knowledge or technology is being used inappropriately or with the intent to cause harm. This network of scientists and the tools they use would be adaptive in the sense that the capacity for surveillance and intervention would evolve along with advances in technology. Such intervention could take the form of informal counseling of an offending scientist when the use of these tools appears unwittingly inappropriate or reporting such activity to national authorities when it appears potentially malevolent in intent. While decentralized and adaptive solutions are potentially limited in effectiveness, they are nonetheless of substantial interest. Their usefulness may be limited to their...
ability to engender public opprobrium, but active steps to promote the
development of distributed, decentralized networks of scientists will at
the least heighten awareness while potentially enhancing surveillance. A
good example of such a network is the Program for Monitoring Emerging
Diseases, which hosts the ProMED-mail Web site. A similar instrument
could be useful in establishing a shared culture of awareness and respon-
sibility among life scientists. Such a distributed reporting and response
network would be directed primarily at the community of legitimate sci-
entists, its aggregate aim being to stimulate both creativity in anticipating
activity that could be malicious, and vigilance in detecting and reporting
such activity.

**Recommendation 5**

The committee recommends strengthening the public health infra-
structure and existing response and recovery capabilities.

The committee recognizes that all of its recommended measures,
taken together, provide no guarantee that continuing advances in the life
sciences—and the new technologies they spawn—will not be used with
the intent to cause harm. No simple or fully effective solutions exist where
there is malevolent intent, even in cases where only minimal resources are
available to individuals, groups, or states. Thus, its recommendations rec-
ognize a critical need to strengthen the public health infrastructure and
the nation’s existing response and recovery capabilities. In keeping with
the focus of this report, the committee urges that the insights and poten-
tial benefits gained through advances in the life sciences and related tech-
nologies be fully utilized in the development of new public health de-
fenses. Although many of the concepts and suggestions embodied in these
recommendations were articulated in the 2002 National Research Council
report, *Making the Nation Safer: The Role of Science and Technology in Coun-
tering Terrorism* (“Intelligence, Detection, Surveillance, and Diagnosis,”
Chapter 3, pp. 69-79), they remain as relevant and needed today as they
were then.

An effective civil defense program will require a well-coordinated
public health response, and this can only occur if there is strong integra-
tion of well-funded, well-staffed, and well-educated local, state, and fed-
eral public health authorities. Despite substantial efforts since September
11, 2001, few if any experts believe that the United States has achieved
even a minimal level of success in accomplishing this goal, which is as
important for responses to naturally-emerging threats, such as pandemic
influenza, as for a deliberate biological attack. Current efforts to accom-
plish these aims have been woefully ineffective and have not provided
the nation with the infrastructure it needs to deal rapidly, effectively, and
in a clearly coordinated manner when faced with a catastrophic event such as an overwhelming tropical cyclone, a rapidly spreading pandemic, or a large-scale bioterrorism attack. These efforts need to be enhanced and expanded.

Early and specific diagnosis, even prior to the onset of typical signs and symptoms, should be the goal of research and development efforts. While it is reasonable to hope that improved diagnostic tests will be developed as a result of current federal biodefense research efforts, it is not clear that adequate attention, prioritization, or investment have been devoted to this important area or that all of the potentially useful approaches (e.g., comprehensive monitoring of host-associated molecular biological markers) have been adequately explored. There is a similar need for early recognition and diagnosis of animal and plant diseases. Equally important is the development of broadly active vaccines or biological response modifiers capable of providing protection against large classes of agents. To date, well-established companies in the pharmaceutical and vaccine industries have had little financial incentive to develop new vaccines or therapeutics for biological threat agents for which the market is extremely uncertain and dependent ultimately on government procurement decisions. Continued efforts must be taken to address this failure of the market to produce the countermeasures needed.

CONCLUSION

Because its members believe that continuing advances in the life sciences and related technologies are essential to countering the future threat of bioterrorism, the committee’s recommendations affirm policies and practices that promote the free and open exchange of information in the life sciences. The committee also affirms the need to adopt a broader perspective on the nature of the threat spectrum and to strengthen the scientific and technical expertise available to the security communities so that they are better equipped to anticipate and manage a diverse array of novel threats. Given the global dispersion of life sciences knowledge and technological expertise, the committee recognizes the international dimensions of these issues and makes recommendations that call for the global community of life scientists to adopt a common culture of awareness and a shared sense of responsibility, including specific actions that would promote such a culture.

It remains unclear how the country’s response to a future biological attack will be managed. How will the responses of many different federal departments (e.g., Departments of Homeland Security, Health and Human Services, Justice, and Defense and the myriad agencies within them)
be effectively integrated, and who will control operations and ensure they are adequately interfaced with local and state governments and public health agencies? Although well beyond the scope of the committee’s charge, the development of an effective means of integrating the responses by multiple government agencies would provide the nation with perhaps the most necessary of “tools” with which to meet any future challenge.
CHAPTER 5

Chemical weapons
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Chemical weapons

The abhorrence of the use of ‘poison’ as a weapon has deep roots in history. The 1899 Hague Declaration prohibited the use of projectiles whose sole object was ‘the diffusion of asphyxiating and deleterious gases’. The 1907 Hague Convention IV prohibited the use of ‘poison and poisoned weapons’. Nevertheless, gas – most often mustard gas – was used extensively in World War I. The public was horrified. As a result, the Geneva Protocol (Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare) was adopted in 1925.

The Geneva Protocol, while expanding the existing bans to cover also ‘bacteriological’ weapons, applied only to their use. It imposed no restriction on development, production and stockpiling. Many of the states that ratified the protocol expressly reserved the right to use the otherwise prohibited weapons against an enemy state not party to the Protocol, or – as retaliation

THE MAIN TYPES OF CHEMICAL WEAPONS:

**Nerve agent**: highly lethal, kills in very small dosages. E.g. sarin, soman, VX.

**Blistering agent**: causes burns and blisters on the body, damages eyes. If inhaled it severely damages the lungs, which often leads to death. E.g. mustard sulphurous gas, lewisite.

**Asphyxiating agent**: causes damage to the lungs. E.g. phosgene, mustard gas.

**Psychotomimetic agent**: causes a hallucinatory effect similar in kind to that of LSD. E.g. BZ.

**Incapacitating agent**: relies on irritants and toxic effects to incapacitate a person temporarily. Depending on purpose of use they might be allowed under the CWC. E.g. tear gas, CS.

**Possible new agents**: research on new ways of affecting the human brain to cause aggressiveness, sleepiness, fear or other emotions. E.g. bioregulators.
in kind – against a party using chemical weapons in violation of its obligations under the Protocol.

In the inter-war period, chemical weapons were used by Spain in Morocco, by Italy in Abyssinia and by Japan in China. In World War II, poisonous gases killed millions in Nazi concentration camps, and chemical weapons were used in Asia. But they were not used on European battlefields. Since the end of that war chemical weapons have been used by Egypt in North Yemen (1963–67); in the Iraq–Iran war (1980–88); and by the Iraqi Government against its own Kurdish civilian population. In the Vietnam War, defoliants and CS gas were used by the United States.

Although states have been the major users of chemical weapons, current concerns are primarily about the use of these weapons by terrorists.

**THE CHEMICAL WEAPONS CONVENTION**

After some 20 years of negotiations, a complete ban on the development, production, stockpiling and use of chemical weapons finally came into effect in 1997, when the Chemical Weapons Convention (CWC) entered into force.

There are 178 parties to the CWC as of April 2006. Containing extensive

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**DEFINITION OF CHEMICAL WEAPONS (CWC ARTICLE II):**

1. ‘Chemical Weapons’ means the following, together or separately:
   (a) Toxic 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;
   (b) Munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;
   (c) Any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b).

2. ‘Toxic Chemical’ means:
   Any chemical, which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.
WHICH CHEMICALS ARE CONTROLLED?

Schedule 1 chemicals include those that have been or can easily be used as chemical weapons and which have very limited, if any, uses for peaceful purposes. These chemicals are subject to very stringent restrictions, including ceilings on production (1 tonne per annum per state party) and possession, licensing requirements and restrictions on transfers. These restrictions apply to the relatively few industrial facilities that use such chemicals. Some of these chemicals are used as ingredients in pharmaceutical preparations or as diagnostics. Others are produced and used for protective purposes, such as for testing CW protective equipment and chemical agent alarms.

Schedule 2 chemicals include those that are precursors to, or that in some cases can themselves be used as, chemical weapon agents, but which have a number of other commercial uses (such as ingredients in resins, flame-retardants, additives, inks and dyes, insecticides, herbicides, lubricants and some raw materials for pharmaceutical products).

Schedule 3 chemicals include those that can be used to produce, or can be used as, chemical weapons, but which are widely used for peaceful purposes (including plastics, resins, mining chemicals, petroleum refining fumigants, paints, coatings, anti-static agents and lubricants).

Discrete Organic Chemicals (DOCs) are among those chemicals not specifically listed in the Schedules or anywhere in the Convention. Manufacturing operations producing DOCs are referred to as ‘other chemical production facilities’. These plant sites are subject to declarations and verification requirements if they produce in aggregate more than 200 tonnes of DOCs annually. They are also subject to these requirements if they comprise plants at which more than 30 tonnes of any DOCs containing the elements phosphorous, sulphur or fluorine (PSF chemicals) are produced. Thousands of plant sites have been declared to the OPCW.

Verification measures, the CWC requires states parties to declare and then to destroy all stocks of chemical weapons within 10 years of entry into force (by 2007), with a possible extension of up to five years (by 2012). Most importantly, the Convention completely prohibits their future development, production, stockpiling, transfer and use.

Unlike the NPT, which allows five states to retain nuclear weapons, all rules in the CWC are non-discriminatory. They apply equally to all its parties, whether they are great powers or small. Another important difference between the treaties is that, unlike the NPT, the CWC establishes well-
defined authorities – a Conference of the States Parties, an Executive Council and a Technical Secretariat – to be responsible for the operation and implementation of the Convention.

The comprehensive prohibition of the acquisition, production and use of chemical weapons has been a success. However, a number of challenges remain. They are listed in one document and two plans of action that were adopted by the 2003 CWC Review Conference. The problems, which are addressed below, include:

- A failure to meet CWC deadlines for destruction of chemical weapon stocks
- Several states still have not joined the CWC
- A continued interest among states in the development of non-lethal chemical weapons, such as incapacitants
- Shortcomings in verification and inspection activities
- Limited applicability to non-state actors (terrorists)
- Uneven implementation among state parties

**Destroying the chemical-weapon stockpiles**

Only the complete destruction of all stockpiles of chemical weapons will ensure that these weapons cannot be used by states or terrorist groups and that there can be no accidental releases. The CWC requires that states declare and then destroy their stockpiles by 2007 in accordance with an agreed schedule. However, a major problem in the implementation of the CWC has been and remains the slow rate of destruction of the vast chemical weapon arsenals built up by the United States and the Soviet Union during the Cold War, as well as of those abandoned by Japan in China during World War II. The high cost of destruction and the environmental and safety concerns of local populations have contributed to these delays. These are urgent challenges to overcome. High cost must not serve as an excuse.
With approximately 40% of the United States’ chemical weapon stocks destroyed, the US Government Accountability Office has reported that destruction would be completed in 2012 at the earliest. US delays are partly due to environmental and safety concerns.

The figures for Russia are even less satisfactory. Only approximately 4% of the Soviet Union’s 40,000-tonne stockpile has been destroyed. Russia’s destruction programme receives financial and technical assistance from the United States and the Cooperative Threat Reduction-type programmes of the European Union. Some causes of the delay have been the low levels of federal Russian funding, inefficient use of foreign assistance and persistent bureaucratic problems. However, during 2005 there were several positive developments in the Russian destruction programme. Still, notwithstanding Russia’s improving economy and additional Russian resources combined with continued international assistance to Russia’s destruction programme, it seems unlikely that the entire Russian chemical-weapon stockpile will be destroyed by 2012.

In addition to the destruction programmes in Russia and the United States, programmes to destroy chemical weapon stockpiles are also being carried out in Albania, India, Libya and South Korea, and efforts are ongoing to destroy the chemical weapons that Japan left in China after World War II.

**WMDC RECOMMENDATION**

**37 States parties to the Chemical Weapons Convention must provide adequate resources to ensure that there are no undue delays in the agreed destruction of chemical weapon stockpiles.**

**Promoting universality**

Sixteen states, as of April 2006, have not ratified the CWC, for a variety of reasons:

- Some may have chemical weapon programmes and may consider it not to be in their security interests to become a party.
- Some may not have chemical weapon programmes but may withhold participation for reasons of regional political leverage.
- Some have signalled an interest in joining the CWC but have not yet done so.
- Some may have no chemical industries and see no reason to join and finance the implementation of a treaty that does not directly affect them.
The universal adherence of states to the CWC is important for the authority and effectiveness of the regime.

Both the OPCW and its individual member states may provide positive incentives to states still remaining outside the Convention to sign and ratify it. Some member states have also exerted political and economic pressure. For example, in accordance with the European Union WMD Strategy, in an agreement with Syria in October 2004, the EU insisted on Syria’s taking steps towards adherence to the CWC as a precondition for entering into a bilateral Association Agreement.

**WMDC RECOMMENDATION**

**38** The Organisation for the Prohibition of Chemical Weapons and states parties to the Chemical Weapons Convention should continue their efforts to secure universal adherence to the Convention. States parties should fully implement the rules on trade and transfer of chemicals that are precursors to chemical-weapon agents. They should further develop regulations regarding the trade and transfer of chemicals that can be used to produce chemical weapons. The Organisation for the Prohibition of Chemical Weapons and states parties should continue to offer states positive incentives, including technical assistance, to join and implement the Chemical Weapons Convention. When providing such assistance or transferring relevant technologies, they should consider steps to ensure safe and responsible handling by the recipient.
Non-lethal weapons, incapacitants and riot control agents

The term *non-lethal* weapons in the context of the CWC usually refers to riot control agents, such as tear gas and CS gas, and substances that can incapacitate by putting a person to sleep, often referred to as ‘knock-out’ gas. Yet the term non-lethal is misleading, since all of these gases can be lethal if the concentration is sufficiently high and the time of exposure sufficiently long. Similarly, substances that cause unconsciousness may be lethal in concentrations used to affect a large number of people simultaneously.

The use of riot control agents is specifically and explicitly prohibited in the CWC as a method of warfare. It may at first be difficult to understand why it is a violation of international law to use tear gas against combatants in war, but not necessarily a violation to use it against a civilian population in peacetime. The reason is that tear gas is used for riot control in peacetime to *avoid* the use of firearms, while riot control agents have a history of being used in wars to force combatants out of foxholes or bunkers to be exposed to lethal arms or explosives. Furthermore, any use of riot control agents risks provoking retaliation or an escalation in the choice of chemical agents.

States still say that they might need to use riot control agents for purposes other than warfare (e.g. a riot in a prison). International regulations relevant to such use are not laid down in the CWC but are found in the framework of human rights and international humanitarian law.

*Increased interest in non-lethal chemical weapons*

There is an increasing interest among some governments to adopt a more flexible interpretation of the CWC rules on the use of incapacitating chemical weapons, even as a method of warfare, in order to be able to use them in diverse situations.

Such an interpretation, in the view of the Commission, would constitute a dangerous erosion of the fundamental ban on chemical weapons that the authors of the Convention intended. If accepted, it might allow for use in armed conflict of substances such as fentanyl, a derivative of which was used in Moscow in 2002 when terrorists held hostages at a theatre and law enforcement units used the opiate to facilitate their attack. The opiate killed about one-fifth of the hostages. States parties and the OPCW should reaffirm that an interpretation of the CWC allowing the use of such substances in armed conflicts would not be consistent with the Convention.

The development of new non-lethal or less-than-lethal chemical weapons with incapacitating effects or other effects on the brain would, if accepted for use in armed conflicts, considerably change the nature of warfare and jeopardize the integrity of the CWC.
The general purpose criterion

The CWC provides means for protecting peaceful uses gained from technological advances, while maintaining and strengthening the barriers to hostile uses, through the general purpose criterion in Article 1 of the Convention.

Instead of prohibiting a particular chemical or family of chemicals, the CWC prohibits all toxic chemicals, except for ‘the listed purposes’. These listed purposes include ‘industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes … purposes directly related to protection against toxic chemicals … military purposes not connected with the use of chemical weapons and not dependent upon the toxic properties of chemicals as a method of warfare; law enforcement including domestic riot control purposes’.

Toxic is defined in the CWC as anything that is harmful through ‘chemical action on life processes’, whether it is temporarily incapacitating or lethal. Some toxic substances that have been considered for use as disabling chemical weapons are even more toxic than the chemicals developed for lethal purposes, in the sense that extremely small amounts are sufficient to cause an effect.

The BTWC provides a similar general purpose criterion, prohibiting in Article I ‘microbial or other biological agents, or toxins whatever their origin or method of production of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes’. The inclusion not only of microbial agents, but also of toxins, captures such natural substances as those ligands and other naturally occurring bioactive molecules and their chemical analogues that can exert harmful effects on life processes. The CWC and the BTWC are therefore mutually reinforcing in their prohibition of toxicity as a weapon of war.

Provided the general purpose criterion is implemented properly, it ensures that the conventions remain relevant and effective even in the face of future technological advances in biochemistry and biotechnology. When new toxic chemicals are developed they automatically come under its purview. The Commission therefore holds that the prohibitions of the CWC cover all toxic chemicals, regardless of their origin or method of production, and that the general purpose criterion of the CWC is valid.
WMDC RECOMMENDATION

39 States parties to the Chemical Weapons Convention should confirm that, like the use of riot control agents, the use of toxic chemical agents for purposes of law enforcement is banned as a method of warfare. Accordingly, each state party must declare any such agent under Article III.

Enhancing the CWC’s inspection and monitoring capacity

Pursuant to Article IX on consultations, cooperation and fact-finding, each party to the CWC has the right to request an on-site challenge inspection of any facility or location in any other state party, for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the Convention. The Commission underscores the importance of such inspections in strengthening the effectiveness and credibility of the CWC. The parties should not view challenge inspections solely as a means of last resort to clarify cases of suspected non-compliance. Rather, the parties should view such inspections as a confidence-building measure – a collective means to reinforce their commitment to the CWC.

For challenge inspections to be effective, the Technical Secretariat of the OPCW must have the necessary legal rights, resources and training as well as cooperation and assistance from states concerned. The OPCW requires up-to-date information from member states, and preferably the most up-to-date technical and inspection equipment. It further requires sampling rights and the ability to remove samples for testing, capabilities and permissions to facilitate rapid transport and entry to the requested location.

Not all states have provided such information or rights. In addition, the OPCW is currently limited to the use of an approved list of equipment agreed by states parties, and states may refuse to allow the use of some of the approved equipment. Inspected states must ensure that the most efficient equipment available shall be on the list of equipment agreed for use by the OPCW.

Training exercises for challenge inspections have been carried out in a few states, mainly in Europe. It would be valuable if more states and regions would conduct such exercises.
WMDC RECOMMENDATION

States parties should ensure that the Organisation for the Prohibition of Chemical Weapons has the resources, experience and legal rights needed to carry out challenge inspections in a timely and effective manner, including for the taking of samples and removal of samples for testing.

CHEMICAL TERRORISM

The threat that non-state actors might use chemical weapons became a reality when the Aum Shinrikyo Japanese sect used sarin in the 1994 Matsumoto attack and later in the attacks in the Tokyo subway in 1995.

Non-state actors such as terrorist groups have many options for targets and the time and manner of attack. However, there are significant technical difficulties associated with obtaining the necessary materials in sufficient quantities and purity. Transporting and effectively using chemical weapons against an intended target also pose difficulties.

For example, Aum Shinrikyo had access to ample financial resources, modern equipment and at least one laboratory where it could do research and arrange production over an extended period, as well as people with knowledge and skills. Yet the sect managed to produce only limited quantities of chemical agents, and these had high levels of impurity and were unsuitable for long-term storage. As a result, the attacks were less effective than they might have been. The case shows that it is difficult to produce and disperse these weapons in an efficient manner even where the basic capacities exist. The most potent weapons pose lethal threats also to the perpetrators themselves.

The threat of terrorist attacks against chemical industry

Rather than dispersing chemical weapons of their own, terrorists might attack plants or transport vessels containing hazardous chemicals and cause leakages or large releases of industrial chemicals.

The potential effects of an attack on a chemical plant (or trains of tank cars) are illustrated by some large industrial accidents such as that in Bhopal, India, when more than 3,000 people died after an accidental release of methylisocyanate from a pesticide plant in 1984. The accident in the same year at a liquefied gas storage facility in Mexico City, where explosions killed
more than 500 and injured about 7,200 people, and the massive explosion at a fertilizer plant in Toulouse in 2001 are other examples. Such chemical industries exist in the vicinity of many cities and some are even located in cities. The regular transport of dangerous chemicals to and from such facilities also raises security risks.

**How to reduce the danger**

It is important that countries and governments ensure that they have effective national legal frameworks and capacities to control the relevant equipment, materials and expertise, as required by UN Security Council Resolution 1540.

Risks can be reduced through many different measures, some simple, some costly. For instance, chemical industries may be relocated away from urban areas to areas with little or no civilian population, transport may be routed away from concentrations of population, and hazardous materials may be distributed for storage in several sites.

Other measures that may and should be taken relate to increased physical security and the development of a *security culture*, in ways similar to those practised by the nuclear industry. However, the challenge is great, since the number of sensitive facilities that would need such improved protection is in the thousands, while in comparison there are rather few nuclear facilities.

Chemical industries must minimize the risk of insider threats and ensure that they possess the required skills and leadership to take necessary action and reduce damage if a leakage occurs.

**The role of national governments and international cooperation**

The role of national governments is to ensure through supervision, legislation or agreement that the industry has an adequate security culture and to provide for legal action against anyone who commits malicious acts at or against chemical sites.

Furthermore, there is a need to work towards common international standards of security for chemical facilities, to reduce the risk that terrorists will seek targets in a country where security is lagging.
WMDC RECOMMENDATION

41 Through their domestic laws and policies, all states should prohibit the production, possession and use of toxic chemicals and technologies for purposes that are banned by the Chemical Weapons Convention. States should ensure security in and for chemical facilities through legislation and agreement with industry. States should also develop national means to monitor that security standards are met.

WMDC RECOMMENDATION

42 States parties to the Chemical Weapons Convention should use the Organisation for the Prohibition of Chemical Weapons as a coordinating centre in the development of global standards for a chemical industry security culture. The Organisation should offer evaluation and security assistance at declared sites. States parties should also strengthen the capacity of the Organisation for the Prohibition of Chemical Weapons to provide practical assistance against chemical weapons, for instance detection equipment, alarm systems and medical antidotes.
8. Further Reading

Listed below are some selected books and articles that may be of interest to those seeking more detailed background and contextual information on the information and documents included in this Resource Guide. The OPCW’s website contains many official documents related to the CWC. Alongside the individual titles noted below, readers can also refer to the periodic reports in the annual SIPRI Yearbook. In addition, The CBW Conventions Bulletin publishes reports on developments in the OPCW in its quarterly issues alongside articles relating to CW issues more broadly. These sources can be found on the internet at the following addresses:

*The Organisation for the Prohibition of Chemical Weapons*
www.opcw.org

*The CBW Conventions Bulletin*
www.sussex.ac.uk/Units/spru/hsp/pdfbulletin.html

*SIPRI Yearbooks*
www.sipri.org/contents/cbwarfare/Publications/Publications/cbw-yearbook.html

**The 1925 Geneva Protocol**


**The 1972 Biological Weapons Convention**


**The 1977 ENMOD Convention**


**The 1993 Chemical Weapons Convention**


Kenyon, Ian. “Chemical Weapons in the Twentieth Century: Their Use and Their Control”, *The CBW Conventions Bulletin*, no. 48 (June 2000)


**The Second CWC Review Conference**


Meier, Oliver. “Chemical Weapons Parlay’s Outcome Uncertain”, *Arms Control Today*, vol. 38 no. 2 (March 2008)


FEEDBACK FORM

PERSONAL INFORMATION (OPTIONAL):
Name: __________________________________________________________
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Did you find this Resource Guide useful?         YES       NO
Why? __________________________________________________________
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______________________________________________________________

Was the Resource Guide too large?         YES       NO

Are there additional documents that you think should have been included? Which?
______________________________________________________________
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Are there some documents included that you do not think should have been? Which?
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Will you continue to use this Resource Guide once the Second CWC Review Conference is over?
YES       NO
Why? __________________________________________________________
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Do you think there is value in similar Resource Guides being produced for future CWC meetings, such as for the Third Review Conference?
YES       NO

Other comments __________________________________________________
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Please return completed form to representatives of HSP during the Review Conference, or post it afterwards to: Harvard Sussex Program, Freeman Centre, University of Sussex, Falmer, Brighton, East Sussex, BN1 9QE, UK or fax it to ++ 44 1273 685865
This Resource Guide is intended to aid delegates to the Second Review Conference of the 1993 Chemical Weapons Convention and thus contribute to a constructive and successful outcome. The conference will be held 7-18 April 2008 in The Hague, the Netherlands.

This book contains official documents and other texts relating to the chemical weapons regime, including:

• The text of related treaties and agreements
• Some official documents from the Organisation for the Prohibition of Chemical Weapons (OPCW)
• Documents from the United Nations, other international organisations and regional organisations
• Documents from informal instruments and arrangements
• Supporting material from various non-governmental organisations

It will also be a useful resource for researchers, non-governmental organisations, journalists and others in civil society with an interest in the chemical weapons regime embodied in the CWC.

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The Harvard Sussex Program is an inter-university collaboration for research, communication and training in support of informed public policy towards chemical and biological weapons. The Program links research groups at Harvard University in the United States and the University of Sussex in the United Kingdom. It began formally in 1990, building on two decades of earlier collaboration between its co-directors. For more information see www.sussex.ac.uk/Units/sprü/hsp/index.html

SPRU was founded in 1966 at the University of Sussex, and is now an established world leader in research, consultancy and teaching in the field of science, technology and innovation policy and management. SPRU is the largest centre of its kind worldwide. For more information see www.sussex.ac.uk/Units/sprü

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