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Strengthening the Biological Weapons Convention

Briefing Paper No 14 (Second Series)

Two Decades of Strengthening CBW Prohibitions: Priorities for the BTWC in the 21st Century

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Graham S Pearson and Malcolm R Dando

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TWO DECADES OF STRENGTHENING CBW PROHIBITIONS: PRIORITIES FOR THE BTWC IN THE 21st CENTURY

by Graham S. Pearson*

Introduction

1. In this Briefing Paper the opportunity is taken to consider how the world has changed over the past 25 years and how the perceptions of the threat posed by chemical and biological weapons have developed in order to identify the key priorities for strengthening the prohibition regimes for chemical and biological weapons in the second half of the first decade of the 21st century. Back in the early 1980s, the Cold War was still intense and chemical weapons were recognized as being in the arsenals of both the Soviet Union and the United States. The main concern of chemical defence programmes was therefore against chemical weapons -- mustard, nerve agents and hydrogen cyanide. Although the Biological and Toxin Weapons Convention (BTWC) had been opened for signature in 1972 and entered into force in 1975, the first Review Conference in 1980 had seen major concerns about the Soviet Union following the release of anthrax from a facility in Sverdlovsk and negotiations towards a Chemical Weapons Convention were underway in Geneva.

2. Today, we live in a very different world. The Cold War has dissolved and there is much more cooperation across Europe and Russia. There were high hopes in the early 1990s for a new world order of peace and stability but this has not been realised and we are now faced with an uncertain world in which there is greater concern about the potential use of chemical or biological weapons by rogue States or sub State actors and terrorist groups. The range of potential chemical and biological agents is now recognized as being considerably wider than 25 years ago and the importance of *comprehensive* prohibition regimes for both chemical and biological agents is thus greater than before. The need for effective prohibition regimes against a wider range of chemical and biological agents is therefore greater than ever.

3. The Chemical Weapons Convention (CWC) entered into force in 1997 and has made the world a safer place. However, the first Review Conference in April 2003 failed to face up to the potential threat to the Convention posed by non-lethal or less-than-lethal agents. The Biological and Toxin Weapons Convention made progress and was almost at the point in 2001 on reaching agreement on a legally binding instrument to *strengthen the effectiveness and improve the implementation* of the Convention when the United States at the eleventh hour withdrew its support and plunged that Convention into crisis. If the general purpose criteria in both Conventions are not maintained and reinforced, there are real dangers for peace and security.

4. This Briefing Paper analyses the changing world and sets out priorities for international and national action to strengthen the prohibition regimes for chemical and biological weapons in the years ahead with particular attention being given to the forthcoming Sixth Review Conference of the BTWC in 2006.

* This Briefing Paper is developed from the paper entitled “21 Years of CBW Protection: A Changing World” presented at the Eighth International Symposium on Protection Against Chemical and Biological Warfare Agents held in Gothenburg, Sweden, on 2 to 6 June 2004.

The 1980s Perspective

5. In 1980 there was, in contrast to the situation of today, relatively little public information or debate about chemical and biological weapons. During the previous decade the World Health Organization had in 1970 published its report *"Health Aspects of Chemical and Biological Weapons"* and in the previous year, 1969, the Secretary-General of the United Nations had published the report *"Chemical and bacteriological (biological) weapons and the effects of their possible use."* 1972 had seen the agreement and opening for signature of the Biological and Toxin Weapons Convention (BTWC) which entered into force in 1975. A key element of the Convention is the general purpose criterion embodied in the basic prohibition in Article I which states that:

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.

The general purpose criterion is shown in bold. In addition, the Stockholm International Peace Research Institute (SIPRI) publications in the series "The Problem of Chemical and Biological Warfare" in the early 1970s had drawn attention to the rise of chemical and biological weapons, to chemical and biological weapons at that time and to the importance of protection against chemical and biological weapons.

6. The entry into force of the BTWC, even though it contained no provisions for verification, had led to a feeling, in both the United Kingdom and the United States, that the resources devoted to biological defence could be significantly curtailed. This led in the United Kingdom to the transfer of the Microbiological Research Establishment (MRE) from the Ministry of Defence to the Public Health Laboratory Service with a new name of the Centre for Applied Microbiology and Research (CAMR). Some 12 scientists were retained in the then Chemical Defence Establishment (CDE) to maintain a watch-tower role in respect of biological weapons. In practice, these twelve scientists were largely engaged in studies on how Gruinard Island which had been used during World War II for trials involving anthrax might safely be decontaminated; this was achieved in the summer of 1986.

7. However, although the BTWC had entered into force, the first Review Conference in 1980 was overshadowed by the reports of an anthrax release at Sverdlovsk in April 1979 which had resulted in a number of deaths. Charles Flowerree, Head of the US Delegation, had on the final day of the Review Conference stated that the US Government had initiated consultations with the Soviet Union under Article V of the Convention *"which raised the question whether a lethal biological agent had been present in 1979 in the Soviet Union in quantities inconsistent with the provisions of the Convention."*¹ Ambassador Issraelyan,

¹United Nations, Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin

heading the Soviet Union delegation had responded saying that *"The Conference had been successful despite the tension resulting from a recent campaign by Western mass media. That campaign, together with statements such as that just made by the United States delegation, constituted an attempt to cast doubt on the Soviet Union's compliance with the Convention. ... The incident in 1979 referred to by the United States delegation had in fact resulted from an epidemic caused by the consumption of infected meat which had not been subjected to normal inspection before sale: it in no way reflected on the Soviet Union's compliance with the Convention."*²

8. Further developments in the late 1970s and early 1980s related to US concerns about chemical warfare in Southeast Asia and Afghanistan. These concerns in Southeast Asia related to what became known as yellow rain and the allegation that these attacks had been waged using trichothecene mycotoxins.

9. Public awareness of chemical and biological warfare was heightened by the publication³ in 1982 of a book entitled *"A Higher Form of Killing"* which aimed to put the new arms race primarily in regard to chemical weapons into its historical context.

10. Further insights into the 1980s perspective are provided by the annual UK Ministry of Defence *Statement on the Defence Estimates* which set out the basis for the planning and funding of the Ministry of Defence. Thus in the years 1980 to 1983 these Statements included the following:

Year	Statement
1980	<i>"Unlike NATO, the Soviet Union has a major capability for offensive chemical warfare. Soviet forces maintain large stocks of chemical munitions and are fully equipped and trained to operate in a chemical environment."</i>
1981	<i>"The Warsaw Pact also maintains the effectiveness of its capability for offensive chemical warfare."</i>
1982	<i>"We estimate that the Soviet Union has a stockpile in excess of 300,000 tonnes of chemical agent." "The importance of adequate verification is illustrated by the disturbing outbreak of anthrax in the city of Sverdlovsk in 1979. Although the 1972 Biological Weapons Convention provides for international consultation to take place to reassure all signatories that no breach of the Convention has occurred, the Soviet authorities have been unwilling to give a satisfactory explanation of the Sverdlovsk outbreak. They have, moreover, resisted all efforts to improve the procedures for ensuring compliance with the Convention."</i>

Weapons and on Their Destruction, *Summary Record of the Twelfth Meeting*, BWC/CONF.I/SR.12, 25 March 1980, p.3.

²United Nations, Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, *Summary Record of the Twelfth Meeting*, BWC/CONF.I/SR.12, 25 March 1980, p.5.

³Robert Harris and Jeremy Paxman, *A Higher Form of Killing*, Chatto & Windus Ltd, United Kingdom, 1982.

1983	<i>"The Soviet Union has a major capability in this field [chemical weapons]. Continuing R & D and production of chemical weapons is adding to their stockpile, already assessed to be over 300,000 tons. Moreover, Soviet forces are comprehensively equipped and trained to operate in a contaminated environment."</i>
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The emphasis in these Statements is entirely upon the chemical weapons capability of the Soviet Union with a mention in 1982 of the concerns relating to the outbreak of anthrax in Sverdlovsk in 1979.

The situation in the early 1980s

11. As already noted, the BTWC had entered into force but there was no Chemical Weapons Convention although negotiations were continuing in Geneva aimed at such a Convention. When the first International Symposium on Protection against Chemical Weapons was held in Stockholm on 6 to 9 June 1983, participants were issued with a leaflet entitled "The Growing CW -- Threat" prepared by the Civil Defence Administration, the Defence Materiel Administration, the National Defence Research Institute and the Royal Fortification Administration.⁴ This included a map of the world indicating where and when chemical and toxin attacks had been reported distinguishing confirmed uses from alleged uses. The locations shown on the map can be summarised as follows:

Confirmed Use

Year	Location	Description
1914 - 18	Central Europe, Russia	Chlorine, phosgene, mustard gas. 1,300,000 casualties, 91,000 fatalities.
1937	Abyssinia, now Ethiopia	Mustard gas. 15,000 casualties ?
1937 - 45	China	Lewisite, etc. Limited casualties.
1963 - 67	Yemen	Mustard gas, possibly also nerve gas. Unknown number of casualties.
1964 - 71	Vietnam	Herbicides, tear gases. Less than 2,000 fatalities. Severe environmental damage.
1970	Angola	Herbicides. No casualties.

Alleged Use

Year	Location	Description
1976 - 82	Laos	Mycotoxins, etc. Casualties?
1979 - 82	Kampuchea	Incapacitating agents. Mycotoxins, etc. Casualties?
1979 - 81	China - Vietnam	Poisoned rivers. Casualties?
1979 - 82	Afghanistan	Incapacitating agents and lethal substances. Mycotoxins, etc. Casualties?
1980 - 81	Angola	Tear gas? Casualties?
1981 - 82	Iraq - Iran	?
1981 - 82	El Salvador	Insecticides? Casualties?

⁴Sweden, Civil Defence Administration, Defence Materiel Administration, National Defence Research Institute and Royal Fortification Administration, *The Growing CW--Threat*, 1983.

1982	Lebanon	Nerve gas? BC agents? Casualties?
1982	Eritrea	Nerve gas? Casualties?
1982	Thailand	Incapacitating agents. No lethal cases. Less than 100 casualties.

The leaflet also provides information on the main groups of agents, delivery systems and dispersion models, binary systems and protective measures such as detection, protection, decontamination and medical antidotes.

Developments in the mid 1980s

12. In the early 1980s tension mounted between Iraq and Iran leading in 1980 to the Security Council urging *'Iran and Iraq to refrain immediately from any further use of force and to settle their dispute by peaceful means and in conformity with principles of justice and international law'*.⁵ However, the situation continued to deteriorate resulting in a war which lasted from 1980 to 1988. To an increasing extent, starting in 1983, chemical weapons were used, primarily by Iraq but also with chemical weapon military casualties in Iraq⁶. The key developments are summarised in the following table.

30 Mar 1984	Security Council considered the report of specialists appointed by the Secretary-General to investigate allegations by Iran that chemical weapons had been used. ⁷ Specialists concluded that <i>'chemical weapons in the form of aerial bombs have been used'</i> and that <i>'the types of chemical agents used were... mustard gas and ... a nerve agent known as tabun.'</i> The President of the Security Council strongly condemned the use of chemical weapons ⁸ . The statement although referring to the allegation by Iran did not specifically name Iraq as the State using chemical weapons.
25 Apr 1985	Security Council considered the report of a further investigation into an allegation of use of chemical weapons. ⁹ The specialist concluded that <i>'chemical weapons were used during March 1985 in the war between Iran and Iraq; mustard was used, affecting Iranian soldiers; the attacks were made by means of bombs dropped from aircraft, ...it is possible that hydrocyanic gas was used, alone or in combination with yperite.'</i> The President of the Security Council said that <i>'the Security Council... are appalled that chemical weapons have been used against Iranian soldiers during the month of March 1985.'</i> ¹⁰

⁵United Nations Security Council, official records, 2248th meeting, S/PV 2248, 28 September 1980.

⁶ United Nations Security Council, *Report of the mission 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/18852, 8 May 1987.

⁷United Nations Security Council, *Report of the specialists appointed by the Secretary-General to investigate allegations by the Islamic Republic of Iran concerning the use of chemical weapons*, S/16433, 26 March 1984.

⁸United Nations Security Council, *Resolutions and Decisions of the Security Council 1984*, Security Council Official Records: Thirty-Ninth Year, p. 10 - 11, United Nations, New York, 1985.

⁹United Nations Security Council, *Letter dated 17 April 1985 from the Secretary-General to the President of the Security Council*, S/17127 and S/17127/Add. 1, 17 April 1985 and 30 April 1985.

24 Feb 1986	SCR 582 (1986) deplored <i>'the escalation of the conflict, ... and, in particular, the use of chemical weapons contrary to obligations under the 1925 Geneva Protocol.'</i> [Emphasis added]. ¹¹
21 Mar 1986	Security Council considered a further report on the alleged use of chemical weapons. ¹² The specialists concluded that <i>'On many occasions, Iraqi forces have used chemical weapons against Iranian forces.'</i> and that <i>'the agents used have mainly been mustard gas although on some occasions nerve gas was also employed.'</i> The President stated that the Council were <i>'Profoundly concerned by the unanimous conclusion of the specialists that chemical weapons on many occasions have been used by Iraqi forces against Iranian forces, most recently in the course of the Iranian offensive into Iraqi territory, the members of the Council strongly condemn this use of chemical weapons in clear violation of the Geneva Protocol of 1925 which prohibits the use in war of chemical weapons.</i> ' [Emphasis added]. ¹³

13. A SIPRI Fact Sheet¹⁴ by Julian Perry Robinson and Jozef Goldblat addressing the subject of Chemical Warfare in the Iraq-Iran War noted that allegations of the use of chemical weapons has been frequent in the Iraq-Iran war although both States are party to the 1925 Geneva Protocol and that one of the instances reported by Iraq has been conclusively verified by an international team dispatched to Iraq by the UN Secretary-General which identified the presence of mustard gas and also of the nerve agent tabun. The fact sheet also noted that in March, April and May 1984, the United States, United Kingdom and the European Community had all taken steps to control the key chemical weapon precursor chemicals.

14. In Geneva further steps had taken place towards the agreement of a comprehensive Chemical Weapons Convention. In 1984 the Conference on Disarmament had agreed to move away from exploratory discussion to start its final elaboration of a treaty banning chemical weapons. An impetus was provided both by the verification that chemical weapons had been used in the Iraq-Iran war and by the United States tabling a new draft Convention. This draft Convention was tabled by the then Vice President George Bush and called for *"any-time, any-where"* inspections. These proposals for mandatory challenge inspections and other intrusive verification provisions represented a significant step forward.

¹⁰United Nations Security Council, *Resolutions and Decisions of the Security Council 1985*, Security Council Official Records: Fortieth Year, p. 6 - 7, United Nations, New York, 1986.

¹¹United Nations Security Council, *Resolutions and Decisions of the Security Council 1986*, Security Council Official Records: Forty-First Year, p. 11, United Nations, New York, 1987.

¹²United Nations Security Council, *Report of the mission despatched 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/17911, 12 March 1986.*

¹³United Nations Security Council, *Resolutions and Decisions of the Security Council 1986*, Security Council Official Records: Forty-First Year, p. 11 - 12, United Nations, New York, 1987.

¹⁴Julian Perry Robinson and Jozef Goldblat, *Chemical Warfare in the Iraq-Iran War*, SIPRI Fact Sheet, Chemical Weapons I, May 1984. Available at <http://www.sipri.se/cbw/research/factsheet-1984.html>

15. In the United States, President Ronald Reagan in January 1985 appointed a Chemical Warfare Review Commission to consider four specific points¹⁵:

"(1) the relationship of the chemical stockpile modernization by the United States with the ultimate goal of the United States of achieving a multilateral, comprehensive and verifiable ban on chemical weapons;

(2) the adequacy of the existing United States stockpile of unitary chemical weapons in providing a credible deterrent to use by the Soviet Union of chemical weapons against the United States and allied forces;

(3) whether the binary chemical modernization program proposed by the Department of Defense is adequate to support United States national security policy by posing a credible deterrent to chemical warfare; and

(4) the ability of defensive measures alone to meet the Soviet chemical warfare threat and the adequacy of funding for current and projected defensive measure programmes."

16. This Commission reported in June 1985 that *"modernization with binary weapons is more likely if anything to encourage these difficult negotiations than to impede them."* Furthermore, the Commission *"believes that deterrence by maintaining a capability to retaliate in kind is a necessary and moral posture to prevent chemical warfare, and that it has a good likelihood of being effective."* In addition, the Commission concluded that *"the modernization proposed is an essential first step, but more effort is required....and to conduct research against new Soviet chemical weapons."* Finally, in regard to whether defensive measures alone are an effective response to the Soviet chemical threat *"the Commission's firm conclusion is that they are not."* The report in its section on Defensive Techniques states that *"there is convincing intelligence that the Soviet Army has been experimenting with new toxic agents on a considerable scale"* and makes the point that the US protective measures are effective assuming that the Soviets use *"a familiar toxic agent, rather than any of the several possible added ingredients -- mask penetrants or new chemicals -- that would render most mask filters ineffective."*

17. As already noted above the finding that chemical weapons had been used in the Iraq/Iran war led a number of governments to place licensing measures on the export of several chemical weapon precursors. In June 1985, the Australia Group, comprising Australia, Canada, Japan, New Zealand and the United States together with the 10 European Community members met in Brussels for the first time following the proposal by Australia that the countries which had introduced licensing for exports might meet in order to examine the scope for harmonising the measures taken individually and for enhancing cooperation amongst them on this issue.

18. The annual UK Ministry of Defence *Statement on the Defence Estimates* in the years from 1984 to 1986 included the following:

¹⁵U.S. Government Printing Office, *Report of the Chemical Warfare Review Commission*, June 1985, p.2.

Year	Statement
1984	<p><i>"The Soviet Union has a major capability in this field [chemical weapons]. Continuing research and development and production of chemical weapons is adding to their stockpile, already assessed to be over 300,000 tons of nerve agent.. Moreover, Soviet forces are comprehensively equipped and trained to operate in a contaminated environment."</i></p> <p><i>"A wide range of arms control issues are under discussion [in Geneva] including chemical weapons, in which the Russians have a large and growing offensive capability. Continuing reports of the use of such weapons in South East and South West Asia make the task of banning them entirely all the more urgent. The aim of the NATO Allies remains a comprehensive, world-wide and verifiable ban on chemical weapons."</i></p>
1985	<p><i>"The Soviet Union regards both chemical and nuclear systems as weapons of mass destruction whose use would be subject to the highest political control. Although they have expressed support for the control and abolition of chemical weapons, they have not slackened the build-up and maintenance of their ability to wage offensive chemical warfare. Research, development and production of chemical weapons is adding to their stockpile, which is currently estimated to include over 300,000 tons of nerve agents. Moreover, Soviet forces are comprehensively equipped and trained to operate in a chemically contaminated environment."</i></p>
1986	<p><i>"The Soviet Union is capable of engaging in chemical warfare (CW) on a very large scale. It produces and stockpiles a variety of chemical weapons and is estimated to have some 300,000 tonnes of nerve agent alone. It has specialist troops responsible for aspects of nuclear, biological and chemical warfare. Soviet Servicemen are versed in the doctrine and tactics of CW; and Soviet forces have a variety of means of delivering chemical attacks by land- and sea-based systems and from missiles and bombs."</i></p> <p><i>"... the further use of chemical weapons in the Gulf War illustrates the danger posed by the proliferation of these weapons in the Third World. In an attempt to make proliferation more difficult, the British Government has imposed export controls on a range of chemicals that might be used to manufacture chemical weapons. But these measures are no substitute for the negotiation of the global ban to which we remain committed, and which is the only long-term solution to the problem."</i></p>

The emphasis continues to be on the Russian chemical weapons capability but for the first time there is mention of proliferation of such weapons in the Third World.

Developments in the late 1980s

19. Although the Security Council had denounced the use of chemical weapons in the Iraq/Iran war and several States had taken steps to control the export of chemical weapon

precursors, the use of chemical weapons in the Iran/Iraq war continued to escalate until a cease-fire was agreed on 20 August 1988. The key developments in relation to the United Nations are summarised below:

8 Oct 1986	SCR 588(1986) called ¹⁶ upon Iran and Iraq to implement fully and without delay Resolution 582 (1986) which had deplored inter alia <i>'in particular, the use of chemical weapons contrary to obligations under the 1925 Geneva Protocol.'</i>
14 May 1987	Security Council considered another report of the alleged use of chemical weapons. ¹⁷ The specialists concluded that <i>'There has been repeated use of chemical weapons against Iranian forces by Iraqi forces, employing aerial bombs and very probably rockets. The chemical agents used are mustard gas (yperite) and probably, on some occasions, nerve agents.'</i> that <i>'a new dimension is that civilians in Iran also have been injured by chemical weapons.'</i> and that <i>'Iraqi military personnel sustained injuries from chemical warfare agents, which are mustard gas (yperite) and a pulmonary irritant, possibly phosgene.'</i> The President said that the Council was <i>'deeply dismayed by the unanimous conclusions of the specialists that there has been repeated use of chemical weapons against Iranian forces by Iraqi forces, that civilians in Iran also have been injured by chemical weapons, and that Iraqi military personnel have sustained injuries from chemical warfare agents, they again strongly condemn the repeated use of chemical weapons in open violation of the Geneva Protocol of 1925 in which the use of chemical weapons in war is clearly prohibited.'</i> [Emphasis added].
20 July 1987	SCR 598(1987) deplored, <i>'in particular, the use of chemical weapons contrary to obligations under the 1925 Geneva Protocol'</i> and demanded that Iran and Iraq observe an immediate cease-fire and discontinue all military actions. ¹⁸

¹⁶ United Nations Security Council, *Resolutions and Decisions of the Security Council 1986*, Security Council Official Records: Forty-First Year, p. 11 - 12, United Nations, New York, 1987.

¹⁷ United Nations Security Council, *Report of the mission 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/18852, 8 May 1987.

¹⁸ United Nations Security Council, *Resolutions and Decisions of the Security Council 1987*, Security Council Official Records: Forty-Second Year, p. 5 - 6, United Nations, New York, 1988.

9 May 1988	Security Council considered another report of the alleged use of chemical weapons. ¹⁹ The specialist had concluded that chemical weapons had again been used in both Iran and Iraq. SCR 612(1988) condemned vigorously the continued use of chemical weapons in the conflict between Iran and Iraq contrary to the obligations under the Geneva Protocol and expected both sides to refrain from the future use of chemical weapons in accordance with their obligations under the Geneva Protocol. ²⁰ The Resolution called upon ' <i>all states to continue to apply or to establish strict control of the export to the parties to the conflict of chemical products serving for the production of chemical weapons.</i> '
26 Aug 1988	Security Council considered reports of three missions investigating the alleged use of chemical weapons. ^{21 22 23} The specialists had concluded that chemical weapons casualties were observed in both Iran and Iraq. SCR 620 (1988) condemned the use of chemical weapons in the conflict between Iran and Iraq in violation of the Geneva protocol and called upon ' <i>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.</i> ' ²⁴

International awareness of the use of chemical weapons in the Iraq/Iran war was enhanced by the images that were transmitted by the world media of the attack on Hallabja when it was reported that 5,000 died.

20. In Geneva negotiations continued towards a comprehensive treaty prohibiting chemical weapons. In August 1987, the Soviet Foreign Minister Eduard Shevardnadze accepted the proposals for mandatory challenge inspection and other intrusive verification measures which the United States had put forward in its 1984 draft convention. In addition, he invited the Conference on Disarmament participants to visit the Shikhany military facility to observe the destruction of chemical weapons. On 3 - 4 October 1987 some 150 representatives from 45 States participating in the Conference on Disarmament negotiations together with more than

¹⁹ United Nations Security Council, *Report of the mission 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/19823, 25 April 1988.

²⁰ United Nations Security Council, *Resolutions and Decisions of the Security Council 1988*, Security Council Official Records: Forty-Third Year, p. 10, United Nations, New York, 1989.

²¹ United Nations Security Council, *Report of the mission 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, 20 July 1988.

²² United Nations Security Council, *Report of the mission 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/20063, 25 July 1988.

²³ United Nations Security Council, *Report of the mission 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/20134, 19 August 1988.

²⁴ United Nations Security Council, *Resolutions and Decisions of the Security Council 1988*, Security Council Official Records: Forty-Third Year, p. 12, United Nations, New York, 1989.

50 journalists visited Shikhany some 600 miles south-east of Moscow to see a display of 19 standard munitions filled with mustard/lewisite, thickened lewisite and nerve agents and CS and a demonstration of a mobile destruction unit. Later in December 1987, the Soviet Union declared for the first time the size of its chemical weapons stockpile saying that *"the stocks of chemical weapons in the Soviet Union do not exceed 50,000 tons of poisonous substances."*

21. The spring of 1988 saw a bilateral exchange of visits between the United Kingdom's Chemical Defence Establishment at Porton Down and the Soviet Union's Chemical Weapons Facility at Shikhany with a visit first to Porton Down followed by a return visit to Shikhany. In the subsequent press conference in Moscow, questions were asked about the refusal to allow access to a second facility located at Shikhany and connected solely to Shikhany.

22. Later in 1988 following the images of chemical weapons use in the Iraq/Iran war earlier in the year, President Ronald Reagan in a speech to the United Nations General Assembly urged the States Parties to the 1925 Geneva Protocol to convene a conference to reverse the rapid deterioration of respect for the international norm against the use of chemical weapons. This led to 149 states meeting in Paris in January 1989 and in a concluding document solemnly affirming their commitment not to use chemical weapons and stressing their necessity of concluding at an early date a convention on the prohibition of chemical weapons.

23. The Second Review Conference of the BTWC took place in Geneva on 8 to 26 September 1986. In the General Debate the United States in a statement said²⁵ that *"it believed the Soviet Union had continued to maintain an offensive biological warfare programme and capability and had been involved in the production and use of toxins for hostile purposes in Laos, Kampuchea and Afghanistan."* It also said that the United States had sought to make use of the consultative process provided for in Article V of the Convention with the Soviet Union *"concerning the 1979 outbreak of anthrax in that country, Soviet involvement in the production, transfer and use of mycotoxins, and the Soviet Union's maintainance of an offensive biological warfare programme."* The Soviet Union in its statement²⁶ during the General Debate stated that *"The Soviet Union scrupulously observed its obligations under articles I, II, III and IV of the Convention. It did not possess any bacteriological agents or toxins, weapons, equipment or means of delivery. It had never transferred such weapons to allied States or third countries nor provided information on their development. It had no stockpiles of weapons of that kind outside its territory and did not carry out any development of such weapons on the territories of other States."*

24. The Final Declaration²⁷ of the Review Conference elaborated the procedure to be followed in regard to consultations carried out under Article V of the Convention and also

²⁵United Nations, Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, *Summary Record of the Third Meeting*, BWC/CONF.II/SR.3, 18 September 1986, pp. 4-5.

²⁶United Nations, Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, *Summary Record of the Third Meeting*, BWC/CONF.II/SR.3, 18 September 1986, p. 7.

²⁷United Nations, Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, *Final Declaration*, BWC/CONF.II/13/II, 30 September 1986, pp. 6.

agreed that all States Parties should provide an annual exchange of data under four confidence-building measures in order to "prevent or reduce the occurrence of ambiguities, doubts and suspicions." The four measures, subsequently further elaborated in March/April 1987, address:

1. *Exchange of data, including name, location, scope and general description of activities, on research centres and laboratories that meet very high national or international safety standards established for handling, for permitted purposes, biological materials that pose a high individual and community risk or specialise in permitted biological activities directly related to the Convention.*
2. *Exchange of information on all outbreaks of infectious disease and similar occurrences caused by toxins that seem to deviate from the normal pattern as regards type, development, place, or time of occurrence. If possible, the information provided would include, as soon as it is available, data on the type of disease, approximate area affected, and number of cases.*
3. *Encouragement of publication of results of biological research directly related to the Convention, in scientific journals generally available to States Parties, as well as promotion of use for permitted purposes of knowledge gained in this research.*
4. *Active promotion of contacts between scientists engaged in biological research directly related to the Convention, including exchanges for joint research on a mutual agreed basis."*

25. The annual UK Ministry of Defence *Statement on the Defence Estimates* in the years from 1987 to 1989 included the following:

Year	Statement
1987	<p><i>"The Warsaw Pact has the capability to conduct chemical warfare (CW) against NATO forces on a very large scale, and produces and stockpiles a range of lethal agents and incapacitants. The lethal agents currently produced and stockpiled include nerve, blister, blood and choking agents. Research into new agents continues, including in areas that will blur the distinction between chemical and biological weapons. The Warsaw Pact has troops who specialise in CW, and the ordinary Serviceman is trained in CW doctrine and tactics.</i></p> <p><i>Warsaw pact forces have various means of delivering chemical attacks by land- and sea-based systems and from missiles and bombs. the variety of delivery systems, together with the range both in type and persistency of chemical weapons, would allow Warsaw pact forces to use chemical weapons very flexibly."</i></p>

1988	<p><i>"The Soviet Union has also made some useful moves towards greater openness about its chemical warfare (CW) capabilities. It has acknowledged, for the first time, possession of CW stocks and has claimed that stocks of chemical weapons in the Soviet Union do not exceed 50,000 tons in terms of toxic agents. This figure, however, is significantly below Western estimates of the total Soviet stockpile and requires clarification."</i></p> <p><i>"In October 1987, the Soviet Union invited the participants in the Conference on Disarmament to visit its CW installation at Shikhany This was welcome, although the visit was limited and revealed little of modern Soviet stocks and production capability."</i></p>
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Year	Statement
1989	<p><i>"The Soviet Union's chemical warfare (CW) capability, the world's largest and most sophisticated, poses a major threat to NATO. The Soviet Union, however, did not acknowledge until 1987 that it had any CW capability at all. In April 1987, Mr. Gorbachev admitted to the existence of such a capability; later in 1987 Soviet spokesmen admitted to a stockpile of 50,000 tonnes of chemical agent.</i></p> <p><i>We find it difficult to accept a number of the Soviet Union's statements about its CW activities. We strongly suspect that, contrary to the Soviet claims, production of CW agents in the Soviet Union is still continuing and that testing of chemical weapons has not ceased. We estimated the size of the Soviet stockpile (in terms of weight of agents alone, and excluding the weight of the weapons in which they are encased) to be several times higher than the 50,000 tonnes claimed. We believe that the stockpile includes types of agents that were not disclosed to our experts during their visit to Shikhany, and that research into new agents continues."</i></p> <p><i>"There is also a growing danger of world-wide CW proliferation, exemplified by the use of chemical weapons in the Iraq/Iran conflict and by the clear evidence of Libya's efforts to develop a CW capability.... The best way to deal with the menace of chemical weapons is a comprehensive and verifiable global ban on their production, possession and use."</i></p>

Whilst the emphasis on the Soviet Union continues, there is increasing mention of the dangers of proliferation of chemical weapons.

Developments in the early 1990s

26. On 2 August 1990, Iraqi forces began their invasion and occupation of Kuwait. The Security Council convened within hours of the initial reports of Iraq's invasion and unanimously adopted Resolution 660 (1990)²⁸ which condemned the invasion, and demanded that Iraq immediately and unconditionally withdraw all its forces. Each of the P5 voiced strong opposition to the invasion.²⁹ As there was no sign that Iraq planned to withdraw from Kuwait or otherwise comply with Resolution 660 (1990), this led in November 1990 to the adoption of SCR 678(1990)³⁰ which contained a clear choice for Iraq. In its first paragraph the Council decided to allow Iraq 'one final opportunity, as a cause of goodwill' to fully implement on or before 15 January 1991 Security Council Resolution 660 (1990) and all subsequent Resolutions. Should Iraq fail to do so the Council said in the second paragraph, the member states co-operating with the government of Kuwait were authorised '*to use all necessary means*' - words understood to mean military force - to uphold and implement the Resolutions and to '*restore international peace and security in the area*'. This was only the fourth time in the United Nations history that the Security Council had decided to authorise member states to use military force.

27. Military operations began on 17 January 1991 and ceased at midnight Eastern Standard Time on 27-28 February 1991. There was major concern that Iraq might use chemical or biological weapons against the coalition forces and President Bush in a letter³¹ to Saddam Hussein made it clear "*that the United States would not tolerate the use of chemical or biological weapons You and your country will pay a terrible price if you order unconscionable acts of this sort.*" In the event chemical or biological weapons were not used in the conflict. The definitive cease-fire resolution, SCR 687(1991), drafted during the month of negotiations following the successful liberation of Kuwait, and adopted³² on 3 April 1991, was the fourteenth adopted by the Security Council in response to Iraq's invasion of Kuwait. The 34 operative paragraphs of the Resolution were divided into 9 parts and set out in great detail the terms for a formal cease-fire to end the conflict and restore security and stability to

²⁸United Nations Security Council, *Security Council Resolution condemning Iraq's invasion of Kuwait, demanding the immediate and unconditional withdrawal of all Iraqi forces and calling for negotiations for a peaceful resolution of their differences*, S/RES/660 (1990), 2 August 1990.

²⁹United Nations Security Council, *Official Records 2932nd meeting*, S/PV.2932, 2 August 1990.

³⁰United Nations Security Council, *Security Council Resolution authorising member states co-operating with the government of Kuwait to use "all necessary means to uphold and implement "the Council's Resolutions on the situation unless Iraq fully complies with those Resolution on or before 15 January 1991"*, S/RES/678 (1990), 29 November 1990.

³¹George Bush Presidential Library and Museum, *Statement by Press Secretary Fitzwater on President Bush's Letter to President Saddam Hussein of Iraq*, 12 January 1991. Available at <http://bushlibrary.tamu.edu/research/papers/1991/91011201.html>

³² United Nations Security Council, *Security Council Resolution establishing detailed measures for a cease-fire, including deployment of the United Nations Observer Unit; arrangements for demarcating the Iraq-Kuwait border; the removal or destruction of Iraqi weapons of mass destruction and measures to prevent their reconstitution, under the supervision of a Special Commission and the Director General of the IAEA; and creation of a compensation fund to cover direct loss and damage resulting from Iraq's invasion of Kuwait*, S/RES/687 (1991), 3 April 1991.

the area. Of particular relevance in respect of weapons of mass destruction was Section C which decreed that Iraq was to eliminate, under international supervision, its chemical and biological weapons stockpiles and its ballistic missiles with a range greater than 150 km. Iraq was to submit within 15 days a declaration of the locations, amounts and types of such weapons. Furthermore, a plan was required to ensure the future ongoing monitoring and verification of Iraq's compliance with the ban on these weapons and missiles. It was this resolution that established the United Nations Special Commission (UNSCOM) on Iraq with Ambassador Rolf Ekeus as its Executive Chairman.

28. During the subsequent years, UNSCOM³³ mounted repeated chemical and biological weapons inspections of Iraq and successfully oversaw the destruction of over 480,000 litres of chemical warfare agents, over 28,000 chemical munitions and nearly 1,800,000 litres of precursor chemicals. Although Iraq persistently sought to circumvent the requirements of the Security Council and to obstruct the work of UNSCOM it has become well known as a result of the work of UNSCOM that Iraq had a massive chemical and biological weapons programmes.

29. The concerns that chemical weapons might be used by Iraq against the coalition forces heightened public awareness of chemical weapons around the world and led to increased political pressure on the negotiators in Geneva to complete a global treaty prohibiting chemical weapons. These negotiations were also facilitated by the United States - Soviet Union Memorandum of Understanding on chemical weapons signed in September 1989 and subsequent bilateral meetings when the US and the Soviet Union agreed first at the Foreign Minister and then at Presidential level to expedite the negotiations in Geneva. In March 1992, Australia submitted a draft treaty offering compromise solutions to outstanding issues as a basis for early completion of the negotiations. In June 1992, the Chairman of the Ad Hoc Committee on Chemical Weapons at the Conference on Disarmament, Ambassador von Wagner of Germany released a draft final text which provided a complete text embodying both consensus compromises and the Chairman's proposed compromise language on the remaining unresolved issues. In September 1992 the Conference on Disarmament agreed the text of the Chemical Weapons Convention and forwarded it to the United Nations.

30. The Third Review Conference of the BTWC took place in Geneva on 9 to 27 September 1991. This extended the range of confidence-building measures to the following:

1. *Declaration form on "Nothing to declare" or "Nothing new to declare"*

2. *Confidence-building measure "A":*

- *Part 1: Exchange of data on research centres and laboratories;*

- *Part 2: Exchange of information on national biological defence research and development programmes.*

3. *Confidence-building measure "B":*

- *Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins.*

³³Graham S. Pearson, *The UNSCOM Saga Chemical and Biological Weapons Non-Proliferation*, 1999, Macmillan Press Ltd.

4. Confidence-building measure "C":

- Encouragement of publication of results and promotion of use of knowledge.

5. Confidence-building measure "D":

- Active promotion of contacts.

6. Confidence-building measure "E":

- Declaration of legislation, regulations and other measures.

7. Confidence-building measure "F":

- Declaration of past activities in offensive and/or defensive biological research and development programmes.

8. Confidence-building measure "G":

- Declaration of vaccine production facilities.

31. In addition, the Review Conference *"determined to strengthen the effectiveness and improve the implementation of the Convention and recognizing that effective verification could reinforce the Convention, decides to establish an Ad Hoc Group of Governmental Experts open to all States Parties to identify and examine potential verification measures from a scientific and technical standpoint. The Group shall meet in Geneva for the period 30 March to 10 April 1992. The Group will hold additional meetings as appropriate to complete its work as soon as possible, preferably before the end of 1993."* The mandate for the Group, which became known as VEREX, included the following:

"The Group shall seek to identify measures which could determine:

- *Whether a State party is developing, producing, stockpiling, acquiring or retaining microbial or other biological agents or toxins, of types and in quantities that have no justification for prophylactic, protective or peaceful purposes;*
- *Whether a State party is developing, producing, stockpiling, acquiring or retaining weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.*

Such measures could be addressed singly or in combination. Specifically, the Group shall seek to evaluate potential verification measures, taking into account the broad range of types and quantities of microbial and other biological agents and toxins, whether naturally occurring or altered, which are capable of being used as means of warfare."

32. Increased attention to both chemical and biological defence was evident in a number of official statements by governments and by groups such as NATO during this period. One example saw the Chemical Defence Establishment (CDE) at Porton Down in the UK, the oldest such establishment, change its name to the Chemical & Biological Defence

Establishment (CBDE) in April 1991 thereby reflecting more accurately its role in providing effective protective measures against the threat of chemical and biological weapons.

33. The annual UK Ministry of Defence *Statement on the Defence Estimates* in the years from 1990 to 1992 included the following:

Year	Statement
1990	<p><i>"The Soviet Union continues to possess the world's largest and most sophisticated chemical warfare (CW) capability. There has, however, been encouraging progress in bilateral talks between the United States and the Soviet Union.... it was announced during Secretary of State Baker's visit to Moscow in February [1990] that the United States and Soviet Union had agreed on the framework for the elimination of chemical weapons."</i></p> <p><i>"There is also a danger that some nations will attempt to develop nuclear or other warheads for these missiles [ballistic]. While nuclear warheads represent a major technological challenge, the development of chemical or biological warheads could be easier. A number of countries either have or are developing an offensive chemical warfare capability. Several more have shown an interest in obtaining one. Export controls have made it more difficult and costly for countries to do this but they have not halted proliferation. The legitimate spread of bio-technology for scientific and economic purposes has carried with it the potential for diversion of equipment and expertise into offensive biological warfare programmes."</i></p>
1991	<p><i>"A global chemical weapons ban has long been a British and Western arms control priority. Although in the event chemical warfare (CW) was not used in the Gulf conflict, the threat of its use has drawn attention to the urgent need to proceed even more vigorously towards this goal ..."</i></p> <p><i>"Today no country admits possessing them [biological weapons] but a number are capable of manufacturing them, and there are indications that in fact about ten countries possess or seek to acquire a biological warfare (BW) capability. Iraq, although it has signed the Convention, is one; as a result of UN Security Council Resolution 687 it has now added ratification to its signature ..."</i></p>
1992	<p><i>"The possibility of the kind of East-West conflict that threatened Europe in the past has disappeared, though allowance has to be made for uncertainty over future developments in the former Soviet Union, where for the foreseeable future an enormous concentration of conventional, nuclear and chemical capabilities will remain."</i></p> <p><i>"Outside Europe, the proliferation of ballistic missiles and weapons of mass destruction and of sophisticated conventional weapons could pose a threat to our dependencies, our allies and the United Kingdom itself. In an unstable and uncertain world, it is in our interest to play our part in fostering international stability...."</i></p>

The emphasis has now moved away from the previous focus on the former Soviet Union to concerns about proliferation of both chemical and biological weapons. Indeed, the 1992 statement makes it clear that in the Gulf crisis of 1990/1991 *"new detection capabilities were deployed against both chemical and biological agents and medical countermeasures against biological agents were also developed and deployed."*

Developments in the mid 1990s

34. The Chemical Weapons Convention opened for signature in Paris on 13 to 15 January 1993. Article XXI provided for entry into force 180 days after the 65th State had deposited its instrument of ratification with the Secretary-General of the United Nations. By the time of the Fifth International Symposium on Protection against Chemical and Biological Weapons in June 1995, 159 States had signed the Convention and 29 had ratified it. A key element of the Convention is the general purpose criterion in Article II (b) which states that chemical weapons include *all 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*. This ensures that the Chemical Weapons Convention prohibits all future chemicals in types and quantities not for permitted purposes thus preventing the Convention from becoming obsolete.

35. In regard to biological weapons, the Ad Hoc Group of Governmental Experts, known as VEREX, established by the Third Review Conference had met twice in 1992 and twice in 1993 producing a final report in which 21 potential verification measures, both off-site and on-site, had been identified and evaluated from a scientific and technical viewpoint. The Final Report was considered at a Special Conference in September 1994 which decided to establish an Ad Hoc Group to consider appropriate measures and draft proposals to strengthen the Convention to be included, as appropriate, in a legally binding instrument. The Ad Hoc Group met for the first time in January 1995.

36. International concerns, particularly in the US and the UK, about the biological weapons capability of the Soviet Union led President Yeltsin issuing a decree prohibiting work on biological weapons on 11 April 1992 and later the same year, in September 1992, to the issuing of a Joint US/UK/Russian Statement on Biological Weapons following a visit by a joint UK/US delegation to Moscow. This statement noted that the Russian Government had taken a number of steps to resolve compliance concerns which included confirmation of *"the termination of offensive research, the dismantlement of experimental technological lines for the production of biological agents, and the closure of the biological weapons testing facility"* and that Russia agreed to visits to *"any non-military biological site at any time in order to remove ambiguities."*

37. In South Africa, there were approaches by the UK and the US to the South African Government in regard to the South African chemical and biological weapons programmes. Although there was at the time little public visibility of these approaches, it has subsequently become known that South Africa was being encouraged to abandon these programmes and to make appropriate declarations under the international regimes.

38. UNSCOM had during this period continued to make progress with the inspection and destruction of Iraq's proscribed chemical and biological weapons capabilities. By 1995, it had become clear that Iraq had had a sizeable biological weapons programme and this was eventually admitted by Iraq in the later summer of 1995. In addition, the ongoing monitoring and verification (OMV) programme in Iraq was established in order to ensure that Iraq was in compliance with its obligations not to engage in the proscribed programmes.

39. Considerable public attention was gained by the attack carried out by the sect Aum Shinrikyo using the nerve agent sarin on 20 March 1995 on the Tokyo subway which killed 12 people and caused over 5,000 casualties. This had followed an attack seven months

earlier in Matsumoto in central Japan which killed seven people and affected 600 residents. These incidents highlighted the vulnerability of populations to chemical terrorism.

40. The increased attention being given to both chemical and biological protection around the world was illustrated in the United States by the creation in 1993 of the US Army Chemical and Biological Defence Command. At the NATO meeting in January 1994 of Heads of State and Government a Declaration³⁴ was issued which stated that:

"17. Proliferation of weapons of mass destruction and their delivery means constitutes a threat to international security and is a matter of concern to NATO. We have decided to intensify and expand NATO's political and defence efforts against proliferation We direct that work begin immediately ... to develop an overall policy framework to consider how to reinforce ongoing prevention efforts and how to reduce the proliferation threat and protect against it."

This led to the Alliance Policy Framework on Proliferation of Weapons of Mass Destruction³⁵ issued on 9 June 1994. As the NATO Handbook states, since 1994, *"the Alliance has increasingly focused on the range of defence capabilities needed to devalue WMD proliferation and use. Efforts are continuing to improve NATO's defence posture against WMD risks, in order to reduce the operational vulnerabilities of NATO military forces, whilst maintaining their flexibility and effectiveness in situations involving the presence, threat or use of NBC weapons."*

41. The annual UK Ministry of Defence *Statement on the Defence Estimates* in the years from 1993 to 1995 included the following:

Year	Statement
1993	<i>"There has been a treaty banning Biological Weapons since 1992. The declaration made by Russia in 1992 under the recent confidence-building measures made it clear, however, that the former Soviet Union -- Depository Power of the Biological Weapons Convention -- had illegally maintained an offensive biological weapons programme which continued until March 1992. This confirmed the misgivings long held by the other Depository Powers -- ourselves and the United States -- who took up these matters at a high level with the Soviet and Russian governments between 1990 and 1992."</i>

³⁴NATO, *Declaration of the Heads of State and Government*, Ministerial Meeting of the North Atlantic Council/North Atlantic Cooperation Council, Press Communiqué M-1(94)3, NATO Headquarters, Brussels, 10 - 11 January 1994. Available at <http://www.nato.int/docu/comm/49-95/c940111.htm>

³⁵NATO, *Alliance Policy Framework on Proliferation of Weapons of Mass Destruction*, Ministerial Meeting of the North Atlantic Council/North Atlantic Cooperation Council, Press Communiqué M-NAC-1(94)45, Istanbul, Turkey, 9-10 June 1994. Available at <http://www.nato.int/docu/comm/49-95/c940609a.htm>

1994	<p><i>"The end of the Cold War has brought many changes for the better, not least an end to the artificial and repressive division of Europe. But we have seen all too often major threats to peace and stability caused by regional ambition. In these circumstances, we and our allies must try to ensure that countries with an appetite for aggressive regional domination are denied the weapons and technologies that they need to impose their will."</i></p> <p><i>"It may be some time before all states finally accede to the CWC and the Government will therefore ensure that other measures to deter the proliferation and use of chemical weapons (such as the chemical warfare defence programme and export controls) are maintained at an appropriate level."</i></p>
1995	<p><i>"Regional instability may be compounded by the proliferation of nuclear, chemical and biological weapons and the means of their delivery which we, with our allies, have identified as being a major security concern. Our current assessment is that some dozen countries of concern have or are developing such weapons; most also have ballistic missile programmes. Programmes are largely concentrated in three regions: the Middle East; South Asia; and North Korea."</i></p>

The emphasis is now clearly on the dangers from proliferation of chemical and biological weapons.

Developments in the late 1990s

42. A key development was the entry into force of the Chemical Weapons Convention on 29 April 1997 following the deposit by Hungary 180 days earlier of the 65th instrument of verification. At entry into force there were 87 States Parties and 78 Signatory States. The Organization for the Prohibition of Chemical Weapons (OPCW) was set up in The Hague in the Netherlands and together with the National Authorities in the individual States Parties started work on the implementation of the Convention. By 1998, a further 20 States had become Parties including Iran, Pakistan and the Russian Federation bring the number of States Parties to 107. 4 States Parties had declared possession of chemical weapons and six States Parties had made declarations of past or present production capabilities and seven had declared old or abandoned chemical weapons. Almost 200 inspections had taken place on the territories of 25 States Parties since entry into force.

43. UNSCOM had continued its inspections in Iraq and had, despite the difficulties put in their way by the Iraqi authorities, gained appreciations of the magnitude of the Iraqi chemical and biological offensive programmes although inconsistencies in the Iraqi declarations meant that there were significant unresolved issues.

44. The Fourth Review Conference of the Biological and Toxin Weapons Convention was held in Geneva for two weeks in November/December 1996. Concern was expressed about non-compliance in the General Debate with Australia, France, the UK and the US all naming both Iraq and the former Soviet Union as being non-compliant; the UK said: *"The existence of a massive offensive biological weapons programme conducted illegally for years in the Soviet Union has recently come to light."* and on Iraq said that *"thousands of Coalition troops, as well as neighbouring civilian populations, were at real risk from Saddam Hussein's extensive biological weapons programme during the Gulf War."* whilst the United States noted: *"Overall, the United States believes that twice as many countries now have or*

are actively pursuing offensive biological weapons capabilities as when the Convention went into force." The negotiations leading to the Final Declaration were difficult with neither Iraq nor the Russian Federation wishing to see any specific mention of their countries; an interesting contrast to the fact that both countries had since the Third Review Conference openly acknowledged having had offensive biological weapons programmes. Although the United States had proposed to the Conference language that *"The Conference notes the efforts of UNSCOM to address some of these concerns and expresses its support for the early and satisfactory completion of UNSCOM's important work. The Conference also notes the important decree by the President of the Russian Federation in April 1992 indicating that his country would accomplish its obligations under the Convention. The Conference expressed the hope that the objectives outlined in that decree would rapidly be fulfilled."*, this was not agreed and the eventual language made no mention of UNSCOM, Iraq or the Russian Federation.

45. The work of the Ad Hoc Group was supported with every State party that spoke during the General Debate being in favour of the work of the Ad Hoc group and the need to strengthen the BTWC. However, a South African proposal for language in the Final Declaration that outlined the elements of the future legally binding instrument as comprising comprehensive annual declarations, on-site measures including investigations on non-compliance concerns, voluntary confidence building measures, measures to implement Article X and definitions of objective terms and criteria where applicable failed to find consensus even though the contributions to the General Debate by the EU, Australia, Bulgaria, Canada, the UK and the US had all mentioned similar elements as being in the future legally binding instrument. Proposals to include a target date of completion by 1998 also failed to find consensus although this was supported by the EU, the UK, the US, Australia, New Zealand, Romania and the Slovak Republic. The Ad Hoc Group was, however, encouraged in the Final Declaration to *"review its method of work and to move to a negotiating format"*. The following year, in July 1997, the Ad Hoc Group successfully transitioned to a rolling text of a legally binding instrument to improve the implementation and strengthen the effectiveness of the Convention.

46. Concerns about the potential use of chemical and biological weapons by terrorists continued to receive attention as it became clear that the Aum Shinrikyo sect in Japan had sought both chemical and biological agents and had also made attempts to disseminate biological agents. In particular the G7 Heads and State of Government at their summit in June 1996 in Lyon, France stated that *"Special attention should be paid to the threat of utilization of nuclear, **biological** and **chemical materials**, as well as **toxic substances**, for terrorist purposes."* [Emphasis added]

47. The annual UK Ministry of Defence *Statement on the Defence Estimates* in 1996 was followed in subsequent years by occasional reports with supporting essays. Thus in July 1998, there was a *Strategic Defence Review* with a supporting essay on *Deterrence, Arms Control and Proliferation*. These included the following:

Year	Statement
1996	<i>"The proliferation of nuclear, chemical and biological weapons and the means of their delivery are issues that we, with our allies, have identified as being of major security concern. We continue to make considerable efforts in the field of arms control and non-proliferation, and believe these have been successful in hindering potential proliferators."</i>

1998	<p><i>"In the modern world, nuclear weapons are not the only weapon of mass destruction. The Review therefore addressed the continuing risks arising from the proliferation of chemical and biological weapons. The Government is committed to their elimination. But the difficulty and complexity of this task should not be underestimated.</i></p> <p><i>The Government's policy has two strands:</i></p> <ul style="list-style-type: none"> <i>-- existing international arms control and non-proliferation regimes must be strengthened, increasing the political and economic costs to proliferators, and the risk of their being detected by the international community;</i> <i>-- as long as risks remain, British forces must be trained and equipped to operate in a chemical or biological environment. This fulfils our duty of care to our people and by ensuring that there is no military benefit from using chemical or biological weapons, it reduces the incentives for a proliferator to acquire them.</i> <p><i>In the long term, we seek to create the conditions where no state can credibly judge that the gains from acquiring such weapons would be equal to the costs and risks involved."</i></p> <p><i>"Our assessment is that there could be around 20 countries that either possess or have shown an interest in developing offensive chemical and/or biological warfare capabilities."</i></p>
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The emphasis is thus primarily on the risks from proliferation of chemical and biological weapons.

Developments at the start of the 21st Century

48. The Organization for the Prohibition of Chemical Weapons (OPCW) and the States Parties to the CWC continued to implement the Convention successfully. By the end of 2000, there were 141 States Parties. Further progress had been made in destruction of chemical weapons with some 1,500 tonnes of agents being destroyed and over 480,000 munitions and containers being destroyed. 300 inspections were carried out in 45 States Parties -- of these 140 inspections were of industry facilities.

49. The work of UNSCOM in Iraq was suspended in late 1998 when it became clear that Iraq was continuing to obstruct the work of UNSCOM in Iraq and was failing to cooperate with UNSCOM. At the end of 1998 when the UNSCOM report of 15 December made it clear that *'Iraq did not provide the full cooperation it promised on 14 November 1998.'* and went on to add that *'during the period under review Iraq initiated new forms of restriction upon Commission's work Iraq's conduct ensured that no progress was able to be made in either the fields of disarmament or accounting for its prohibited weapons programmes.'* [Emphasis added], military action was taken by the United States and the United Kingdom against Iraq. In both countries the UNSCOM report was cited as demonstrating that Saddam Hussein had no intention of abandoning his weapons of mass destruction.

50. In January 1999, the Security Council decided unanimously to establish three panels to compile reports by 15 April 1999 on the three main elements of Iraq's compliance with the Security Council relations: disarmament; humanitarian issues; and matters outstanding from

Iraq's 1990 invasion of Kuwait. Insofar as the panel relating to disarmament was concerned, the decision stated that:

*'4. The first panel, on disarmament and current and future ongoing monitoring and verification issues, would involve the participation and expertise from the United Nations Special Commission, the International Atomic Energy Agency, the United Nations Secretariat, and any other relevant expertise. The panel would assess all the existing and relevant information available, including data from ongoing monitoring and verification, relating to the state of disarmament in Iraq. The panel would make recommendations to the Security Council on how, taking into account relevant Security Council resolutions, to **re-establish an effective disarmament/ongoing monitoring and verification regime in Iraq.** [Emphasis added]*

The Amorim panel report was issued on 27 March 1999. During the subsequent months, there was debate amongst the Security Council members as to what action should be taken which culminated on 17 December 1999 when the Security Council adopted a new resolution 1284 (1999)³⁶ which established a UN Monitoring, Verification and Inspection Commission (UNMOVIC) which replaces UNSCOM. This resolution was approved by 11 votes (Argentina, Bahrain, Brazil, Canada, Gabon, Gambia, Namibia, Netherlands, Slovenia, UK and US) to 0 with 4 abstentions (China, France, Malaysia and Russia). The resolution stated that the Security Council:

*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; [Emphasis added]*

51. In January 2000, the Secretary-General nominated³⁷ Dr. Hans Blix of Sweden as Executive Chairman and this nomination was approved³⁸ by the Security Council on the following day. Dr. Blix took up his post as Executive Chairman on 1 March 2000.³⁹ The following months saw the establishment of UNMOVIC and the start of training of personnel for the UNMOVIC mission. By May 2001 the UNMOVIC quarterly report stated that UNMOVIC was ready to take up the full tasks mandated to it and had 45 staff in New York and over 120 on the roster of trained experts available to serve UNMOVIC in Iraq.

³⁶United Nations Security Council, *Resolution 1284 (1999) Adopted by the Security Council at its 4084th meeting on 17 December 1999*, S/RES/1284 (1999), 17 December 1999. Available at <http://www.un.org/Depts/unmovic/documents/docslst.htm>

³⁷United Nations Security Council, *Letter dated 26 January 2000 from the Secretary-General addressed to the President of the Security Council*, S/2000/60, 27 January 2000.

³⁸United Nations Security Council, *Letter dated 27 January 2000 from the President of the Security Council addressed to the Secretary-General*, S/2000/61, 27 January 2000.

³⁹Hans Blix, *Disarming Iraq The Search for Weapons of Mass Destruction*, 2004, Bloomsbury Publishing, London.

52. The negotiations by the Ad Hoc Group of the States Parties to the BTWC of a legally binding instrument to improve the implementation and strengthen the effectiveness of the Convention had continued throughout this period. In the spring of 2001, Ambassador Tibor Toth, the Chairman of the Ad Hoc Group, had circulated a Chairman's text with compromise language to resolve the relatively few outstanding issues. In May 2001, a report⁴⁰ on the April/May session of the Ad Hoc Group concluded that *"it is evident that the Protocol negotiation can indeed be completed before the Fifth Review Conference and result in an effective and valuable strengthening of the prohibition regime against biological weapons."*

53. As already noted the annual UK Ministry of Defence *Statement on the Defence Estimates* was discontinued in the late 1990s and replaced by occasional reports and analyses. In April 1999, the Ministry of Defence published a report entitled *Defending Against the Threat of Biological and Chemical Weapons* and later, in December 1999, a *Defence White Paper 1999*, was issued. These included the following:

Year	Statement
April 1999	<p><i>"In the less predictable post-Cold War security climate, many countries of concern have biological or chemical weapons capabilities. Several of them are in those areas in which ... we are most likely to face challenges to our interests, particularly the Gulf, Near East and North Africa. The potential threat from biological and chemical agents is now greater than that from nuclear weapons."</i></p> <p><i>"So far, very few terrorist groups have shown an interest in biological or chemical materials. The 1995 sarin attack by Aum Shinrikyo on the Tokyo underground has been the most serious incident to date. Most groups will continue to prefer conventional means of attack."</i></p>
December 1999	<p><i>"Of notable concern are the dangers from continuing proliferation of weapons of mass destruction and their potential delivery systems. While there is a clear international consensus that the use of chemical and biological weapons is wrong, we are a long way from achieving our aim of ridding the world of them. The development of delivery systems for weapons of mass destruction, in particular ballistic missiles, continues to be monitored closely."</i></p> <p><i>"Paradoxically, the increases in our conventional military capability may make unconventional threats more likely. Potential adversaries may conclude that they cannot compete in conventional warfare and so seek areas or methods of conflict where they perceive they have an advantage. These kinds of threats are commonly described as asymmetric. For example, adversaries may use weapons we would not, such as those banned by international law; they may resort to acts of terrorism."</i></p>

This stated for the first time that the potential threat from biological and chemical agents was now greater than that from nuclear weapons. It also touches on the potential terrorist threat using biological or chemical materials -- interestingly using the term *"materials"* rather than the more limiting *"agents"*.

⁴⁰Graham S. Pearson, *Strengthening the Biological and Toxin Weapons Convention*, Quarterly Review no 15, *CBW Conventions Bulletin*, Issue No. 52, June 2001. Available at <http://www.sussex.ac.uk/spru/hsp>

Developments in the early 21st Century

54. The period from 2001 to 2004 has seen several serious incidents and developments relating to CBW and the elements of the web of assurance that such weapons are totally prohibited. These incidents and developments have had an impact on the global approach to preventing chemical and biological weapons -- and it is unclear in 2004 where some of these developments may lead. There is, however, no doubt that the requirements for effective regimes totally prohibiting chemical and biological weapons are more widely recognized round the world than ever before.

Chemical and Biological Terrorism

55. The Al Qaeda attacks of the World Trade Centre and the Pentagon on 11 September 2001 have led to a recognition that terrorism knows no frontiers and that all States are vulnerable to such attacks. In the United States, there were attacks in September/October 2001 in which letters containing anthrax were sent through the US postal system and caused 22 cases of anthrax infection resulting in 5 deaths as well as immense alarm in the United States. Over two years later and despite the FBI and the US Post Office offering a reward of \$2 M dollars for information leading to the arrest and conviction of the person (s) responsible for mailing the four anthrax letters, this case is still unsolved. It has been suggested in an op-ed⁴¹ for the Los Angeles Times on 22 September 2002 that within two weeks after the attacks the source of the anthrax was known to be domestic and have originated in the US biodefence programme and that this position has not changed by September 2002. The op-ed concluded that *"given the origin of the anthrax and the warnings contained in the letters, the perpetrator's motive was not to kill but rather to raise public fear and thereby spur Congress to increase spending on biodefence. In this, the attacks have been phenomenally successful."*

56. There was widespread international reaction to these attacks in the United States and to the potential use of chemical or biological weapons by terrorist groups. The Security Council of the United Nations on 28 September 2001 adopted resolution 1373 (2001)⁴² which reaffirmed its unequivocal condemnation of the terrorist attacks which took place in New York and Washington DC on 11 September 2001 and expressed its determination to prevent all such acts. It calls upon all States *"to find ways of intensifying and accelerating the exchange of operational information, especially regarding ... the threat posed by the possession of weapons of mass destruction by terrorist groups."* and emphasises the need to enhance coordination of efforts on national, subregional, regional and international levels in regard to *"the illegal movement of nuclear, chemical, biological and other potentially deadly materials."* This resolution established the Counter Terrorism Committee to monitor the implementation of this resolution.

57. The Secretary-General of the United Nations on 1 October 2001 established a Policy Working Group on the United Nations and Terrorism which reported⁴³ on 1 August 2002. This included several recommendations relating to weapons of mass destruction:

⁴¹Barbara Hatch Rosenberg, *Anthrax Attacks Pushed Open an Ominous Door*, Los Angeles Times, 22 September 2002. Available at <http://fas.org/bwc/news/latimes09-22-02.htm>

⁴²United Nations Security Council, *Resolution 1373 (2001)*, S/RES/1373 (2001), 28 September 2001.

⁴³United Nations General Assembly/Security Council, *Identical letters dated 1 August 2002 from the Secretary-General addressed to the President of the General Assembly and President of the Security Council*, A/57/273 S/2002/875, 6 August 2002.

"Recommendation 18

Consideration should be given to the establishment of a mechanism under the Department for Disarmament Affairs that would produce a biennial public report on the potential use of weapons of mass destruction in terrorist acts. This mechanism would make use of existing United Nations resources and specialized databases, as well as information received from Member States, and could serve as a barometer of terrorist danger.

Recommendation 19

The development of the technical capabilities of the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons and the World Health Organization to provide assistance to States in the event of the threat or use of weapons of mass destruction, other weapons and technologies should be encouraged.

Recommendation 20

Arrangements through which specialized agencies or related organizations can provide assistance and advice to States on how to develop and maintain adequate civil defence capability against the use of weapons of mass destruction, other weapons or technologies should be facilitated.

Recommendation 21

Relevant United Nations offices should be tasked with producing proposals to reinforce ethical norms, and the creation of codes of conduct for scientists, through international and national scientific societies and institutions that teach sciences or engineering skills related to weapons technologies, should be encouraged. Such codes of conduct would aim to prevent the involvement of defence scientists or technical experts in terrorist activities and restrict public access to knowledge and expertise on the development, production, stockpiling and use of weapons of mass destruction or related technologies."

58. The European Union responded by holding an extraordinary European Council meeting on 21 September 2001 which agreed⁴⁴ a plan of action to counter terrorism. At a meeting a month later in Ghent on 19 October 2001, the Council asked the Council and the Commission to prepare a programme to improve the cooperation between Member States on the evaluation of risks, alerts and intervention, the storage of such means and in the field of research. The programme should cover the detection and identification of infectious and toxic agents as well as the prevention and treatment of chemical and biological attacks. An initial report⁴⁵ on the state of civil protection in the European Union against possible

⁴⁴European Union, *Conclusions and Plan of Action of the Extraordinary European Council Meeting on 21 September 2001*. Available at <http://europa.eu.int>

⁴⁵European Commission, *Civil protection -- State of preventive alert against possible emergencies*, Communication from the Commission to the Council and the European Parliament, COM(2001) 707 final, Brussels, 28 November 2001. Available at [http://europa.eu.int/eur-lex/en/com/pdf/2001/com2001_0707en01 .pdf](http://europa.eu.int/eur-lex/en/com/pdf/2001/com2001_0707en01.pdf)

emergencies was issued on 28 November 2001. A progress report⁴⁶ was issued in June 2002 on the implementation of the programme for preparedness for possible emergencies. A report⁴⁷ on cooperation in the European Union preparedness and response to biological and chemical agent attacks was issued in June 2003. This sets the scene by outlining recent bioterrorist incidents and their repercussions in the EU before addressing Public Health Preparedness and Response and then the Availability and Stockpiling of Medicines. The report identifies the importance in building a multi-sector response of both health security and of actions in food, animal, plant and water safety. Another section addresses International Cooperation which includes the Ottawa initiative, cooperation with the WHO and with NATO. The report concludes that *"Of utmost importance in countering bioterrorism is speedy detection of a release and immediate transmission of alert and relevant information to those charged with mounting the appropriate response. Member States are improving their epidemiological surveillance apparatus and their biological and chemical monitoring capabilities and have set up national systems of alert and information transmission."*

59. The then Director-General of the World Health Organization, Dr Brundtland, addressing⁴⁸ the Pan-American Health Organization in Washington DC on 24 September 2001 less than two weeks after 11 September said *"Surveillance becomes all the more vital as we must prepare for the possibility that people are deliberately harmed with biological or chemical agents."* The World Health Assembly in May 2002 adopted⁴⁹ a resolution addressing the global public health response to natural occurrences, accidental release or deliberate use of biological and chemical agents or radionuclear material that effect health. The strategy developed by the WHO to respond to this resolution comprises four main areas: international preparedness; global alert and response; national preparedness; and preparedness for selected diseases/intoxication. In addition, the World Health Organization has in 2004 issued a second edition⁵⁰ of the *Public Health Response to Biological and Chemical Weapons: WHO Guidance*.

60. The Health Ministers of the G7 together with Mexico and the European Union Commissioner for Health met in Ottawa on 7 November 2001 to launch the Global Health

⁴⁶European Commission, *Civil protection -- Progress made in implementing the programme for preparedness for possible emergencies*, Communication from the Commission to the Council and the European Parliament, COM(2002) 302 final, Brussels, 11 June 2002. Available at http://europa.eu.int/eur-lex/en/com/pdf/2002/com2002_0302en01.pdf

⁴⁷European Commission, *On Cooperation in the European Union on Preparedness and Response to Biological and Chemical Agent Attacks (Health Security)*, Communication from the Commission to the Council and the European Parliament, COM(2003) 320 final, Brussels, 2 June 2003. Available at [http://europa.eu.int/eur-lex/en/com/cnc/2003/com2003_00320en01 .pdf](http://europa.eu.int/eur-lex/en/com/cnc/2003/com2003_00320en01.pdf)

⁴⁸Dr Gro Harlem Brundtland, *WHO Regional Committee of the Americas*, Fifth-third session, Washington DC, 24 September 2001. Available at http://www.who.int/director-general/speeches/2001/english/20010924_rcamrowashington.en.html

⁴⁹World Health Assembly, *Global public health response to natural occurrences, accidental release or deliberate use of biological and chemical agents or radionuclear material that effect health*, WHA 55.16, Fifty-fifth World Health Assembly, 16 May 2002. Available at <http://www.who.int>

⁵⁰World Health Organization, *Public Health Response to Biological and Chemical Weapons : WHO Guidance*, 2004. Available at <http://www.who.int/csr/delibepidemics/biochemguide/en/print.html>

Security Initiative also known as the Ottawa Plan. The statement⁵¹ said that *"The events of September 11 have changed the focus of governments. It has centered our attention on how we assess risks, how we prepare for any eventuality and how we respond more effectively to public health security crises.... Terrorism, particularly bioterrorism, is an international issue, for instance, an outbreak of smallpox anywhere in the world is a danger to all countries. International collaboration is essential."* The statement sets out the objectives for the G7 plus Mexico coordination. Subsequent Ministerial statements have outlined further developments under the Global Health Security Initiative. Thus the statement⁵² issued on 7 November 2003 in Berlin outlines the outcome of a smallpox outbreak simulation exercise, indicates that the UK is leading work on a risk incident scale and that generic criteria for priority chemicals have been developed by Japan. It also recognizes that preparedness for and response to bioterrorism has much in common with preparedness for and response to naturally occurring global health threats such as pandemic influenza. Consideration is being given to how information from the Global Security Health Initiative might be shared with other countries perhaps through *"periodic information sessions determined by the World Health Organization at the World Health Assembly."* The next Ministerial meeting will be in France in the autumn of 2004.

61. The G8 Heads of State and Government at their meeting in Canada in July 2002 announced⁵³ the *"G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction."* In its first paragraph this states that *"We commit ourselves to prevent terrorists, or those that harbour them, from acquiring or developing nuclear, chemical, radiological and biological weapons 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."*

The Biological and Toxin Weapons Convention

62. Although the Ad Hoc Group of the BTWC had been close in April/May 2001 to completing its work on a legally binding instrument, its next four week meeting in July 2001 was to be disrupted. After about 50 of the 55 or so States Parties engaged in the negotiations had spoken in favour of the Chairman's composite text being used as the basis for the political decisions needed to complete the Protocol prior to the Fifth Review Conference in November 2001, the mood was sharply changed on Wednesday 25 July 2001 when the United States delivered a 10 page statement rejecting both the composite Protocol and the approach adopted in the Protocol. Whilst it is possible that the US rejection provided cover for other dissenters to the Protocol, it was the US rejection that effectively stalled the Ad Hoc Group negotiations -- and certainly contributed to the failure of the Ad Hoc Group to agree a procedural report on the July/August session. This failure in the early hours of Saturday 18 August 2001 has to be primarily attributed to the United States rejection at the eleventh hour of the Protocol when it was evident that many delegations had come to the July/August session expecting hard negotiations resulting in successful agreement of an agreed Protocol.

⁵¹G7 Health Ministers, *Ottawa plan for improving health security*, G7 with Mexico Health Ministers' Meeting, Ottawa, Canada, 7 November 2001. Available at <http://www.g8.utoronto.ca/health/ottawa2001.html>

⁵²Health Canada, *Fourth ministerial meeting on Health Security and Bioterrorism*, Berlin, Germany, 7 November 2003. Available at http://www.hc-sc.gc.ca/english/media/releases/2003/ministerial_statement.htm

⁵³G8 Leaders, *The G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction*, Available at <http://www.g8.gc.ca/2002/Kananaskis/globpart-en.asp>

The US rejection was described in our evaluation⁵⁴ as being *"a huge mistake based on illogical assessments"*.

63. This evaluation in August 2001 concluded that *"it has always been evident during the negotiations that the United States were not showing leadership but rather participating reluctantly with objectives that are unrealistic in the global world of the 21st century. Although following the US statement of 25 July 2001 there have been some suggestions that the composite Protocol text should be put onto the shelf for the time being, one has to ask the question -- **for what purpose?** It is very clear that if at some future date -- a couple of months, a couple of years or a decade or more hence -- the United States indicates that it is ready to give further consideration to a Protocol to strengthen the Convention, it would be unrealistic not to expect the other States Parties at that time not to want to reexamine the provisions in the composite Protocol text and there will then be extensive unraveling of what is **an excellent package** of measures in the Chairman's composite text resulting in a **net loss** of the benefits for health, safety, security and prosperity that are available from the Protocol. The United States statement that it intends to develop other ideas and different approaches to effectively strengthen the Convention ignores the reality that by having withdrawn from the Protocol at the eleventh hour, the United States has effectively killed any favourable multilateral consideration of any ideas, however meritable, that it may bring forward at some subsequent date. Any new proposals, no matter how meritable, associated with the United States will be dead on arrival and will be rejected by the international community. There is simply no prospect of any early strengthening of the biological weapons multilateral prohibition regime by any means other than the Protocol in the foreseeable future."*

64. As this rejection of the negotiations had preceded the anthrax attacks of September/October 2001, there was some hope that the United States might reconsider its position at the Fifth Review Conference of the BTWC which was held in Geneva on Monday 19 November to Friday 7 December 2001. The President of the Review Conference, Ambassador Tibor Tóth of Hungary, in his opening remarks noted that the negotiations on the compliance protocol had come to an abrupt halt in August and that another challenge was posed by the recent use of biological weapons in the incidents using anthrax as a weapon of terror which led to the notion that the use of these weapons is becoming part of our everyday life. He said that *"Such a notion is slowly eroding all the prohibition layers, both politically and legally binding, as contained in the consensus final declarations of all the previous Review Conferences and in the Biological Weapons Convention itself. The Convention is facing perhaps the greatest challenges in its 26-year history.... this... puts us in a situation profoundly different to that faced by previous Review Conferences."* He concluded that *"We will have to reconfirm at the Conference the importance the international community attaches to the integrity of each and every prohibition norm... We must not accept the slow erosion of the norms that served us for decades, if not longer. We must comprehend that in the light of political and public expectations we have no other viable choice but to overcome these challenges."*

65. The Review Conference made good progress during its three week meeting and had, by the morning of the final day, reached the position where the President of the Review Conference was reporting to the media that 75 per cent of the Final Declaration had been

⁵⁴Graham S. Pearson, Malcolm R. Dando and Nicholas A. Sims, *The US Rejection of the Composite Protocol: A Huge Mistake Based on Illogical Assessments*, University of Bradford Department of Peace Studies, Evaluation Paper No. 22, August 2001. Available at <http://www.brad.ac.uk/acad/sbtwc>

consolidated and that the outstanding critical issues were non-compliance with the Convention, follow-up to the Review Conference, and the question of the Ad Hoc Group and whether or not this should resume its work.

66. Late in the afternoon of the final day, Friday 7 December 2001, agreement had been reached on the language in the Final Declaration relating to the first eleven Articles of the Convention -- and consensus language was available for Articles XIII, XIV and XV making the Final Declaration 95 per cent complete -- when the US tabled new language for Article XII, without prior consultation with any of the other States Parties, which included:

3. The Conference takes note of the work of the Ad Hoc Group, and decides that the Ad Hoc Group and its mandate are hereby terminated and replaced with the process elaborated in paragraphs 1 and 2.

This proposal by the United States was received with shock and anger not only because of its proposed termination of the Ad Hoc Group and its mandate but also because of its unexpected introduction less than two hours before the end of the Review Conference thereby jeopardizing the Conference and the progress towards agreement of a Final Declaration. In order to avoid a complete failure, there was no alternative other than to adjourn the Review Conference until 11 to 22 November 2002.

67. It had thus become evident during the Review Conference that the United States, whilst content to call for national measures, would not consent to any language which required multilateral action or sought to arrive at legally binding measures to strengthen the regime. It also apparently had difficulty in accepting language referring to other international treaties such as the Convention on Biological Diversity or the Cartagena Protocol on Biosafety to which the United States is not a Party even though such language had been agreed at previous Review Conference. The tabling, within two hours of the end of the Review Conference, of language, without any prior consultation even with close allies, proposing termination of the Ad Hoc Group and its mandate showed a serious misreading of the widespread desire of all the other States Parties to strengthen the effectiveness and improve the implementation of the Convention in accordance with the mandate of the Ad Hoc Group. This led to the adjournment of the Review Conference for a year until November 2002 even though the Final Declaration was said by the President to be some 95 per cent complete.

68. The attitude of the United States to the Review Conference and the Biological and Toxin Weapons Convention is very hard to understand let alone explain. The rest of the world appreciates and recognizes the value of the multilateral regime against biological weapons in strengthening collective security and following the events of 11 September and the subsequent anthrax attacks in the United States, it would have been expected that the United States would have been aware of -- and would have wished to benefit from -- the considerable benefits that could accrue from multilaterally strengthening the BWC regime as national measures are always going to be subject to national interpretation and are unlikely to be harmonised internationally. The United States missed a real opportunity to help to protect itself -- and its fellow States Parties -- from the dangers of biological weapons.

69. At the resumption of the Review Conference in November 2002, there was agreement to a modest programme of continued annual meeting by the States Parties to address the following topics:

- i. *The adoption of necessary, national measures to implement the prohibitions set forth in the Convention, including the enactment of penal legislation;*
- ii. *National mechanisms to establish and maintain the security and oversight of pathogenic microorganisms and toxins;*
- iii. *Enhancing international capabilities for responding to, investigating and mitigating the effects of cases of alleged use of biological or toxin weapons or suspicious outbreaks of disease;*
- iv. *Strengthening and broadening national and international institutional efforts and existing mechanisms for the surveillance, detection, diagnosis and combating of infectious diseases affecting humans, animal, and plants;*
- v. *The content, promulgation, and adoption of codes of conduct for scientists.*

The first two topics would be addressed in 2003, the third and fourth in 2004 and the fifth in 2005. It is, however, regrettable that the opportunity was missed to adopt a Final Declaration as the reaffirmations and extended understandings provided by such Final Declarations do significantly contribute to the strengthening of the norm and regime totally prohibiting biological weapons. Certainly the international situation regarding the Biological and Toxin Weapons Convention was not one in which there was no urgency to strengthen the norm and regime and thereby send a clear message to States Parties and to sub-State actors that these weapons are totally prohibited.

The Chemical Weapons Convention

70. The Organisation for the Prohibition of Chemical Weapons and the implementation of the Chemical Weapons Convention continued to make progress. By the end of 2002, 147 States had become Party to the Convention. Further progress had been made in destruction of chemical weapons with over 7,100 tonnes of agents being destroyed. 210 inspections were carried out in 38 States Parties -- of these 85 inspections were of industry facilities. These reduced numbers were because of cash shortfalls in the OPCW. In April 2002 a First Special Session of the Conference of States Parties voted to terminate the appointment of the Director-General of the OPCW and at the resumed Special Session in July 2002 it appointed Ambassador Rogelio Pfirter as Director General.

71. In 2003, the First Review Conference of the CWC was held in The Hague on 28 April 2003 to 9 May 2003. Although this is required by the Convention "*to undertake reviews of the operation of the Convention*" and "*such reviews shall take into account any relevant scientific and technological developments*", it was evident that the States Parties had not really seized the opportunity to take stock after five years of operation of the Convention. This failure stemmed at least in part from the upheaval associated with the change of the Director General of the OPCW during the previous year. The key documents for the Review Conference were largely only issued within three weeks of the start of the Conference thereby limiting national consideration of the issues in preparation for the Review Conference. As a consequence, the First Review Conference represented a missed opportunity with States Parties failing to gain the maximum benefit from the review.

72. Although some States Parties in their political statements expressed concern about the implications of non-lethal or less than lethal agents for the Convention, there was no mention

of such agents or of law enforcement in the final version of the Review Document. This was a clear example of the failure of States Parties to prepare for and engage in the issues that should be addressed at the Review Conference especially given the worldwide attention focussed on the use of a fentanyl derivative by the Russian security forces at the Moscow theatre siege. As the CBW Conventions Bulletin editorial⁵⁵ in June 2003 stated "... *it should not be simply ignored now for another five years. Indeed it is hard to think of any other issue having as much potential for jeopardizing the long-term future of the CWC regime.*" [Emphasis added]

73. During the Review Conference, in private session, a Second Special Session of the Conference of the States Parties took a decision on the tenure policy of the OPCW that would limit the total length of service for OPCW staff to seven years and thus make the OPCW a non-career organisation. This decision attracted little attention at the time even though its implications for the future health of the OPCW are immense. In contrast to the tenure policy of organisations such as the IAEA and the World Health Organization which recognize that there is a need to maintain the expertise and skills of the organization, the OPCW has effectively put its future effectiveness in jeopardy.

The United Nations Monitoring and Verification Commission (UNMOVIC)

74. During this period, UNMOVIC continued to prepare for operations in Iraq. In September 2002, Iraq advised the UN Secretary-General that Iraq had decided to agree to the return of United Nations inspectors without conditions. This led to Security Council resolution 1441 (2002)⁵⁶ which was unanimously adopted on 8 November 2002 and provided a strengthened inspection regime by conferring revised and additional authorities to the UN weapons inspectors and also set out a timeline for the resumption of inspections in Iraq of not later than 45 days after adoption of the resolution and that UNMOVIC update the Security Council 60 days thereafter. The resolution also includes the requirement that Iraq shall provide, within 30 days of the resolution:

'a currently accurate, full and complete declaration of all aspects of its programmes to develop chemical, biological, and nuclear weapons, ballistic missiles, and other delivery systems such as unmanned aerial vehicles and dispersal systems for use on aircraft, including any holdings and precise locations of such weapons, components, subcomponents, stocks of agents, and related material and equipment, the locations and work of its research, development and production facilities, as well as all other chemical, biological, and nuclear programmes, including any which it claims are for purposes not related to weapons production or material.'

75. The first team of UNMOVIC inspectors arrived in Iraq on 25 November comprising 11 experts from UNMOVIC in New York covering the three areas (biological, chemical and missiles) for which UNMOVIC is responsible. During the period from the first inspection by UNMOVIC in Iraq on 27 November 2003 until the day when all United Nations personnel were withdrawn on 18 March 2003, UNMOVIC carried out 731 inspections, covering 411 sites, of which 88 had not been inspected before. The final paragraph of the UNMOVIC

⁵⁵CBW Conventions Bulletin, *Where to from Here? The First CWC Review Conference and the Next Five Years*, Issue No. 60, June 2003. Available at <http://www.sussex.ac.uk/spru/hsp>

⁵⁶United Nations Security Council, *Resolution 1441 (2002)*, S/RES/1441 (2002), 8 November 2002.

quarterly report⁵⁷ of 28 February 2003 summarised the situation and set out what opportunities Iraq had had and what it could have done:

During the period of time covered by the present report, Iraq could have made greater efforts to find any remaining proscribed items or provide credible evidence showing the absence of such items. The results in terms of disarmament have been very limited so far. The destruction of missiles, which is an important operation, has not yet begun. Iraq could have made full use of the declaration, which was submitted on 7 December. It is hard to understand why a number of the measures, which are now being taken, could not have been initiated earlier. If they had been taken earlier, they might have borne fruit by now. It is only by the middle of January and thereafter that Iraq has taken a number of steps, which have the potential of resulting either in the presentation for destruction of stocks of items that are proscribed or the presentation of relevant evidence solving long-standing unresolved disarmament issues. [Emphasis added]

76. On 6 March 2003, UNMOVIC circulated a key document entitled "*Unresolved Disarmament Issues*" which sets out clusters of the disarmament issues which UNMOVIC considered currently unresolved, and of the measures which Iraq could take to resolve them, either by presenting proscribing stocks or items or by providing convincing evidence that such stocks or items no longer exist. There were six clusters relating to munitions and other delivery means, seven related to chemical agents and eleven clusters relating to biological agents. In addition, UNMOVIC submitted a draft Work Programme for the discharge of its mandate to the Security Council on 17 March 2003. This document listed Key Remaining Disarmament Tasks which had been identified primarily on the basis of the level of danger or threat that the particular weapon or item would pose if it existed.

77. Armed action commenced in Iraq on 19 March 2003 and after the end of this action, the United States organized units to identify any Iraqi weapons of mass destruction and other proscribed items and to engage in the task of disarming Iraq. The Iraq Survey Group established after the military action in 2003 has only very recently submitted its Comprehensive Report. David Kay in a statement made to the United States Congress on 2 October 2003 about an interim report has said that the ISG has "*discovered dozens of WMD-related program activities and significant amounts of equipment that Iraq concealed from the United Nations during the inspections that began in 2002.*" and went on in regard to biological weapons to say that the ISG has "*begun to unravel a clandestine network of laboratories and facilities within the security service apparatus. This network was never declared to the UN and was previously unknown.this clandestine capability was suitable for preserving BW expertise, BW capable facilities and continuing R & D -- all key elements for maintaining a capability for resuming BW production.*" Following the resignation of David Kay, Charles Duelfer was appointed in his place. In a statement made in April 2004 when a status report was made to the US Congress, Charles Duelfer said that "*the ISG has developed new information regarding Iraq's dual-use facilities and ongoing research for a capability to produce biological or chemical agents at short notice.*" He went on to say that Iraq was working up to March 2003 to construct new facilities for the production of chemicals with a crash programme to construct plants capable of making a year's supply of any chemical in a month. He concluded by saying that the ISG was focussing on developing an integrated picture of the Iraqi WMD programmes and intentions.

⁵⁷United Nations Security Council, *Note by the Secretary-General*, S/2003/232, 28 February 2003.

78. In September 2004, the ISG issued a Comprehensive Report⁵⁸ which said that it is now evident that Saddam Hussein “so dominated the Iraqi regime that its strategic intent was his alone. He wanted to end sanctions while preserving the capability to reconstitute his weapons of mass destruction when sanctions were lifted.” The major reason why Iraq continued to provide a confused message regarding its WMD capabilities was that “the guiding theme for WMD was to sustain the intellectual capability achieved over so many years at such a great cost and to be in a position to produce again with as short a lead time as possible—within the vital constraint that no action should threaten the prime objective of ending international sanctions and constraints.” It was evident that Saddam Hussein “continued to see the utility of WMD and he said that he purposely gave an ambiguous impression about possession as a deterrent to Iran. He gave explicit direction to maintain the intellectual capabilities. As UN sanctions were eroded there was a concomitant expansion of activities that could support full WMD reactivation. He directed that ballistic missile work continue that would support long-range missile development. It is clear that virtually no senior Iraqi believed that Saddam had forsaken WMD forever. Evidence indicates that, as resources became available and the constraints of sanctions decayed, there was a direct expansion of activity that would have the effect of supporting future WMD reconstitution.”

79. A particular point emphasized in the report was that in considering Iraq’s Western observers and analysts tend to bring their own assumptions and logic to the examination of the evidence. Western logic and assumptions are virtually built in and have been applied successfully for so long that it is forgotten that they are present and thus shape thinking and conclusions. When considering the very different system that existed under Saddam Hussein, there is a risk of not seeing the meaning and not seeing the implications of the evidence. Analysts of the Iraq WMD activities need to look for something they may *not expect or be able to see*. For example, analysts should not expect to find extensive government documents or parliamentary records reflecting Saddam’s decisions on WMD. The regime simply did not operate that way. An obvious corollary is that not finding such documents is not meaningful one way or the other. The observation that the absence of evidence is not evidence of absence is especially true in regard to Iraq’s WMD.

80. In the Comprehensive Report a Key Finding was that “Saddam wanted to recreate Iraq’s WMD capability—which was essentially destroyed in 1991—after sanctions were removed and Iraq’s economy stabilized, but probably with a different mix of capabilities to that which previously existed. Saddam aspired to develop a nuclear capability—in an incremental fashion, irrespective of international pressure and the resulting economic risks—but he intended to focus on ballistic missile and tactical chemical warfare (CW) capabilities.

- *Iran was the pre-eminent motivator of this policy. All senior level Iraqi officials considered Iran to be Iraq’s principal enemy in the region. The wish to balance Israel and acquire status and influence in the Arab world were also considerations, but secondary.*
- *Iraq Survey Group (ISG) judges that events in the 1980s and early 1990s shaped Saddam’s belief in the value of WMD. In Saddam’s view, WMD helped to save the Regime many times. He believed that during the Iran-Iraq war chemical weapons had halted Iranian ground offensives and that ballistic missile attacks on Tehran had*

⁵⁸ Central Intelligence Agency, *Comprehensive Report of the Special Advisor to the DCI on Iraq’s WMD*, 30 September 2004. Available at <http://www.cia.gov>

broken its political will. Similarly, during Desert Storm, Saddam believed WMD had deterred Coalition Forces from pressing their attack beyond the goal of freeing Kuwait. WMD had even played a role in crushing the Shi'a revolt in the south following the 1991 cease-fire.

- *The former Regime had no formal written strategy or plan for the revival of WMD after sanctions. Neither was there an identifiable group of WMD policy makers or planners separate from Saddam. Instead, his lieutenants understood WMD revival was his goal from their long association with Saddam and his infrequent, but firm, verbal comments and directions to them.*”

81. Insofar as chemical weapons were concerned, “Saddam never abandoned his intentions to resume a CW effort when sanctions were lifted and conditions were judged favorable” as “Saddam and many Iraqis regarded CW as a proven weapon against an enemy’s superior numerical strength, a weapon that had saved the nation at least once already—during the Iran-Iraq war—and contributed to deterring the coalition forces in 1991 from advancing to Baghdad.” The report goes on to state that “Iraq’s CW program was crippled by the Gulf war and the legitimate chemical industry, which suffered under sanctions, only began to recover in the mid-1990s. Subsequent changes in the management of key military and civilian organizations, followed by an influx of funding and resources, provided Iraq with the ability to reinvigorate its industrial base.” and that “The way Iraq organized its chemical industry after the mid-1990s allowed it to conserve the knowledge-base needed to restart a CW program, conduct a modest amount of dual-use research, and partially recover from the decline of its production capability caused by the effects of the Gulf war and UN-sponsored destruction and sanctions.” The ISG did not discover chemical process or production units configured to produce key precursors or CW agents. However, site visits and debriefs revealed that Iraq maintained its ability for reconfiguring and ‘making-do’ with available equipment as substitutes for sanctioned items. The ISG judged, based on available chemicals, infrastructure, and scientist debriefings, that Iraq at Operation Iraqi Freedom (OIF) “probably had a capability to produce large quantities of sulfur mustard within three to six months.” Moreover “Iraq’s historical ability to implement simple solutions to weaponization challenges allowed Iraq to retain the capability to weaponize CW agent when the need arose. Because of the risk of discovery and consequences for ending UN sanctions, Iraq would have significantly jeopardized its chances of having sanctions lifted or no longer enforced if the UN or foreign entity had discovered that Iraq had undertaken any weaponization activities.”

82. On biological weapons, it is evident that in 1991, Saddam Hussain “regarded BW as an integral element of his arsenal of WMD weapons, and would have used it if the need arose”, as immediately prior to the Gulf war in 1991, Saddam Hussain “personally authorized the use of BW weapons against Israel, Saudi Arabia and US forces.” The ISG judged that “Iraq’s actions between 1991 and 1996 demonstrate that Iraq intended to preserve its BW capability and return to a steady, methodical progress toward a mature BW program when and if the opportunity arose.” However, “in practical terms, with the destruction of the Al Hakam facility, Iraq abandoned its ambition to obtain advanced BW weapons quickly. ISG found no direct evidence that Iraq, after 1996, had plans for a new BW program or was conducting BW-specific work for military purposes. Indeed, from the mid-1990s, despite evidence of continuing interest in nuclear and chemical weapons, there appears to be a complete absence of discussion or even interest in BW at the Presidential level.” Nevertheless, “after 1996 Iraq still had a significant dual-use capability—some declared—readily useful for BW if the Regime chose to use it to pursue a BW program. Moreover, Iraq

still possessed its most important BW asset, the scientific know-how of its BW cadre.” The ISG judged that “depending on its scale, Iraq could have re-established an elementary BW program within a few weeks to a few months of a decision to do so, but ISG discovered no indications that the Regime was pursuing such a course.”

83. There have also been clear indications that the Governing Council of Iraq has indeed abandoned its weapons of mass destruction. Iraq made a statement at the Meeting of States Parties of the BTWC in Geneva on 10 November 2003 that said that *"Iraq signed this Convention in 1972. We ratified it in 1991 but circumstances have not allowed us to implement the Convention sufficiently effectively nor to work to ensure the success of principles to rid ourselves of this most severe of weapons of mass destruction, biological weapons."* The statement continued to say that *"Last year Iraq drafted a first set of legislative norms at international level prohibiting the development of weapons of mass destruction. However, circumstances have not allowed Iraq to complete all measures related to this endeavour. The Governing Council is engaged in ensuring respect for all international treaties and conventions signed by Iraq and as soon as circumstances allow the Council will seriously consider further development of national legislation to prohibit all forms of production of weapons of mass destruction."*

UK Ministry of Defence

84. In July 2002, the UK Ministry of Defence published a report entitled *The Strategic Defence Review: A New Chapter* and a year later, in December 2003, another report entitled *Delivering Security in a Changing World*. These reports included the following statements:

Year	Statement
2002	<p><i>"We must take care not to draw conclusions from 11 September [2001] that are too narrowly focused.... But we can make a few tentative assumptions:</i></p> <ul style="list-style-type: none"> <i>... • the psychological threshold of shock may have been raised and other terrorists or possibly rogue states may in future seek to emulate the massive effect of 11 September attacks. This may mean attempts to make and use weapons that have mass effect. Chemical, biological, radiological or even nuclear devices cannot be ruled out.</i> <i>... • the range of capabilities potentially available to terrorists will continue to increase in the future with the diffusion of new technologies."</i> <p><i>"With state sponsored terrorism in decline, there is a continuing international terrorist threat to Western interests from extremist groups.... However, the threat now also embraces groupings ... with less well defined or realistic political or religious aspirations, who are prepared to use weapons of mass effect to pursue their goals."</i></p>

2003	<p><i>"International terrorism and the proliferation of WMD [weapons of mass destruction] represent the most direct threats to our peace and security."</i></p> <p><i>"We also know, for example from documentary evidence recovered from Afghanistan and arrests this year in France and the UK, that international terrorists are seeking to use chemical, biological and radiological means to enhance their capacity for disruption and destruction."</i></p> <p><i>"Continuing proliferation of WMD provides another pressing cause for concern. Some states will continue to seek WMD, particularly as access to the technology and production becomes easier. The means of delivering such weapons are also being proliferated Preventing the potential passage of WMD knowledge or weapons from states to terrorist groups is also a key part of the counter-proliferation challenge."</i></p>
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The emphasis is thus clearly on international terrorism and the possible use of weapons of mass effect by such groups as well on the proliferation of weapons of mass destruction.

Taking Stock

85. The past 25 years have seen immense developments. In the 1980s, attention was focussed primarily on the threat posed by the chemical weapons of the Soviet Union and there was relatively little attention being given to biological weapons as there was a tendency to assume that the 1972 BTWC had dealt with such weapons even though the Convention, as was typical in the 1970s, had no provisions for verification. Concerns were, however, being expressed about the anthrax outbreak in Sverdlovsk in 1979 and the allegations from Laos and Kampuchea that were highlighted in the early 1980s. The subsequent decade saw increased attention being given to the dangers posed by biological weapons largely in the Soviet Union as well as increased emphasis being given to the negotiation of a treaty prohibiting chemical weapons as a result of the use of chemical weapons by Iraq against Iran during the 1980s.

86. The collapse of the Warsaw Pact in the 1990s and the change from a bipolar world to a monopolar world saw greater instability around the world and a greater fear that States might seek to acquire chemical or biological weapons. The invasion of Kuwait by Iraq in 1990 raised public awareness around the world of the real dangers posed by the possible use of chemical and biological weapons by Iraq against the coalition forces. Following the war, UNSCOM despite the intransigence of Iraq successfully demonstrated the magnitude of the Iraqi offensive chemical and biological weapons programmes and oversaw the destruction of such capabilities and the introduction of ongoing monitoring and verification in Iraq.

87. The Chemical Weapons Convention was opened for signature in 1993 and entered into force in 1997. Attempts to strengthen the effectiveness and improve the implementation of the Biological and Toxin Weapons Convention began in 1991 with the creation of VEREX to examine possible verification measures from a scientific and technical viewpoint. The Special Conference in 1994 established the Ad Hoc Group to negotiate a legally binding instrument and despite reaching a Chairman's composite text that was acceptable to almost all of the States Parties engaged in the negotiations, these efforts failed in July 2001 when the United States rejected the draft instrument. The Fifth Review Conference was rescued after a years adjournment by a modest agreement to hold annual meetings of the States Parties to consider national measures to strengthen the regime.

88. An additional dimension was put into sharp focus first in Japan in 1994 and 1995 when the Aum Shinrikyo sect carried out attacks in Matsumoto and Tokyo, Japan using the nerve agent sarin. It subsequently became apparent that the sect had also attempted to carry out biological attacks but without success. These attacks triggered international attention on how to counter the possible terrorist use of chemical or biological weapons. Further attention was given to this when anthrax was sent in letters in the United States in late September/early October 2001. This has provoked immense global attention to preparedness for such attacks.

Prospects for the Future

89. In considering the future, the key is to realistically assess the danger from chemical and biological weapons and to prepare accordingly. Prevention -- the total prohibition of both biological and chemical weapons with effective regimes to verify compliance -- should be the goal of all countries around the world. Both the Chemical Weapons Convention and the Biological and Toxin Weapons Conventions are continuing to increase the number of States Parties and thus to minimise the numbers that have yet to become Party. The First Review Conference of the CWC agreed an Action Plan for Universality and in March 2004 the OPCW reported⁵⁹ that there were now 161 States Parties, 21 Signatory States and 12 Non-signatory States. The BTWC at the last Meeting of the States Parties in November 2003 had 151 States Parties and 16 Signatory States. Given the comprehensive nature of both Conventions and their relevance and applicability both to States and to sub-State actors, *universality for the Conventions* and for the *national implementing legislation within each State Party* has to be the goal.

90. The past decade has shown that intelligence assessments can be successful and can be flawed. It has to be recognized that the intelligence agencies of all countries exist to make worse case assessments based on straws of information gleaned from any sources. It is too little recognized that the compliance regimes associated with the CWC and the BTWC contribute significantly to the creation of *more accurate assessments* of capabilities and activities within States than is possible in the absence of such regimes.

91. It is equally important in assessing the dangers posed by chemical or biological weapons to avoid overstatement and hype as credibility will be the first casualty. It has to be recognized that chemical or biological weapons need *not be the weapons of choice* as their effectiveness depends on the delivery system and the micrometeorology at the instant of release. Their effects can be far less certain or predictable than high explosives. It also has to be appreciated that *other toxic materials* may be used to wage chemical or biological warfare and that much of our knowledge of such weapons is based on those developed in the last century when retaliation in kind was frequently the guiding principle. This assumption is *unlikely* to be applicable today.

92. It is, however, equally true that novel agents, whether biological or chemical, are unproven and hence present greater uncertainties. Nevertheless, the risks from novel agents need to be taken into account whilst the *principal preparedness efforts need to be focussed on those that are well known and judged to be likely to present the danger*.

⁵⁹Organisation for the Prohibition of Chemical Weapons, *Status Report: Action Plan for the Universality of the Chemical Weapons Convention*, Chemical Disarmament, March 2004, pp. 15-17.

93. There is a real danger, however, that the general purpose criteria embodied in both the BTWC and the CWC and which ensures that the prohibitions are truly comprehensive embracing *all agents both present and future*, could be eroded through the current interest in non-lethal or less than lethal agent programmes. There is no other issue that has as much potential for jeopardizing the long-term future of the CWC and the BTWC. The States Parties to those Conventions need to be alert to this very real and present danger -- and take action *before* it is too late to prevent this potential erosion.

94. There continues to be a vital need in every country for all the elements of the *web of assurance* -- to assure the public that all reasonable steps have been taken both nationally and internationally. The web of assurance is made up of the following elements:

- a. International and national regimes that totally prohibit chemical and biological weapons.
 - Universality of the BTWC and CWC and the 1925 Geneva Protocol
 - Withdrawal of all reservations to the Geneva Protocol
 - Legally binding instrument to strengthen the effectiveness of the BTWC
 - National implementing legislation for BTWC and CWC in all countries
- b. Controls of dangerous pathogens and chemicals
 - Addressing handling, use, storage and transfer both nationally and internationally
- c. Broadband protective measures
 - Preparedness, detection, diagnosis and medical countermeasures
 - Preparedness **before** and after release
- d. Determined national and international response to use or threat of use
 - Diplomatic actions, sanctions, military intervention
 - Security Council P5 need to recognize their responsibilities

A strong public commitment to such a web of assurance both nationally and internationally provides two immense benefits -- first to deter the would-be user and second to reassure the public both nationally and internationally that all reasonable steps are being taken to ensure their safety and security.

95. The essential requirement for global peace and security is for the States Parties to continue to strengthen the effectiveness and improve the implementation of the comprehensive prohibition regimes for chemical and biological weapons.

Looking ahead to the BTWC Sixth Review Conference

96. There is a particular need to strengthen the Biological and Toxin Weapons Convention through a legally binding instrument. It is evident that the Sixth Review Conference in 2006 will be a crucial opportunity for the States Parties to reaffirm the importance of the Convention and of its prohibitions and provisions. The opportunity must be taken to agree a Final Declaration which will continue and develop the extended understandings created by the Final Declarations of the First to Fourth Review Conferences. As noted by the President of the Fifth Review Conference in his opening remarks in November 2001, the notion that the use of biological weapons is becoming part of our everyday life *"is slowly eroding all the prohibition layers, both politically and legally binding, as contained in the consensus final*

declarations of all the previous Review Conferences and in the Biological Weapons Convention itself. He concluded that "We will have to reconfirm at the Conference the importance the international community attaches to the integrity of each and every prohibition norm...We must not accept the slow erosion of the norms that served us for decades, if not longer. This situation will be even more critical at the Sixth Review Conference given the failure of the Fifth Review Conference to agree a Final Declaration.

97. Ideally, the Final Declaration of the Sixth Review Conference should see steps being taken to restart the negotiation of a legally binding instrument to strengthen the effectiveness and improve the implementation of the Convention. Should such a resumption prove to be too difficult, the States Parties at the Sixth Review Conference need to focus on agreeing a Final Declaration that simply does *not* make any mention of the negotiations towards a legally binding instrument. It is evident that in 2004 the disagreement about the negotiations of a legally binding instrument to strengthen the Convention has *not* yet been resolved. At the Meeting of Experts in July 2004, at least two States Parties – Russia and Iran – in their opening plenary statements made it clear that they still regarded a legally binding instrument as being what the Convention needed for its strengthening and for the improvement of its implementation whilst Germany noted the failure saying that *'following the failure in 2001 to achieve a legally binding instrument to verify compliance with the Convention, the States Parties took a pragmatic decision at the 5th Review Conference to launch a new process to strengthen the Convention.'* The Russian Federation said that *'We would like to recall here of the fact that for a long time the mechanism to investigate an alleged use of biological weapons has been the subject for negotiations on the development of a control mechanism under the Convention. We consider it necessary to use the results achieved during these negotiations and being supported by a majority of States Parties to the BWC, including on types of investigation and volumes of information provided on the spot. I would like to underscore the following: the consideration of this issue at our meeting cannot be an adequate replacement for elaboration of the BWC control mechanism. This is only an intermediate stage.'* Iran said that *'after failure and suspension of seven years negotiations on the Protocol to the Convention, world has faced rapid development of biotechnology and escalation of bioterrorism threats thus it has become more imperative and important to discuss, within a multilateral legally binding frameworks, the concrete measures to strengthen the effectiveness of the Convention. The preference of a certain country for unilateral actions to combat weapons of mass destruction including biological weapons cannot obliterate the primacy of the principles and rules of multilateralism on this matter. The lack of multilateral coordination will result in the failure of the regime established by the BWC. Legitimate action in the area of international security must be founded on multilateral agreements.'* The United States opposition to multilateral developments was made clear in a statement regarding the allegations of use when the United States said that *'the expert discussions this week serve to underscore and promote understandings of the international processes available for addressing allegations of BW use and suspicious outbreaks of disease: resorting to the UN Security Council under Article VI, convening a formal consultative meeting under procedures developed to implement Article V, and conducting international investigations authorized by the UN Secretary-General. The United States believes that all three of these mechanisms remain viable and that revisions to their scope or procedures are neither necessary nor appropriate.'* There is consequently a real risk that, unless the States Parties recognize these difficulties and tacitly agree simply not to mention the negotiations, the Sixth Review Conference will simply pick up from where the resumed Fifth Review Conference ended – with the Convention regime in a state of crisis.

98. It should be clear to all States Parties – large and small – that the BTWC is *the* vital counter to those considering the use of disease or toxins as a means of attacking humans, animal or plants. Consequently, it is simply too *dangerous* for the international community *not* to reaffirm at the Sixth Review Conference the comprehensiveness of the prohibitions under the Convention and all the other elements which together add to the extended understandings cumulated over the successive Review Conferences. There is a compelling argument for the Sixth Review Conference to agree an interim supportive institution⁶⁰ which will enable the BTWC treaty regime to flourish and achieve its true potential.

99. The international community needs to make the States Parties aware that in this age of increased global concern about weapons of mass destruction and the fears of terrorism acquiring such weapons that it would be quite *unacceptable* to simply agree on a further set of annual topics to bridge the gap to the Seventh Review Conference. However, there is much to be said for the States Parties to the BTWC agreeing in the Final Declaration at the Sixth Review Conference that the Convention has achieved such maturity and that international peace and security would be enhanced through an *annual* Conference of the States Parties similar to those for other treaties such as the CWC. It is far too clear to all that the BTWC is the *weakest* of the regimes addressing weapons of mass destruction and the one that *most* requires strengthening through legally binding measures.

100. The real requirement is for a resumption of negotiations towards a legally binding instrument to strengthen the effectiveness and improve the implementation of the Convention. It should be obvious to every State Party – and to the United States – that the provisions in the Chairman’s composite text compared to the Convention alone were such that the draft legally binding instrument would have provided all States Parties with a *far better* regime for international peace, security and safety than that available from the Convention alone. Although it has been suggested that a piecemeal approach to legally binding measures might be adopted, there are difficulties in that the attraction of the mandate agreed by the Special Conference in 1994 was in its comprehensive nature as there were elements that were particularly attractive to some States Parties and other elements that were attractive to other States Parties. It is less clear how a balanced package of piecemeal legally binding measures might be put together.

101. As there is clearly tension among the States Parties regarding the resumption of negotiations towards a legally binding instrument and it seems unlikely that, however desirable, the Sixth Review will agree such a resumption in its Final Declaration, there would be prudence in those States Parties who recognize the importance of strengthening the effectiveness and improving the implementation of the Convention preparing a contingency plan for the possibility that the Sixth Review Conference does not agree such a resumption of negotiations towards a legally binding instrument. This contingency plan would be based on a troika of States Parties taking a *political* initiative to revive the negotiations of a legally binding instrument. It should be recalled that Australia initiated a Ministerial meeting on 23 September 1998 in New York at which 57 States Parties (including the United States) to the BTWC agreed a declaration⁶¹ (see WP.324 available at <http://opbw.org>) about the Ad Hoc

⁶⁰ Nicholas A. Sims, *The Functions of the BTWC Review Conferences: Maximizing the Benefits from the Fifth Review Conference*, University of Bradford, Department of Peace studies, Review Conference Paper No.2, April 2001.

⁶¹ Australia, *Declaration of the Informal Ministerial Meeting on the Negotiation Towards Conclusion of the Protocol to Strengthen the Biological Weapons Convention*, Working Paper, BWC/AD HOC GROUP/WP.324, 9 October 1998. Available at <http://www.opbw.org>

Group negotiations that *'The Ministers affirm their strong support for the Biological and Toxin Weapons Convention and for strengthening the effectiveness and improving the implementation of the Convention. The Ministers underline the political and security imperatives of concluding, as a matter of priority, a protocol to the Convention. ... They strongly believe that benefits in terms of security and development will accrue to all States Parties to the protocol.'* and that *'The Ministers are determined to see this essential negotiation brought to a successful conclusion as soon as possible ...'*. This represented a *political* commitment by all the principal States Parties engaged in the negotiations: the list of the States Parties cosponsoring the September 1998 political declaration were Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Czech Republic, Denmark, Fiji, Finland, France, Germany, Greece, Hungary, Indonesia, Iran (Islamic Republic of), Ireland, Italy, Japan, Jordan, Kenya, Kuwait, Luxembourg, Malaysia, Mexico, Myanmar, Netherlands, New Zealand, Norway, Peru, Philippines, Poland, Portugal, Republic of Korea, Romania, Russia, Singapore, Slovakia, Slovenia, Solomon Islands, South Africa, Spain, Sweden, Switzerland, Thailand, Tonga, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay and Zimbabwe.

102. Consequently, it is proposed that a troika might be made up of Australia (as the initiator of the political commitment of 1998), South Africa (as a NAM state that has made an immense contribution to the negotiation of the legally binding instrument) and Norway (as a State outside the European Union which chaired the First BTWC Review Conference in 1980 and also has experience of negotiations leading to a multilateral treaty outside the more usual UN process in Geneva or New York). It is suggested that such a troika should arrange a meeting of States Parties to the BTWC to discuss a legally binding instrument to strengthen the effectiveness and improve the implementation of the Convention and which could consider whether to use the Chairman's composite text as a starting point.

Conclusions

102. The BTWC is the central pillar of the regime totally prohibiting biological and toxin weapons. There is no alternative to this regime. However, the regime totally prohibiting biological and toxin weapons is the weakest of the regimes addressing weapons of mass destruction and, consequently, is the one most in need of being strengthened. The dangers that humans, animals or plants might be attacked by biological or toxin agents is of greater concern today with especial concern being expressed in the United States to the dangers of bioterrorism. Global peace and security demands that the effectiveness of the BTWC be strengthened and its implementation improved. Whilst the preferred solution would be for the Sixth Review Conference in 2006 to reaffirm the extended understandings gained in previous Review Conference, to agree an interim supportive institution, to agree to hold an annual Conference of States Parties and to restart the negotiations of a legally binding instrument to strengthen the effectiveness and improve the implementation of the Convention, there are clear indications in 2004 that the United States does not see the benefits of restarting such negotiations. Consequently, those States Parties who recognize the vital importance for global peace and security of strengthening the effectiveness and improving the implementation of the Convention are urged to develop a contingency plan that builds upon the *political* commitment made by Ministers of 57 States Parties in 1998 to the early completion of such negotiations.