## Strengthening the Biological Weapons Convention

# **Review Conference Paper No 7**

# **Return to Geneva: A Comprehensive List of Measures**

# August 2002

### **Series Editors**

## Graham S Pearson and Malcolm R Dando

Department of Peace Studies, University of Bradford

# **Strengthening the Biological Weapons Convention**

**Review Conference Paper No 7** 

# **Return to Geneva: A Comprehensive List of Measures**

Graham S. Pearson

Series Editors Graham S Pearson and Malcolm R Dando

Department of Peace Studies University of Bradford Bradford, UK

August 2002

#### **RETURN TO GENEVA: A COMPREHENSIVE LIST OF MEASURES**

by Graham S. Pearson

#### Introduction

1. The Fifth Review Conference of the Biological and Toxin Weapons Convention opened in Geneva on 19 November 2001 and was adjourned on Friday 7 December until 11 November 2002. The Interim Report<sup>1</sup> records that:

33. At its sixth plenary meeting on 7 December 2001, the Conference decided by consensus to adjourn its proceedings and reconvene at Geneva from 11 to 22 November 2002.

2. The reason for the adjournment was the absence of agreement on how to take forward various proposals to strengthen the Biological and Toxin Weapons Convention regime. Although proposals were made by the European Union, the United States and other States Parties for measures to strengthen the regime there was no agreement as to how best to give further consideration to these proposals. It was also evident that almost all the States Parties continued to support the mandate for the Ad Hoc Group to consider measures "to strengthen the effectiveness and improve the implementation" of the Convention whilst, in contrast, the United States had proposed language "that the Ad Hoc Group and its mandate are hereby terminated...."

3. It is important that the Fifth Review Conference when it resumes in November 2002 should both successfully conclude with a Final Declaration, that reaffirms the norms and extended understandings that have been developed during the previous Review Conferences, and agree a process that continues to strengthen the BTWC regime during the interval until the Sixth Review Conference. It is therefore timely that States Parties should, as Nicholas Sims has argued in Review Conference Paper No. 5<sup>2</sup>, be considering now how to achieve a successful outcome from the resumed Fifth Review Conference.

4. The launch on 29 April 2002 by the United Kingdom Foreign Secretary of a Green Paper which *"discusses UK priorities and the next steps ahead of the reconvened BTWC Fifth Review Conference and invites comments on the proposals outlined here and on any other ideas for strengthening the Convention"* was therefore welcomed as a valuable and timely contribution to the preparations by States Parties for the resumed Fifth Review Conference in November 2002. Review Conference Paper No. 6<sup>3</sup> examined the UK Green Paper and analysed the proposals identified in the paper. This analysis noted that the Green Paper limited its consideration to measures which have been identified by the UK, its EU partners,

<sup>&</sup>lt;sup>1</sup>United Nations, Fifth 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, *Interim Report*, BWC/CONF.V/12, 14 December 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>2</sup>Nicholas A. Sims, *Return to Geneva: The Next Stage of the BTWC Fifth Review Conference*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 5, April 2002. Available at http://www.brad.ac.uk/acad/sbtwc

<sup>&</sup>lt;sup>3</sup>Graham S. Pearson, *Return to Geneva: The United Kingdom Green Paper*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 6, June 2002. Available at http://www.brad.ac.uk/ acad/sbtwc

the US and academics in a number of countries and did not allude to the fact that several of the measures identified were also supported by other States Parties in their statements at the Fifth Review Conference in November 2001. It also did not mention other measures proposed by other States Parties at the Review Conference even though the Green Paper after identifying the five areas for specific action then refers to the other measures identified in the Green Paper and says that "the UK is ready to examine these and any others that may serve to counter the threat." The analysis concluded that in considering the forthcoming resumed Review Conference there would be significant benefit to be gained from creating a comprehensive list of the measures proposed to the Fifth Review Conference as this could then attract support from many States Parties as being a list that should be reviewed and taken further at a meeting subsequent to the Review Conference.

5. This Review Conference Paper takes this forward by creating and examining a comprehensive list of the measures proposed by States Parties at the Fifth Review Conference in November/December 2001 either in their statements or in the proposals put forward as Working Papers to the Committee of the Whole.

#### The measures proposed to the Fifth Review Conference in November/December 2001

6. The months leading up to the start of the Fifth Review Conference on 19 November 2001 saw the events of 11 September followed by the subsequent anthrax attacks in the United States which resulted in five deaths. World attention was focussed on countering terrorism and the United Nations Secretary-General in his address<sup>4</sup> to the General Assembly on 1 October 2001 said that:

"While the world was unable to prevent the 11 September attacks, there is much we can do to help prevent future terrorist acts carried out with weapons of mass destruction. The greatest danger arises from a non-State group -- or even an individual -- acquiring and using a nuclear, biological or chemical weapon. Such a weapon could be delivered without the need for any missile or any other sophisticated delivery system.

In addition to measures taken by individual Member States, we must now strengthen the global norm against the use of proliferation of weapons of mass destruction. This means, among other actions:

-- Redoubling efforts to ensure the universality, verification and full implementation of key treaties relating to weapons of mass destruction, including those outlawing chemical and biological weapons and the nuclear non-proliferation treaty;

-- Promoting cooperation among international organizations dealing with these weapons;

-- Tightening national legislation over exports of goods and technologies needed to manufacture weapons of mass destruction and their means of delivery;

<sup>&</sup>lt;sup>4</sup>United Nations, *Secretary-General, Addressing Assembly on Terrorism, Calls for 'Immediate, Far-Reaching Changes' in the UN Response to Terror*, SA/SG/7977, GA/9920, 1 October 2001. Available at http://www.un.org/News/Press/docs/2001/sgsm7977.doc.htm

-- Developing new efforts to criminalize the acquisition or use of weapons of mass destruction by non-State groups.

The Fifth Review Conference of the Biological and Toxin Weapons Convention (BTWC) opening on 19 November 2001 was thus well timed to enable the States Parties to respond to these calls.

7. In addition, the United States put forward proposals to strengthen the Convention in a Presidential statement<sup>5</sup> issued on 1 November 2001 which stated that "The United States is committed to strengthening the Biological Weapons Convention (BWC) as part of a comprehensive strategy for combating the complex threats of weapons of mass destruction and terrorism." and went on to propose that '...all Parties:

• Enact strict national criminal legislation against prohibited BW activities with strong extradition requirements;

• Establish an effective United Nations procedure for investigating suspicious outbreaks or allegations of biological weapons use;

• Establish procedures for addressing BWC compliance concerns;

• Commit to improving international disease control and to enhance mechanisms for sending expert response teams to cope with outbreaks;

• Establish sound national oversight mechanisms for the security and genetic engineering of pathogenic organisms;

• Devise a solid framework for bioscientists in the form of a code of ethical conduct that would have universal recognition; and

• Promote responsible conduct in the study, use, modification, and shipment of pathogenic organisms.

8. At the Review Conference, there was widespread expectation that a strong Final Declaration would be agreed together with an agreement that the States Parties would meet again in 2002 in order to consider further how to strengthen the effectiveness and improve the implementation of the Convention. The Review Conference was close to agreement when late on the afternoon of the final day, Friday 7 December 2001, the United States tabled language proposing the termination of the Ad Hoc Group and its mandate -- to strengthen the effectiveness and improve the implementation of the Convention. The Review Conference was close to agreement when late on the afternoon of the final day, Friday 7 December 2001, the United States tabled language proposing the termination of the Ad Hoc Group and its mandate -- to strengthen the effectiveness and improve the implementation of the Convention. The Review Conference consequently adjourned until 11 November 2002.

9. The States Parties should be engaged now in preparing for the resumption of the Fifth Review Conference and seeking an agreed way forward. However, should agreement not be

<sup>&</sup>lt;sup>5</sup>The White House, *Statement by the President: Strengthening the International Regime against Biological Weapons*, 1 November 2001, Available at http://www.whitehouse.gov/news/releases/2001/11/ print/20011101. htm

forthcoming, States Parties will need to consider whether to vote<sup>6</sup> in order to move matters forward and avoid a complete failure of the Review Conference. In April 2002, the United Kingdom issued a Green Paper<sup>7</sup> entitled "*Strengthening The Biological And Toxin Weapons Convention: Countering The Threat From Biological Weapons*" which identified a range of the measures that could be deployed to strengthen the Convention and discusses UK priorities ahead of the resumed Fifth Review Conference.

10. However, the Green Paper makes no allusion to the fact that the UN Secretary-General and a number of other States Parties in their statements<sup>8</sup> made in the General Debate of the Fifth Review Conference spoke in support of proposals that are essentially similar to those put forward by the US and the EU. These included the following:

Supported Measure	State Party
National legislation needs to be tightened	UN S-G
Acquisition or use of biological weapons needs to be criminalized	UN S-G
Provision of assistance should prevention fail	UN S-G
Strengthen existing international disease control and response	Japan
Universality needs to be encouraged	Canada
	Iran
	New Zealand
	Norway
	Pakistan
	Russia
	Switzerland
Enhanced confidence-building measures	New Zealand
Effective compliance machinery to make it much harder to cheat	New Zealand
Strengthened legally-binding confidence-building measures	Canada
Timely and complete submission of confidence-building measures	Russia
International cooperation in the provision of assistance	India
	Ukraine
Institutional arrangements to combat bioterrorism	Ukraine
Strengthened moral and legal norms	India
Enhanced national controls on dangerous pathogens	India
Withdrawal of Geneva Protocol reservations	Mexico
An international legal instrument to criminalize activities prohibited	Switzerland
by the Convention	

11. In addition, the Green Paper makes no mention of other proposals made to the Fifth Review Conference. In particular, South Africa made specific proposals<sup>9</sup> for amendments to the existing CBMs "A" -- the declaration of maximum containment facilities -- and CBM "G" -- the declaration of vaccine production facilities -- extending coverage to animal and plant pathogen facilities as well as for a new CBM "H" for declaration of plant inoculant and

<sup>&</sup>lt;sup>6</sup>Nicholas A. Sims, *Return to Geneva: The Next Stage of the BTWC Fifth Review Conference*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 5, April 2002. Available at http://www.brad.ac.uk/acad/sbtwc

<sup>&</sup>lt;sup>7</sup>United Kingdom, *Strengthening The Biological And Toxin Weapons Convention: Countering The Threat From Biological Weapon*, The Stationery Office, Cm 5484, April 2002. Available at http://www.fco.gov <sup>8</sup>These statements are available at http://www.opbw.org

<sup>&</sup>lt;sup>9</sup>South Africa, *Strengthening Confidence-Building Measures*, BWC/CONF.V/COW/WP.1, 16 November 2001. Available at http://www.opbw.org

biocontrol agent production facilities. New Zealand made proposals<sup>10</sup> that the Review Conference should establish an enhanced process of accountability through annual meetings of States Parties and identify other means by which we might work further on compliance options, including the possibility of subsidiary bodies or an Oversight Committee. Korea<sup>11</sup> said that the idea of establishing some kind of intersessional mechansim to strengthen the follow-up process deserves serious consideration by States Parties. Japan<sup>12</sup> proposed that the States Parties should meet frequently during the intersessional period and supported the idea of a strong follow-up mechanism in whatever format ... or an annual meeting of the States Parties. Both South Africa<sup>13</sup> and Brazil<sup>14</sup> noted that Article 14 of the draft Protocol contained provisions that could guide States Parties in future actions regarding the full operation of Article X whilst Pakistan<sup>15</sup> stressed the importance of full implementation of Article X. China<sup>16</sup> said that "the enhancement of international cooperation is the only way to effectively meet the challenges of global security and to realize comprehensive and lasting security." The omission from the Green Paper of a specific measure addressing "technical assistance and technical cooperation" is surprising as this was identified by the EU in its statement<sup>17</sup> as being one of the measures that will need to be detailed further in work after the Review Conference. It is, however, noted in the Green Paper in the context of investigations into non-compliance that a free-standing agreement on such investigations would not be easily negotiated "unless it also contained some scientific and technological assistance elements." Canada<sup>18</sup> proposed a regular forum that would at least provide an annual opportunity for States Parties to convene, with oversight supplemented by scientific and legal expert study

<sup>&</sup>lt;sup>10</sup>Clive Pearson, Statement by the New Zealand Ambassador for Disarmament Mr Clive Pearson before the Review Conference of States Parties to the Biological Weapons Convention, Geneva, 19 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>11</sup>Chung Eui-Yongm, Statement by Ambassador Chung Eui-Yongm, Permanent Representative of the Republic of Korea, at the Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 20 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>12</sup>Toshio Sano, Statement by Mr. Toshio Sano, Representative of the Delegation of Japan at the Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 19 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>13</sup>Peter Goosen, Statement by Peter Goosen, Chief Director: Peace and Security, Department of Foreign Affairs, Pretoria, Geneva, 19 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>14</sup>Celina M. Assumpcao de Valle Pereira, Statement Ambassador Celina M. Assumpcao de Valle Pereira, Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 19 November to 7 December 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>15</sup>Abdul Basit, Statement by Mr. Abdul Basit, Acting Permanent Representative at the Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 19 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>16</sup>China, Statement by Ambassador Sha Zukang Head of Chinese Delegation at the 5th Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 19 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>17</sup>Belgium, *Statement by Belgium on behalf of the European Union*, 19 November 2001. Available at http:// www.opbw.org

<sup>&</sup>lt;sup>18</sup>Christopher Westdal, Statement by His Excellency Christopher Westdal, Ambassador and Permanent Representative to the Conference on Disarmament, The Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 19 November 2001. Available at http://www.opbw.org

groups, as appropriate. India<sup>19</sup> proposed that transfer of dual-use materials for medical, diagnostic and treatment purposes should be regulated on the basis of guidelines to be negotiated and accepted by all States Parties and that these guidelines should prohibit transfers to non-State actors. Norway<sup>20</sup> proposed that there was a clear need to strengthen the support functions of the Convention with the aim of ensuring more regular meetings of the States Parties and other intersessional work. Norway also supported the proposal to include terrorism and public health in a future legally binding mechanism. This additional list of proposals could thus be summarised as follows:

Proposed Measure	State Party
Specific extensions to CBMs A & G and new CBM H	South Africa
Enhanced accountability through annual meetings	New Zealand
Regular annual meetings of subsidiary bodies and/or an Oversight	Canada
Committee	Japan
	Korea
	New Zealand
	Norway
Article X implementation	Brazil
	China
	EU
	Pakistan
	South Africa
Guidelines to ensure strengthening of Article III and to prohibit	India
transfers of dual-use materials to non-State actors	
Inclusion of terrorism and public health in a future legally-binding	Norway
mechanism	

12. Further expressions of support and suggestions were made by the States Parties in proposals made to the Committee of the Whole<sup>21</sup>. These can be tabulated as shown below:

Proposals made to the Committee of the Whole	
--	--

COW/WP No	Proposal	State Party
COW/WP.1	Strengthened CBM A & G and new CBM H	South Africa
COW/WP.2	Art I includes reaffirmation of S & T	China
COW/WP.3	Art III emphasises importance of balance with	China
	Article X	
COW/WP.4	Art IV new viewpoints and proposals on	China
	strengthening of domestic legislation support	

<sup>&</sup>lt;sup>19</sup>Rakesh Sood, Statement by Ambassador Rakesh Sood, Head of Delegation to the Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 19 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>20</sup>Sverre Bergh Johansen, Statement by H.E. Sverre Bergh Johansen, Ambassador, Permanent Representative of Norway to the United Nations Office in Geneva, Geneva, 20 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>21</sup>The Working Papers submitted by the States Parties to the Committee of the Whole at the Fifth Review Conference are available at http://www.opbw.org

COW/WP No	Proposal	State Party
COW/WP.5	Art V new ideas and proposals concerning CBMs	China
COW/WP.6	support Art XIV promotion of universality	Libya
COW/WP.7	Art X promotion of fullest possible exchange	Libya
COW/WP.8	Art X promotion including disease surveillance	Australia
00 11/ 11/0	and proposing specific measures	France
	and proposing speerice measures	Italy
COW/WP.9	Art X various proposals	China + 6
COW/WP.10	Preamble Universality	NAM +
		Other
COW/WP.11	Art I prohibition of use	NAM +
	-	Other
COW/WP.12	Art X various proposals	NAM +
		Other
COW/WP.13	Work of the Ad Hoc Group	NAM +
		Other
COW/WP.14	Art I establishment of Scientific Advisory Panel	Japan
	Art I educational programme on BW supported	
	Art IV national criminal legislation supported	
	Art IV strict regulations on pathogens supported	
	Art IV oversight of high-risk experiments	
	Art V enhanced CBMs and clarification supportd	
	Art VII & X strengthened global disease & surv	
	Intersessional meetings to discuss strengthening	
COW/WP.15	Art IX reaffirms effective prohibition of CW	Canada Poland
COW/WP.16	Preamble terrorism	Argentina
		Australia
COW/WP.17	Art I primarily same language as at Fourth Rev C	USA
	Art III	
	Art IV proposed national criminal legislation	
	Art IV standards for security of pathogens	
	Art IV genetic engineering oversight	
	Art IV professional code of conduct	
	Art V reiteration of compliance issue procedures	
	Art V elaboration of investigations of suspicious	
	disease outbreaks and/or alleged biological	
	incidents	
	Art VI, VII, VIII, IX, X, XII, XIV & XV	
	Art XII Intersessional meeting to assess progress	
	in implementing new measures adopted at the Fifth Review Conference and new mechanisms to strengt	
COW/WP.18	Art VIII withdrawal of Geneva Protocol reservns	Russia
COW/WP.18 COW/WP.19	Reservation of right to retaliate is incompatible	Brazil $+ 3$
COW/WP.19 COW/WP.20	Art I strengthened reaffirmation for S & T	Chile
COW/WP.20	Art IX requires updating	Pakistan
COW/WF.21	Art in requires updating	r akistali

COW/WP No	Proposal	State Party
COW/WP.22	Art IV including legal assistance	Canada
		Switzerland
COW/WP.23	P.23 Art I establishment of Scientific Advisory Panel	
	Art I educational programmes to raise awareness	
	Art II	
	Art III voluntary notification of transfers annual	
	Art IV national penal legislation & standards	
	Art IV national approval of genetic engineering	
	Art V database of CBM returns	
	Art V extension of CBM B, E & G	
	Art V mandatory CBM E & G	
	Art V clarification of CBM returns & visits	
	Art X enhanced epidemiol prevention & surveill	
	Art VI, VII, VIII, XI	T 1
COW/WP.24	Art XV	Iraq $+ 4$
COW/WP.25	Art III transfer denial procedures (AHG/WP.432)	China + 7
COW/WP.26	Art X apply Cartagena Protocol principles to	Mexico
	transfers	Peru
COW/WP.27	Art V use procedures to address compliance	Libya
COW/WP.28	concerns	Inon
COW/WP.28	Intro, Preamble, Art I pests and vectors ethnic	Iran
	Art III, IV, V, VI, VII, VIII - withdrawal of Geneva	
COW/WP.29	Protocol reservations, IX, XII	Mexico
COW/WP.29	Art I, III Cartagena Protocol procedures, IV criminal legislation & extradition, VI integrated	Mexico
	approach to implementation of Cartagena Protocol	
	& BTWC, VII safety standards, national	
	oversight of genetic engineering, code of conduct,	
	IX no gaps between CWC & BTWC, X global	
	disease monitoring & surveill, worldwide biosafety	
	standards	
COW/WP.30	Accelerate universalization of the Convention	Australia
	Enhance confidence-building measures	Canada
	Strengthen the Convention nationally & internation	New Zealand
	More frequent meetings of States Parties	
COW/WP.31	Art X establish Cooperation Committee to meet	NAM +
	annually	Other

13. From this it is possible to create a comprehensive list of measures made up from those in the UK Green Paper, those proposed by States Parties in their statements to the Review Conference and those proposed by States Parties in their working papers submitted to the Committee of the Whole. This comprehensive list is in the following tabulation:

## Analysis of proposals in the UK Green Paper, in States Parties statements and in Papers submitted to the Committee of the Whole

Proposed Measure	Green	Statement	COW
	Paper		Proposal
Revised CBMs with specific extensions to particular		Canada	Australia
CBMs		EU	Canada
		New Zealand	
		Russia	China
		South Africa	EU
	,	UK	South Africa
Investigations into non-compliance (alleged use, misuse		UK	EU
of facilities, suspicious outbreaks) and effective		US	USA
compliance machinery to make it much harder to cheat			
Assistance in the event of, or threat of, use of BW		UN S-G	
		India	
		UK	
		Ukraine	
National criminal legislation and extradition		UN S-G	Canada
		UK	China
		US	Japan
			Mexico
			Switzerland
			USA
A new Convention on Criminalization of CBW		UN S-G	
		Switzerland	
Enhanced national controls on dangerous pathogens		India	EU
		US	Japan
			UŠA
A new Convention on Physical Protection of dangerous			
pathogens			
Regular annual meetings of subsidiary bodies and/or an		Canada	EU
Oversight Committee		Japan	Japan
		Korea	UŠA
		New Zealand	
		Norway	
		UK	
Scientific Advisory Panel			Japan
Increase efforts on disease surveillance, detection and		Japan	Australia
diagnosis and countering infectious disease generally		UK	France
		US	Italy
			China
			Libya
			Mexico
			Japan

Proposed Measure	Green Paper	Statement	COW Proposal
Article X implementation		Brazil China	Libya NAM +
		EU Pakistan South Africa	Other
Oversight of genetic engineering		USA	EU Japan Mexico USA
Codes of conduct for professional bodies	V	USA	Japan Mexico USA
Actively promoting universal membership of the BTWC	$\checkmark$	Canada EU Iran New Zealand Norway Pakistan Russia Switzerland	Australia Canada New Zealand Libya
Withdrawal of reservations to the 1925 Geneva Protocol		EU Mexico	Brazil + 3 EU Iran Russia USA
Guidelines to ensure strengthening of Article III and to prohibit transfers of dual-use materials to non-State actors		India	
Cartagena Biosafety Protocol for transfers			Mexico

14. In Review Conference Paper No. 6 the analysis showed that all these measures could usefully be considered in order of the increasing amount of negotiation that they were likely to require for agreement. For this Review Conference Paper, the following comprehensive list of measures in order of increasing amount of negotiation is used:

Proposed Measure	State
Actively promoting universal membership of the BTWC	Australia
	Canada
	EU
	Iran
	Libya
	New Zealand
	Norway
	Pakistan
	Russia
	Switzerland
	UK

Proposed Measure	State
Withdrawal of reservations to the 1925 Geneva Protocol	Brazil + 3
	EU
	Iran
	Mexico
	Russia
	UK
	US
Increase efforts on disease surveillance, detection and diagnosis and	Australia
countering infectious disease generally	China
	France
	Italy
	Japan
	Libya
	Mexico
	UK
	US
Codes of conduct for professional bodies	Japan
	Mexico
	UK
	US
National criminal legislation and extradition	UN S-G
	China
	Japan
	Mexico
	Switzerland
	UK
	US
Enhanced national controls on dangerous pathogens	EU
Linanced national controls on dangerous pathogens	India
	Japan
	UK
	US
Oversight of genetic engineering and high-risk experiments	EU
Oversight of genetic engineering and high-fisk experiments	Japan
	Mexico
	US
Revised CBMs with specific extensions to particular CBMs	Australia
Revised Obivis with specific extensions to particular Obivis	Canada
	Canada China
	EU
	New Zealand
	Russia
	South Africa
	UK

Proposed Measure	State
Regular annual meetings of subsidiary bodies such as a Scientific	Canada
Advisory Panel and/or an Oversight Committee	EU
	Japan
	Korea
	New Zealand
	Norway
	UK
	US
Assistance in the event of, or threat of, use of BW	UN S-G
	India
	UK
	Ukraine
	US
A new Convention on Criminalization of CBW	UN S-G
	Switzerland
	UK
A new Convention on Physical Protection of dangerous pathogens	UK
Article X implementation	Brazil
	China
	EU
	Libya
	NAM
	Pakistan
	South Africa
Investigations into non-compliance (alleged use, misuse of facilities,	EU
suspicious outbreaks) and effective compliance machinery to make it	UK
much harder to cheat	US
Guidelines to ensure strengthening of Article III and to prohibit transfers	EU
of dual-use materials to non-State actors	India
Voluntary annual notification of authorised transfers	EU
Use of Cartagena Biosafety Protocol advanced informed agreement	Mexico
provisions for transfers of living modified organisms	Peru

#### The Effective Strengthening of the Biological Weapons Convention

15. It is timely to consider now, prior to the resumed Review Conference, how best the effective strengthening of the Biological Weapons Convention could be achieved. In this analysis attention will be focussed on a technical assessment of the potential measures in the comprehensive list above, their effectiveness and their associated burden, together with a comparison being made to the measures in the Chemical Weapons Convention regime which has been in force now for over five years. For each measure, a short summary table is provided which makes a comparison with the CWC, evaluates the burden and provides an overall assessment. Such comparisons with the CWC are valid as there is, and rightly so, a deliberate overlap between the Biological and Toxin Weapons Convention and the Chemical Weapons Convention in that **both** conventions address toxins and all toxic substances produced by living organisms even when they are actually produced by synthesis. The two Conventions therefore have a significant area of overlap, both have general purpose criteria

which embrace all possible agents, past, present and future, and both address dual use materials and technology.

Classical CW	Industrial Pharmaceutical Chemicals	Bioregulators Peptides	Toxins	Genetically Modified BW	Traditional BW
Cyanide Phosgene Mustard Nerve Agents	Aerosols	Substance P Neurokinin A	Saxitoxin Ricin Botulinum Toxin	Modified/ Tailored Bacteria Viruses	Bacteria Viruses Rickettsia Anthrax Plague Tularemia
		4	Biological and Toxin	Weapons Convention	<b>&gt;</b>
	Chemical Weapo	ns Convention			
	Poison				ect

It is now evident<sup>22</sup> that chemistry and biology are coming closer together and that we are faced with a continuum -- after all biological agents are actually chemicals. The CWC regime is indeed the one of **greatest** relevance to the BTWC regime and the most appropriate one for comparison.

16. The measures in the comprehensive list are considered in turn in order of increasing negotiation required for implementation.

17. Actively promoting universal membership of the BTWC. Universality of the Convention is highly desirable. At the Fourth Review Conference, the Article XIV section of the Final Declaration included the following:

2. The Convention calls upon States which have not yet ratified or acceded to the Convention to do so without delay and upon those States which have not signed the Convention to join the States Parties thereto, thus contributing to the achievement of universal adherence to the Convention.

3. In this connection, the Conference requests States Parties to encourage wider adherence to the Convention.

4. The Conference particularly welcomes regional initiatives that would lead to wider accession to the Convention.

18. It is regretted that the Depositaries of the BTWC did not take advantage of the opportunity that arose at the Millennium Summit in 2000 when the UN Secretary-General

<sup>&</sup>lt;sup>22</sup>See for example, Graham S. Pearson, *New Scientific and Technological Developments of Relevance to the Fifth Review Conference*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 3, July 2001. Available at http://www.brad.ac.uk/acad/sbtwc

wrote<sup>23</sup> to Heads of State and Government to advise them that special facilities would be provided for Heads of State or Government to add their signatures to any treaty or convention of which the Secretary-General is the depositary and to encourage them, in particular, to sign 25 core treaties<sup>24</sup> -- which included five disarmament treaties including the CWC and the CTBT. Some 85 States took advantage of the opportunity provided by the Millennium Summit.

19. In considering how to encourage the universality of the BTWC as well as of the Geneva Protocol and the CWC as well as the withdrawal of reservations to the Geneva Protocol, there is much to be said for the preparation and publication of regional comparative tabulations showing signature and accessions to the BTWC, to the CWC and to the Geneva Protocol as well as the status of the outstanding reservations to the Geneva Protocol. This would require the co-Depositaries of the BTWC -- the Russian Federation, the United Kingdom and the United States -- to approach France as the Depositary of the Geneva Protocol and the Secretary-General of the United Nations as the Depositary of the CWC to propose that the Department of Disarmament Affairs in the UN should annually prepare and publish these regional comparative tables. As an example, such a tabulation for the countries of the ASEAN Regional Forum prepared for a seminar in Seoul, South Korea in December 2001 was as follows:

<sup>&</sup>lt;sup>23</sup>UN Secretary-General, *Letter to Heads of State or Government*, 15 May 2000. Available at http://untreaty .un.org/English/millennium/law/sgletter.htm

<sup>&</sup>lt;sup>24</sup>Available at http://untreaty.un.org/English/millennium/law/treaties.htm

Country	Geneva	Reservation to	Biological and Toxin	Chemical Weapons
	Protocol	Geneva	Weapons	Convention
		Protocol	Convention	
Australia				
Brunei	?		$\checkmark$	
Cambodia	$\checkmark$	Reservation	$\checkmark$	Signatory
Canada	$\checkmark$			
China	$\checkmark$	Reservation		
DPRK	$\checkmark$	Reservation	$\checkmark$	?
India		Reservation		
Indonesia	$\checkmark$		$\checkmark$	
Japan	$\checkmark$		$\checkmark$	
Laos			$\checkmark$	
Malaysia	$\checkmark$		$\checkmark$	
Mongolia	$\checkmark$		$\checkmark$	
Myanmar	?		Signatory	Signatory
New Zealand	$\checkmark$		$\overline{\mathbf{v}}$	
Papua New Guinea	$\checkmark$	Reservation		
Philippines				
Republic of Korea		Reservation	$\checkmark$	
Russia			$\checkmark$	$\checkmark$
Singapore	?		$\checkmark$	$\checkmark$
Thailand			$\checkmark$	Signatory
USA		Reservation	$\checkmark$	$\sqrt{1-1}$
Vietnam		Reservation		

ASEAN Regional Forum (ARF) Membership of Geneva Protocol, BTWC and CWC

20. Promotion of universality could best be tackled together by a concerted effort involving the co-depositaries for the BTWC, the depositary for the 1925 Geneva Protocol and also the depositary for the CWC, as well as the OPCW with the objective being to increase the universality of the BTWC, the 1925 Geneva Protocol and the CWC together with the withdrawal of reservations from the 1925 Geneva Protocol. Awareness should first be raised by preparation of regional comparative tabulations showing which States have yet to accede or to withdraw their reservations. This should then be followed by a concerted effort to provide States not party with a model package of documentation providing examples of how accession to the relevant Convention or Protocol can be communicated to the relevant Depositary and, likewise, withdrawal of reservations to the 1925 Geneva Protocol can be communicated. This package should also be supplemented by model legislation that could be used by the State concerned in enacting its national implementing legislation. The initiative should also be backed by an offer of technical and financial assistance to enable the individual State concerned to take the necessary actions nationally and internationally to accede to the Convention or Protocol and to withdraw their reservations from the 1925 Geneva Protocol.

21. The overall assessment for this measure can be summarised as follows:

Measure	CWC comparison	Burden on legitimate activities	Assessment
Actively promoting universal membership of the BTWC	Parallel applies		Benefits from all States being Party to the BTWC and the other relevant treaties

22. Withdrawal of reservations to the 1925 Geneva Protocol. The Article VIII section of the Final Declaration<sup>25</sup> of the Fourth Review Conference noted that:

7. The Conference notes that reservations concerning retaliation, through the use of any of the objects prohibited by the Biological and Toxin Weapons Convention, even conditional, are totally incompatible with the absolute and universal prohibition of the development, production, stockpiling, acquisition and retention of bacteriological (biological) and toxin weapons, with the aim to exclude completely and forever the possibility of their use.

and called upon all States Parties "that continue to maintain pertinent reservations to the 1925 Geneva Protocol to withdraw those reservations, and to notify the Depositary of the 1925 Geneva Protocol of their withdrawals without delay."

23. As noted above, the withdrawal of reservations from the Geneva Protocol should be tackled together by a concerted effort involving the co-depositaries for the BTWC, the depositary for the 1925 Geneva Protocol and also the depositary for the CWC, as well as the OPCW. The objective should be to increase the universality of the BTWC, the 1925 Geneva Protocol and the CWC together with the withdrawal of reservations from the 1925 Geneva Protocol. States not party should be provided with a model package of documentation providing examples of how accession to the relevant Convention or Protocol can be communicated to the relevant Depositary and, likewise, withdrawal of reservations to the 1925 Geneva Protocol can be communicated.

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
Withdrawal of reservations to the 1925 Geneva Protocol	Parallel applies	Very slight as requires action by government	Removal of legal inconsistencies

24. Increase efforts on disease surveillance, detection and diagnosis and countering infectious disease generally. The UK Green Paper rightly notes that "this would be done through existing national and/or international efforts" i.e. via the WHO, FAO and OIE and furthermore emphasises that "the overall framework within which any action plans were pursued would need to be clear." There is no doubt that improved national strategies for ensuring human, animal and plant health through disease surveillance and countering outbreaks of disease harmonized internationally through the WHO, FAO and OIE programmes will bring benefits to all States Parties. It is primarily through benefits to

<sup>&</sup>lt;sup>25</sup>United Nations, Fourth 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.IV/9, Geneva, 1996.

national infrastructure and increased transparency that there are potentially, over times, benefits from building confidence in compliance. There are also potential benefits in reducing the chance that accidental releases or deliberate attacks will go unrecognized. This proposed measures should not require negotiation -- at least, not in the BTWC forum -- to be taken forward. It is, however, worth recognising that there would be merit in action being taken internationally to promote the universality of adhesion to the WHO (which has 191 Member States), to the UN FAO (which has 183 Member States but not Russia) and to the OIE (which has 157 Member States).

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
Increase efforts on	No CWC parallel	Slight	Potential benefits in
disease surveillance,			reducing the chance
detection and			that deliberate attacks
diagnosis and			would not be
countering infectious			recognised -
disease generally			however, after failure
			of regime

25. Codes of conduct for professional bodies. This is essentially an elaboration of the appeals that have long been made by the States Parties at the Review Conferences -- at the Fourth Review Conference in 1996, the Final Declaration<sup>26</sup> in the section on Article I stated that:

8. The Conference appeals through the States Parties to their scientific communities to lend their support only to activities that have justification for prophylactic, protective and other peaceful purposes, and refrain from undertaking or supporting activities which are in breach of the obligations deriving from provisions of the Convention.

In addition, an awareness of the prohibitions resulting from the BTWC has also long been encouraged by the States Parties at the Review Conferences -- at the Fourth Review Conference in 1996, the Final Declaration<sup>27</sup> in the section on Article IV stated that the Conference notes the importance of:

- Inclusion in textbooks and in medical, scientific and military education programmes of information dealing with the prohibitions and provisions contained in the Biological and Toxin Weapons Convention and the Geneva Protocol of 1925;

An international code of ethics should require little negotiation as this requires States Parties to encourage their national professional bodies to adopt such codes of conduct. There would, however, be benefits from States Parties working together to compile some examples of best practice and then for a concerted international effort to be mounted by States Parties with

<sup>&</sup>lt;sup>26</sup>United Nations, Fourth 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.IV/9, Geneva, 1996. Available at http://www.opbw.org

<sup>&</sup>lt;sup>27</sup>United Nations, Fourth 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.IV/9, Geneva, 1996.

their national professional bodies to encourage adoption of an appropriate code of conduct which should also be promoted internationally through international professional bodies.

Measure	CWC comparison	Burden on legitimate activities	Assessment
Codes of conduct for	In 2002 OPCW has	Slight as primarily action	Over time could
professional bodies	initiated an ethics project	for national professional	bring some benefits
		bodies	

26. National criminal legislation and extradition. It will be important that States Parties do provide information on the texts of specific legislation enacted or other measures taken to ensure domestic compliance. There would be benefit in this information being collated, translated and distributed by a small secretariat on a regular basis to all States Parties. The experience with the Chemical Weapons Convention (CWC) in which the Technical Secretariat of the OPCW has carried out such a collation and analysis of the legislation enacted by the States Parties to implement the CWC has clearly demonstrated the value of such a collation and analysis as an encouragement to all States Parties to not only implement their legislation but also to ensure that it is effective. There is likewise value in the small secretariat providing model legislation to assist States Parties.

Measure	CWC comparison	Burden on legitimate activities	Assessment
National criminal legislation and extradition	Parallel to CWC	Modest but needed nationally for safety & security reasons	Significant benefits as makes work on biological weapons illegal

27. Enhanced national controls on dangerous pathogens. There is much to be said in support of tighter domestic controls on the use, storage and transfer of pathogens with the United States "select agent" programme<sup>28</sup> and the United Kingdom *The Anti-Terrorism, Crime and Security Act 2001*<sup>29</sup> as examples. Indeed, one of the benefits that was identified as arising from the composite Protocol text was that the provisions in Article 14 *Scientific and Technological Exchange for Peaceful Purposes and Technical Cooperation* in Section F *Cooperative Relationships with Other International Organizations and Among States Parties* included provision for agreements and arrangements in order to derive the greatest possible synergy in, and benefits from:

## (vi) Regulations governing the handling, transportation, use and release of microbial and other biological agents and toxins.

It was apparent that over time the building of capacity in member States relating to the regulation and control of the handling, use, storage and transfer of biological agents will not only build confidence in compliance with the Convention but also bring benefits nationally in regard to public health and protection of the environment. This is an area that needs to be

<sup>&</sup>lt;sup>28</sup>An account of the "select agent" programme is provided in Graham S. Pearson, *Article X: Some Building Blocks*, University of Bradford Department of Peace Studies Briefing Paper No. 7, March 1998, para 47-53. Available at http://www.brad.ac.uk/acad/sbtwc

<sup>&</sup>lt;sup>29</sup>United Kingdom, *The Anti-Terrorism, Crime and Security Act 2001.* Available at http://www.legislation. hmso.gov.uk/acts/acts2001/20010024.htm

developed in conjunction with the ongoing international and regional efforts to harmonise biosafety standards and controls around the world.

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
Enhanced national	No CWC parallel.	Slight as national	Significant benefits
controls on	Toxic chemicals are	controls should already	as shows that
dangerous pathogens	however subject to	be in place for health &	dangerous pathogens
	national controls.	safety reasons	under control

28. **Oversight of genetic engineering and high-risk experiments.** There is already considerable attention being paid to the oversight of genetic engineering with particular attention being given to those experiments with high risks nationally, regionally and internationally.<sup>30</sup> For example, the Organization for Economic Cooperation and Development (OECD) has long been engaged in the harmonization of regulatory oversight in biotechnology with the aim of promoting international harmonization in biotechnology including health and safety aspects. There are indeed benefits to be gained from measures to achieve oversight of genetic engineering to international standards as the infrastructure required within States Parties to achieve this will, over time, increase transparency and thus contribute to building confidence in compliance with the Biological and Toxin Weapons Convention.

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
Oversight of genetic	No parallel	Slight as national	Over time will
engineering and high-		oversight should already	increase transparency
risk experiments		be in place for health &	and contribute to
		safety reasons and	building confidence
		desirable to harmonize to	in compliance
		international standards	

29. Revised CBMs with specific extensions to particular CBMs. The various proposals put forward by the States Parties are quite wide ranging from specific extensions (to CBMs A & G, to CBMs B, E & G and a new CBM H) to clarification mechanisms and voluntary visits and to making some CBMs (E & G) mandatory. Some aspects -- such as the modalities for the improvement and extension of the CBMs -- should be relatively easy to finalise by an ad hoc meeting of scientific and technical experts from States Parties as was done in a two week meeting in 1987 to finalise the modalities for the confidence-building measures agreed at the Second Review Conference in 1986. Other aspects relating to revised CBMs -- such as voluntary visits and a clarification mechanism and making some mandatory are likely to require more negotiation. There would be merit in agreeing that there should be an ad hoc meeting of scientific and technical experts from the States Parties to finalise the modalities as far as possible for the revised and extended CBMs and the new CBM H early in 2003. Any aspects that require further negotiation and consideration should be deferred to a subsequent meeting.

<sup>&</sup>lt;sup>30</sup>A detailed survey of national, regional and international requirements is provided in Graham S. Pearson, *Article X: Some Building Blocks*, University of Bradford Department of Peace Studies Briefing Paper No. 6, March 1998 and Graham S. Pearson, *Article X: Some Building Blocks*, University of Bradford Department of Peace Studies Briefing Paper No. 7, March 1998. Available at http://www.brad.ac.uk/acad/sbtwc

30. The ideas mentioned in the UK Green Paper such as inclusion of an annex on the level of information exchanged voluntarily between states as well as possible voluntary visits between States Parties to facilities notified under the CBMs are well worthy of consideration. However, an essential first step to make real progress is to agree a small secretariat to collate and translate the CBMs returns and to issue these to all States Parties. Such a collation could usefully include regional comparative tabulations such as that for the EU circulated by the University of Bradford during the Fifth Review Conference and reproduced here for information:

<b>EU COMPLIANCE WITH CBMs</b>
(based on information contained in BWC/CONF.V/2, V/2/Corr.1, V/2/Corr.2 &
V/2/Corr.3)

Country	1997	1998	1999	2000	2001
Austria					
Belgium	Patchy	?	Patchy	Patchy	Patchy
Denmark		?	?	?	?
Finland					
France					
Germany					
Greece	?	?	?	?	?
Ireland		?	?	?	?
Italy					
Luxembourg			?	?	?
Netherlands					
Portugal	?	?	?	?	?
Spain					
Sweden					
United Kingdom					?

It is interesting to note that the Council of the European Union on 15 April 2002 adopted<sup>31</sup> a list of concrete measures which included the following:

5. Timely, consistent and full implementation of reporting obligations imposed either by the international instrument or by the final reports of review conferences (..., BWC -- CBMs, ...) and the creation of necessary conditions for processing the resulting information (e.g. translate and process information coming from BWC -- CBMs in usable databases).

31. There would be further benefits from States Parties also agreeing that this small secretariat and any individual State Party could seek clarification from other States Parties of the information submitted in their CBM returns. Together, these two measures could transform the effectiveness of the CBMs.

<sup>&</sup>lt;sup>31</sup>European Union, 2421st Council Meeting, General Affairs, Luxembourg, 15 April 2

Measure	CWC comparison	Burden on legitimate	Overall assessment
		activities	
Revised CBMs with	Broad range of BTWC	Not significantly more	Significant increase
specific extensions +	relevant activities	than at present	in benefit over
secretariat &	Mandatory under CWC		present ineffective
clarification			system

32. Regular annual meetings of subsidiary bodies such as a Scientific Advisory Panel and/or an Oversight Committee. There has long been a compelling argument for the States Parties to the BTWC to set up interim supportive institutions which will enable the BTWC treaty regime to flourish and achieve its true potential. The concept of an interim supportive institution is not novel as it was considered at the Third Review Conference and narrowly missed being established then. The resources required for such an institution would indeed be modest. The arguments for such interim supportive institutions has been convincingly made by Nicholas Sims in the Bradford Review Conference Paper No. 2<sup>32</sup> distributed to States Parties in April 2001 and reiterated in the Article XII section of the University of Bradford "Key Points for the Fifth Review Conference".<sup>33</sup> It should be possible to agree such an interim institution at the resumed Fifth Review Conference by adopting language in the Article XII section of the Final Declaration such as that proposed on pages 125 to 127 of the "Key Points for the Fifth Review Conference".

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
Regular annual	OPCW has regular	Slight	Benefits as would
meetings of	meetings of States		enable progress to be
subsidiary bodies	Parties (CoSP, ExC) and		made in a number of
such as a Scientific	of Scientific Advisory		areas pending
Advisory Panel	Board and		eventual creation of
and/or an Oversight	Confidentiality		OPBW
Committee	Commission		

33. Assistance in the event of, or threat of, use of BW. Whilst, as the UK Green Paper states, it is undoubtedly true that the States Parties could reaffirm and reemphasize their existing obligation under the Convention, the effective provision of such assistance could be greatly promoted by the creation of a small secretariat which would collate offers of assistance from States Parties and serve as a focal point to facilitate their provision in the event of attack or serious threat of attack against a State Party. As noted in the UK statement to the Fifth Review Conference the ongoing work in the OPCW provides a clear indication of the issues that need to be addressed. It was noted above that the effective provision of such assistance could be greatly promoted by the creation of a small secretariat which would collate offers of assistance from States Parties and serve as a focal point to facilitate their provision of such assistance could be greatly promoted by the creation of a small secretariat which would collate offers of attack or serious threat of attack against a State Party. This could be incorporated into the remit for the proposed interim supportive institution at the outset or,

<sup>&</sup>lt;sup>32</sup>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. Available at http://www.brad.ac.uk/acad/sbtwc

<sup>&</sup>lt;sup>33</sup>Nicholas A. Sims & Graham S. Pearson, *Article XII: Review Conferences* in Graham S. Pearson, Malcolm R. Dando & Nicholas A. Sims (eds), *Strengthening the Biological Weapons Convention: Key Points for the Fifth Review Conference*, University of Bradford, Department of Peace Studies, November 2001. Available at http://www.brad.ac.uk/acad/sbtwc

alternatively, the interim supportive institution could establish a subsidiary body to consider the provision of assistance and discuss the detailed procedure for assistance so that this could be provided on a timely basis when required.

Measure	CWC comparison	Burden on legitimate activities	Assessment
Assistance in the event of, or threat of, use of BW	Parallel to CWC	Slight although preparations would need to be made.	Benefit to all States Parties however, after failure of regime

34. A new Convention on Criminalization of CBW. The draft Convention to Prohibit Biological and Chemical Weapons under International Criminal Law<sup>34</sup> developed by the Harvard-Sussex programme would complement the prohibitions of the BTWC and the CWC as it would make it a crime under international law for any person knowingly to develop produce, acquire, retain, transfer or use biological or chemical weapons or knowingly to order, direct or render substantial assistance to those activities or to threat to use biological or chemical weapons. The draft convention rightly defines chemical and biological weapons as they are defined in the BTWC and the CWC on the basis of the general purpose criterion in these conventions. Any person who commits any of the prohibited acts anywhere would face the risk of prosecution or extradition should that person be found in the territory of a state that supports the proposed convention. This could be taken forward by one or more States Parties taking this draft new Convention to the Sixth Committee of the United Nations General Assembly.

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
A new Convention	Would complement both	Slight as national	Significant benefits
on Criminalization of	the CWC and the BTWC	implementation should	as criminalizes work
CBW		already be in place	on CBW

35. A new Convention on Physical Protection of dangerous pathogens. In order to consider the feasibility and desirability of a new international agreement that sets standards for physical protection, containment measures, operating procedures and transfers nationally and internationally, it is necessary to first consider what the existing requirements are nationally, regionally and internationally.<sup>35</sup> At the international level, the UNEP International Technical Guidelines for Safety in Biotechnology<sup>36</sup> points out the importance of containment in the risk management of biological organisms and modified organisms noting that "the degree of containment achieved depends primarily on the type of physical barriers and the application of appropriate work procedures." It also includes "any relevant requirements to ensure safe handling, storage, subsequent transport and use" as being part of the information

<sup>&</sup>lt;sup>34</sup>The Harvard Sussex Program on CBW Armament and Arms Limitation, *The Draft Convention to Prohibit Biological and Chemical Weapons under International Criminal Law*, November 2001. Available at http://fas - www.harvard.edu/~hsp/crim01.pdf

<sup>&</sup>lt;sup>35</sup>A detailed survey of national, regional and international requirements is provided in Graham S. Pearson, *Article X: Some Building Blocks*, University of Bradford Department of Peace Studies Briefing Paper No. 6, March 1998 and Graham S. Pearson, *Article X: Some Building Blocks*, University of Bradford Department of Peace Studies Briefing Paper No. 7, March 1998. Available at http://www.brad.ac.uk/acad/sbtwc

<sup>&</sup>lt;sup>36</sup>United Nations Environment Programme, UNEP International Technical Guidelines for Safety on Biotechnology, UNEP, Nairobi, Kenya, December 1995. Available at http://www.unep.org/unep/program/ natres/biodiv/irb/unepgds.htm

to be provided before such organisms are transferred from one country to another. More recently the Cartagena Protocol on Biosafety to the Convention on Biological Diversity<sup>37</sup> includes requirements for the provision of information that *"specifies any requirements for the safe handling, storage, transport and use of living modified organisms."* Although the Cartagena Protocol focusses on genetically-modified organisms, it is recognised that the provisions for safe handling, storage, transport and use of such organisms are based on and developed from those for unmodified organisms. In addition the Organization for Economic Cooperation and Development (OECD) has long been engaged in the harmonization of regulatory oversight in biotechnology with the aim of promoting international harmonization in biotechnology including health and safety aspects.

36. It is evident that already there is considerable attention being given to the containment of biological agents and of genetically modified organisms nationally, regionally (as in the EU) and internationally. Consideration of a new Convention on Physical Protection of dangerous pathogens needs to be carefully crafted so as to be **complementary** to the existing regulations. Indeed, consideration needs to be given whether strengthening of the physical protection aspects would be better addressed through the existing international fora under the Convention on Biological Diversity, thereby avoiding the risk of possible confusion and unnecessary duplication, rather than through a new security convention.

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
A new Convention	No CWC parallel	Slight as national	Benefits as
on Physical		controls should already	dangerous pathogens
Protection of		be in place for health &	held and transferred
dangerous pathogens		safety reasons and	to international
		desirable to harmonize to	standards
		international standards	

37. Article X implementation. It is evident that the implementation of Article X has attracted increased attention in the Final Declarations of successive Review Conferences.<sup>38</sup> The development of national infrastructure in the context of measures for the implementation of Article X of the Convention is to be supported as such measures over time will increase transparency and thus contribute to building confidence in compliance with the Convention. It is suggested that the Article X section of the Final Declaration of the Fifth Review Conference should be extended to include additional concepts for the implementation of Article X as proposed in subparagraphs 9 to 12 on page 113 of the Bradford "*Key Points for the Fifth Review Conference*".<sup>39</sup> The main problem in simply agreeing language in the Article X section of the Final Declaration of the Final Declaration is the Final Declaration of the Final Declaration of the Final Section of the Final Declaration of the Final Section of the Final Declaration is the Bradford "Key Points for the Fifth Review Conference".<sup>39</sup> The main problem in simply agreeing language in the Article X section of the Final Declaration of the Review Conference is that there is little

<sup>&</sup>lt;sup>37</sup>Cartagena Protocol on Biosafety to the Convention on Biological Diversity. Available at http://www.biodiv .org

<sup>&</sup>lt;sup>38</sup>See Graham S. Pearson, Article X: Exchange of Equipment, Materials and Scientific and Technological Information, International Cooperation and Development in Graham S. Pearson, Malcolm R. Dando & Nicholas A. Sims (eds), Strengthening the Biological Weapons Convention: Key Points for the Fifth Review Conference, University of Bradford, Department of Peace Studies, November 2001. Available at http://www.brad.ac.uk/acad/sbtwc

<sup>&</sup>lt;sup>39</sup>Graham S. Pearson, Article X: Exchange of Equipment, Materials and Scientific and Technological Information for Peaceful Purposes and International Cooperation and Development in Graham S. Pearson, Malcolm R. Dando & Nicholas A. Sims (eds), Strengthening the Biological Weapons Convention: Key Points for the Fifth Review Conference, University of Bradford, Department of Peace Studies, November 2001. Available at http://www.brad.ac.uk/acad/sbtwc

evident implementation during the years between the Review Conferences. Consequently, this is another area in which an interim supportive institution could make a valuable contribution by collecting, collecting and issuing to States Parties an annual report on the implementation of Article X.

Measure	CWC comparison	Burden on legitimate activities	Assessment
Article X implementation	Article XI of the CWC but much less elaborated than BTWC Article X proposals	Slight	Over time will increase transparency and contribute to building confidence in compliance

38. Investigations into non-compliance (alleged use, misuse of facilities, suspicious outbreaks) and effective compliance machinery to make it much harder to cheat. Investigations into suspected non-compliance are a key measure to strengthen the Convention -- and the Green Paper rightly includes misuse of facilities as well as alleged use and suspicious outbreaks. A simple extension of the existing UN Secretary-General process -- which is limited to instances where the State on whose territory the alleged use has taken place -- in respect of both the scope -- to misused facilities -- and the circumstances -- to include cases where the State Party where the investigation would take place has withheld its consent -- is unlikely to be readily agreed. Given the background of the Ad Hoc Group negotiations -- which have elaborated in exhaustive detail procedures for both facility and field investigations -- the viable option would appear to be the negotiation of an international agreement which, as the Green Paper rightly notes, should include other elements including scientific and technological assistance. The negotiation of such an international agreement should be able to benefit from the previous work carried out by the Ad Hoc Group.

Measure	CWC comparison	Burden on legitimate activities	Assessment
Investigations into non-compliance alleged use, misuse of facilities, suspicious outbreaks	Parallel to CWC challenge inspection and investigation of alleged use	Slight as assumed that frivolous investigations will be excluded. However, preparations need to be made.	Significant increase in potential detection & deterrence of prohibited activities

39. Guidelines to ensure strengthening of Article III and to prohibit transfers of dualuse materials to non-State actors. For convenience, this proposed measure is considered along with the other two proposals relating to transfers -- the proposal for voluntary annual notification of authorised transfers and the use of the Cartagena Protocol on Biosafety advanced informed agreement procedures for transfers of living modified organisms between States Parties to the BTWC. It is well known that the control of transfers of biological agents and the implementation of Article III of the Convention is one of the most contentious issues considered by the States Parties when considering how to strengthen the effectiveness of the prohibition regime. There is more passion generated by this issue and much less professional and considered debate and discussion.

40. This is inconsistent with the reality that States around the world are increasingly concerned that no materials that are potentially harmful should be imported into their country without their prior knowledge and agreement because of concerns about public health and the

environment. This applies to a wide range of materials whether these are banned and severely restricted chemicals -- such as pesticides -- or narcotic drugs and psychotropic substances or living modified organisms. These concerns parallel the security concerns about the potential misuse of chemical or biological materials by non-State actors and terrorist groups. It is therefore encouraging that there are signs that some States Parties to the BTWC are showing a willingness, however cautiously, to explore this potential common ground in regard to biological agents. Thus, the EU in their proposed language for the Final Declaration of the Fifth Review Conference proposed:

The Conference invites States Parties to explore a possible set of common principles in the field of export controls to be applied on a voluntary basis.

and that:

Considering the utility of a global overview of international transfers in the current context of enhanced vigilance, the Conference invites States Parties to explore the possibility of voluntary notification of authorisations of transfers subject to licensing on an annual aggregated basis.

These suggestions would appear to mirror some of the provisions that are applied internationally to narcotic drugs and psychotropic substances.<sup>40</sup> The statement made by India<sup>41</sup> to the Fifth Review Conference said that "We believe that transfer of dual-use materials for medical, diagnostic and treatment purposes should be regulated on the basis of guidelines to be negotiated and accepted by all States Parties. Such guidelines should, we further believe, prohibit transfers to non-State actors." The further proposal<sup>42</sup> made by Mexico and Peru was that:

The Conference recognizes the importance of the Cartagena Protocol on Biosafety to the Convention on Biological Diversity, which seeks to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms.....

The Conference decides that States Parties to the BWC shall apply on an interim basis -- whilst the Cartagena Protocol does not enter into force -- provisions regarding the Cartagena Protocol's informed agreement procedure applied to international transfer of living modified organisms which are bacteriological (biological) agents.

41. Previous Review Conferences have agreed language in the Article III section of the Final Declaration -- for example, at the Fourth Review Conference -- which stated that:

2. The Conference notes that a number of States Parties stated that they have already taken concrete measures to give effect to their undertakings under this Article and in

<sup>&</sup>lt;sup>40</sup>Graham S. Pearson, *Further Chemical Control Regimes: Narcotic Drugs and Psychotropic Substances*, CBWCB Bulletin, No. 51, March 2001, pp.2 - 11.

<sup>&</sup>lt;sup>41</sup>Rakesh Sood, Statement by Ambassador Rakesh Sood, Head of Delegation to the Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 19 November 2001. Available at http://www.opbw.org

<sup>&</sup>lt;sup>42</sup>Mexico and Peru, *Proposal Working Paper by Mexico and Peru*, BWC/CONF.V/COW/WP.26, 27 November 2001. Available at http://www.opbw.org

this context also notes statements made by States Parties at the Conference about the legislative or administrative measures they have taken since the Third Review Conference. The Conference calls for appropriate measures by all States Parties.

and also stated that:

The Conference affirms that Article III is sufficiently comprehensive to cover any recipient whatsoever at international, national or subnational levels.

The Final Declaration of the Fourth Review Conference also noted that:

The Conference discussed the question whether multilaterally-agreed guidelines or multilateral guidelines negotiated by all States Parties to the Convention concerning the transfer of biological agents, materials and technology for peaceful purposes to any recipient whatsoever might strengthen the Convention.

without reaching any conclusion other than to note that these issues are being considered as part of the ongoing process to strengthen the Convention.

42. It is noted that the onus in Article III of the Convention is clearly placed on the individual States Parties as Article III states that:

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

The composite Protocol included in Article 7 a Section B entitled "Transfer Guidelines". When it is recognized that the States Parties are concerned about the effective implementation of Article III and that this is primarily a national responsibility, there are potential benefits from considering guidelines to ensure the strengthening of Article III and to prohibit transfers to non-State actors as such guidelines should over time improve the implementation of Article III. It needs to be clear, however, that these would simply be guidelines and it would be a matter for individual States Parties to determine whether or not to adopt these guidelines -- or a lesser or higher standard -- nationally.

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	

Guidelines to ensure	Convention specifies	Modest as similar	Benefits to States
strengthening of	controls relating to	controls are required	Parties from
Article III and to	transfers of scheduled	increasingly to address	improved
prohibit transfers of	chemicals	exports and imports of	implementation of
dual-use materials to		potentially dangerous	Article III
non-State actors.		materials	

#### Conclusions

43. In preparing for the forthcoming resumed Fifth Review Conference there would be significant benefit to be gained from the States Parties considering a comprehensive list of the measures proposed by States Parties in their statements to the Fifth Review Conference or working papers to the Committee of the Whole with proposed language for the Final Declaration as such a list should attract support from many States Parties as being a list that should be reviewed and taken further at a meeting subsequent to the Review Conference. This comprehensive list of measures could, with advantage, be developed and agreed by the Western Group in advance of the resumption of the Review Conference and the opportunity should be taken to see whether the Eastern Group would be willing to be associated with the comprehensive list. The list should be tabled by Australia on behalf of the Western Group as a Working Paper for the resumed Review Conference.

44. The comprehensive list of measures considered in this paper can usefully be summarised in a table in which the measures that require little or no negotiation -- such as the promotion of universality of the Convention -- are listed first and then subsequent measures in order of the amount of negotiation<sup>43</sup> likely to be required up to measures such as the guidelines for transfer controls.

Measure	CWC comparison	Burden on legitimate	Assessment
		activities	
Actively promoting	Parallel applies	Slight as requires action	Benefits from all
universal		by government	States being Party to
membership of the			the BTWC and the
BTWC			other relevant treaties
Withdrawal of	Parallel applies	Very slight as requires	Removal of legal
reservations to the		action by government	inconsistencies
1925 Geneva			
Protocol			

## The Comprehensive List of Measures proposed by States Parties in November 2001 in increasing order of the likely amount of negotiation required to agree the measure

<sup>&</sup>lt;sup>43</sup>The amount of negotiation likely to be required for individual measures is considered in the analysis section on pages 30 to 37 of Graham S. Pearson, *Return to Geneva: The United Kingdom Green Paper*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 6, June 2002. Available at http://www.brad.ac.uk/acad/sbtwc

Measure	CWC comparison	Burden on legitimate activities	Assessment
Increase efforts on disease surveillance, detection and diagnosis and countering infectious disease generally	No CWC parallel	Slight	Potential benefits in reducing the chance that deliberate attacks would not be recognised - however, after failure of regime
Codes of conduct for professional bodies	In 2002 OPCW has initiated an ethics project	Slight as primarily action for national professional bodies	Over time could bring some benefits
National criminal legislation and extradition	Parallel to CWC	Modest but needed nationally for safety & security reasons	Significant benefits as makes work on biological weapons illegal
Enhanced national controls on dangerous pathogens	No CWC parallel. Toxic chemicals are however subject to national controls.	Slight as national controls should already be in place for health & safety reasons	Significant benefits as shows that dangerous pathogens under control
Oversight of genetic engineering and high- risk experiments	No parallel	Slight as national oversight should already be in place for health & safety reasons and desirable to harmonize to international standards	Over time will increase transparency and contribute to building confidence in compliance
Revised CBMs with specific extensions + secretariat & clarification	Broad range of BTWC relevant activities Mandatory under CWC	Not significantly more than at present	Significant increase in benefit over present ineffective system
Regular annual meetings of subsidiary bodies such as a Scientific Advisory Panel and/or an Oversight Committee	OPCW has regular meetings of States Parties (CoSP, ExC) and of Scientific Advisory Board and Confidentiality Commission	Slight	Benefits as would enable progress to be made in a number of areas pending eventual creation of OPBW
Assistance in the event of, or threat of, use of BW	Parallel to CWC	Slight although preparations would need to be made.	Benefit to all States Parties however, after failure of regime
A new Convention on Criminalization of CBW	Would complement both the CWC and the BTWC	Slight as national implementation should already be in place	Significant benefits as criminalizes work on CBW

A new Convention	No CWC parallel	Slight as national	Benefits as
on Physical	-	controls should already	dangerous pathogens
Protection of		be in place for health &	held and transferred
dangerous pathogens		safety reasons and	to international
		desirable to harmonize to	standards
		international standards	

Measure	CWC comparison	Burden on legitimate activities	Assessment
Article X implementation	Article XI of the CWC but much less elaborated than BTWC Article X proposals	Slight	Over time will increase transparency and contribute to building confidence in compliance
Investigations into non-compliance alleged use, misuse of facilities, suspicious outbreaks	Parallel to CWC challenge inspection and investigation of alleged use	Slight as assumed that frivolous investigations will be excluded. However, preparations need to be made.	Significant increase in potential detection & deterrence of prohibited activities
Guidelines to ensure strengthening of Article III and to prohibit transfers of dual-use materials to non-State actors.	Convention specifies controls relating to transfers of scheduled chemicals	Modest as similar controls are required increasingly to address exports and imports of potentially dangerous materials	Benefits to States Parties from improved implementation of Article III

43. The analysis of all these measures in this paper shows that these measures would in general not incur an unnecessary burden on legitimate activities yet they would bring benefits to the States Parties to the BTWC. It is also evident that an interim supportive institution or bureau would be immensely beneficial in helping to nurture and sustain the Convention between Review Conferences and could be highly effective in taking forward several of the proposed measures. The States Parties at the resumption of the Fifth Review Conference on 11 November 2002 are urged to use such a comprehensive list of measures to strengthen the Convention as the basis for an agreement to take these forward through negotiation at meetings subsequent to the Review Conference supported by an interim supportive institution or bureau.