

Strengthening the Biological Weapons Convention

Key Points for the Seventh Review Conference

Editors

Graham S Pearson, Nicholas A. Sims & Malcolm R Dando

September 2011

Division of Peace Studies, University of Bradford, Bradford, UK

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Foreword by

Ambassador Paul van den IJssel

Edited by

Graham S Pearson, Nicholas A. Sims & Malcolm R Dando

Division of Peace Studies

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This Briefing Book "*Key Points for the Seventh Review Conference*" has been prepared to aid the delegations of the States Parties to the Biological and Toxin Weapons Convention (BTWC) in their preparation for the Seventh Review Conference to be held in Geneva from Monday 5 December to 22 December 2011. It complements the Review Conference Papers produced during the past two years:

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|---|---------------|
| 21. Preparing for the BTWC Seventh Review Conference in 2011 | May 2010 |
| 22. An Annual Meeting for the BTWC | June 2010 |
| 23. An Accountability Framework for the BTWC | June 2010 |
| 24. Improving the BTWC Confidence-Building Measures Regime | October 2010 |
| 25. Achieving Consensus at the BTWC Seventh Review Conference | November 2010 |
| 26. Effective Implementation of the BTWC: The Key Role of Awareness Raising and Education | November 2010 |
| 27. The Provision of Scientific and Technological Advice to the Biological and Toxin Weapons Convention | February 2011 |
| 28. Promoting International Cooperation in the Field of Peaceful Biological Activities | March 2011 |
| 29. A 2020 Vision for the Biological and Toxin Weapons Convention | March 2011 |
| 30. Achieving Realistic Ambitions for Decisions at the BTWC Seventh Review Conference | April 2011 |

These documents continue the series which commenced with the Briefing Book *Key Points for the Fourth Review Conference* prepared and distributed to the States Parties to the Biological and Toxin Weapons Convention in 1996 prior to that Review Conference, the Briefing Book *Key Points for the Fifth Review Conference* prepared and distributed in November 2001 prior to that Review Conference and the Briefing Book *Key Points for the Sixth Review Conference* prepared and distributed in September 2006 prior to that Review Conference. The Review Conference Papers and this Briefing Book are available at the BTWC Website at <http://www.brad.ac.uk/acad/sbtwc>

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**STRENGTHENING THE BIOLOGICAL WEAPONS CONVENTION:
KEY POINTS FOR THE SEVENTH REVIEW CONFERENCE**

FOREWORD

The States Parties to the Biological and Toxin Weapons Convention (BTWC) are holding the Seventh Review Conference of the Convention from 5 to 22 December 2011.

Together with the Nuclear Non-Proliferation Treaty (NPT) and the Chemical Weapons Convention (CWC), the BTWC forms the foundation of the disarmament and non-proliferation framework in the area of weapons of mass destruction (WMD).

As President-designate my main aim for the Seventh Review Conference is to secure a positive outcome and to further strengthen the Convention. As I said in my acceptance speech in December 2010, let me stress again here that in my view a positive outcome means two things: consensus, but also ambition. I hope we all agree that we should be guided by ambition when we are determining our aims for the Review Conference. At the same time we should keep an eye on what is doable. Ambitious realism will be my guiding principle, as I hope it will be for you as well.

As I have said previously, there is very little chance of developing agreements from scratch during the three-week Review Conference: proposals need to be developed in advance. This means we need to use our time carefully between now and the Review Conference itself in December 2011. We must take every opportunity to share ideas, discuss proposals, and prepare the ground for agreement.

I think early sharing of ideas, both among States Parties, and between States Parties and the broader BTWC community, such as relevant international organizations, the scientific community, NGOs and academia is key to a successful outcome of the Review Conference. I am therefore particularly pleased that the Division of Peace Studies in the University of Bradford have published this detailed and carefully prepared *Key Points for the Seventh Review Conference* thus continuing the practice that they have done since the Fourth Review Conference in 1996.

I am especially pleased that they have addressed not only the Article by Article Final Declaration but also the Decisions and Recommendations that I and many States Parties, as has been evident from the many preparatory workshops and seminars held around the globe, expect the Seventh Review Conference to address. I welcome the fact that in their overall aim of strengthening the BTWC, they have put forward a comprehensive set of sensibly argued points that will, I am sure, inform the States Parties' preparation for the Seventh Review Conference.

Ambassador Paul van den IJssel
Permanent Representative of the Kingdom of the Netherlands
to the Conference on Disarmament
President-Designate of the Seventh Review Conference
of the States Parties to the Biological and Toxin Weapons Convention
Geneva
Switzerland

ACHIEVING REALISTIC AMBITIONS FOR THE REVIEW CONFERENCE

by Graham S. Pearson, Nicholas A. Sims & Malcolm R. Dando

Introduction

1. The Seventh Review Conference of the Biological and Toxin Weapons Convention (BTWC) is taking place five years after the last review of the operation of the Convention which produced both a *Final Declaration* and a *Part III: Decisions and Recommendations* at the Sixth Review Conference in 2006. Article XII of the Convention requires:

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

2. Although Article XII required only one Review Conference, which took place 3-21 March 1980, the States Parties have chosen to meet regularly for further Review Conferences of their own volition. Such further Review Conferences have been held in 1986, 1991, 1996, 2001-02 and 2006. Although each Review Conference adopts its own agenda, taking account of elements recommended by its predecessor or arising from subsequent developments, Article XII continues to govern the overall purposes of successive Review Conferences.

3. The States Parties to the BTWC are to be complimented for the steps that they have taken starting in 2010 to prepare to ensure a successful outcome to the Seventh Review Conference. As others have pointed out, success is rarely accidental and needs to be planned for. There is a real opportunity to make progress at the Seventh Review Conference as it comes following four years of a successful intersessional process from 2007 to 2010 which has built on the constructive atmosphere achieved at the Sixth Review Conference. The President-designate, Ambassador Paul van den IJssel, in his acceptance speech¹ has rightly sought to raise the expectations of the States Parties through his guiding principle of *ambitious realism*. He has made it clear that the BTWC needs to be further strengthened by consensus, and that this consensus must be sought through flexibility and through sharing ideas as widely as possible in the run-up to the conference so as to avoid any last-minute surprises. He also said that States Parties need to *be creative: look for synergies and mutually beneficial solutions, rather than trade-offs and compromises*.

4. Ambitious realism translates into incremental steps to strengthen the BTWC well beyond those attainable at the Sixth Review Conference in 2006. It needs to be recognized that the consensus achieved in 2006 was only possible because sights were deliberately set low. That was right, for the Sixth Review Conference. But it would not be right for the Seventh. Hence

¹ Ambassador Paul van den IJssel, *Remarks made following his nomination*, Meeting of States Parties, 7 December 2010. Available at [http://www.unog.ch/80256EE600585943/\(httpPages\)/7EF0D5B39D1D0FCFC125782400403D1C?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/7EF0D5B39D1D0FCFC125782400403D1C?OpenDocument)

the significance of Ambassador Paul van den IJssel's acceptance speech². Governments preparing for the Seventh Review Conference must be realistic, but also ambitious. They must seek consensus, not in the status quo, but over ways of strengthening the treaty. Strengthening will be incremental; as the treaty regime flowing from the BTWC continues to evolve, its development must be deliberate, not left to chance. Everyone must raise their sights.

5. What then does the Seventh Review Conference need to achieve in order to steer the recovering BTWC along a trajectory of constructive evolution through its next five years? These *Key Points for the Seventh Review Conference* set out a carefully considered set of ambitious, yet realistically achievable, objectives for the Review Conference to adopt **both** in its *Final Declaration* **and** in a comparable *Part III: Decisions and Recommendations* to those agreed in 2006.

6. The strengthening of the Convention through the review process is incremental, corresponding to the cumulative building up of extended understandings and agreements on the foundations laid by previous Review Conferences. The purpose of these *Key Points for the Seventh Review Conference* is accordingly to enable the States Parties to strengthen the BTWC through the next five years by reaffirming the accumulated body of understandings and agreements built up by previous Review Conferences and recording, wherever they can achieve consensus, further advances in their understanding of the Convention and its implications for what they should do individually and collectively to implement it more effectively. These reaffirmations and advances should be recorded in the Article by Article *Final Declaration*, and in a separate *Decisions and Recommendations* part of the *Final Document*, as in 2006. The balanced development of the BTWC treaty regime will be assisted if strengthening decisions and extended understandings can be recorded in as many areas as possible, across the whole range of the regime, which is why every Article of the Convention receives attention in at least one chapter of these *Key Points for the Seventh Review Conference*.

7. Although by no means an exhaustive list of the issues arising Article by Article, certain elements on which decisions will be sought have by common consent been given particular attention and have acquired particular prominence in the run-up to the Seventh Review Conference; these are listed and then introduced one by one for discussion in the next section of this chapter. However, whilst decisions are important they are but one part of the Review Conference process and the recording of extended understandings in the Article by Article *Final Declaration* is just as important. States Parties need to prepare for and give attention equally to **both** the Article by Article *Final Declaration* **and** *Part III: Decisions and Recommendations*.

Topics on which decisions are required at the Seventh Review Conference

8. There has been general consensus at the various informal workshops held in the latter half of 2010 and in the first half of 2011 such as those at Wilton Park, Beijing, Montreux and Berlin³ on the topics that need to be addressed at the Seventh Review Conference so as to

² Ambassador Paul van den IJssel, *Remarks made following his nomination*, Meeting of States Parties, 7 December 2010. Available at [http://www.unog.ch/80256EE600585943/\(httpPages\)/7EF0D5B39D1D0FCFC125782400403D1C?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/7EF0D5B39D1D0FCFC125782400403D1C?OpenDocument)

³ Information about the workshops held in Beijing, Montreux and Berlin is available at the [unog.ch/bwc](http://www.unog.ch/bwc) website page on the Seventh Review Conference. A paper describing the Wilton Park workshop is listed as *Session 1* –

reach decisions, and there is growing consensus on what the outcome should be for many of these topics even if not yet for all. The topics that need to be addressed are:

- a. Universalisation of the Convention
- b. The Intersessional Process
- c. The Confidence-Building Measures regime
- d. Advances in Science and Technology
- e. The Implementation Support Unit
- f. International cooperation and assistance
- g. Compliance and verification

Universalisation of the Convention

9. There has been a sustained effort on universalisation from 2007 through to 2010 by the successive Chairmen of the annual Meetings of States Parties who had been charged by the language adopted in the *Part III: Decisions and Recommendations* section of the *Final Document* of the Sixth Review Conference:

(b) Agrees that the Chairs of Meetings of States Parties shall coordinate universalization activities, address states not party to the Convention, provide an annual report on universalization activities at Meetings of States Parties, and provide a progress report to the Seventh Review Conference, bearing in mind the primary responsibility of the States Parties on the implementation of this decision.

This process and the progress made is analysed in the chapter entitled *Article XIV: Universal Adherence to the Convention* in these *Key Points for the Seventh Review Conference*. Our conclusion is that it is evident that **more** is required than has been possible since the Sixth Review Conference in 2006 when the successive Chairmen in conjunction with the Implementation Support Unit have endeavoured to make progress on universalization.

10. We consider various possibilities and recommend that a troika made up of the President of the Seventh Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee, in close cooperation with the Russian Federation, the United Kingdom and the United States as Depositaries, and supported by the Implementation Support Unit is very attractive as it would provide continued attention to universalization throughout the period to the Eighth Review Conference and be able to report not only to the annual Meetings of States Parties but also to the Eighth Review Conference. Such a troika would be an extension of the continuing role which a President of a BTWC Review

Wilton Park in the Documentation for the Beijing workshop at the unog.ch/bwc website page on the Beijing Workshop 2010. Reports about the Beijing and Montreux workshops – *Special - December 2010: The Beijing workshop preparing for the BWC Seventh Review Conference* and *Special - May 2011: The Montreux Workshop preparing for the BWC Seventh Review Conference* – are available at <http://www.sussex.ac.uk/Units/spru/hsp/Reports%20from%20Geneva.html> and at the unog.ch/bwc website page on The Think Zone.

Conference has always held, through the years following the Review Conference at which he presided, acting in close cooperation with the Depositaries. That role goes back to 1980 – 1986 when Norway, holding the Presidency of the First Review Conference in 1980, took the responsibility in the years that followed in caring for the Convention. Furthermore, such a troika could encourage a Foreign Minister to write to his/her counterparts in the states not party to the Convention – in a similar way to that in which the President-designate of the Seventh Review Conference has in April 2011 had the Foreign Minister of The Netherlands write to his counterparts in the states not party. The troika also adds the benefit of having a member from each group of States Parties which can be advantageous in promoting regional initiatives.

11. Furthermore, the mandate for the troika and the ISU needs to be slightly broadened so that the troika shall take steps on behalf of the States Parties to promote the universalisation of the Convention and to take opportunities to address states not party at the highest level.

The Intersessional Process

12. On the Intersessional Process, it is evident that there is general agreement that this had been very successful in sharing information on the topics that had been considered since the Sixth Review Conference. However, it is becoming clear that for the next intersessional period there would be advantages in supporting the annual meetings by standing working groups on subjects such as science and technology, on Confidence-Building Measures, and on compliance. It is also recognized that the annual Meeting of States Parties should be able to request that such standing working groups carry out further work or, in the case of science and technology, to request the standing working group to consider further particular topics – and thus that the annual Meeting of States Parties should have some decision making powers where appropriate and on the basis of consensus. In the context of decision making, it has to be recognized that the annual Meeting of States Parties during the intersessional process since 2006 has made decisions – such as who shall be the Chairman for the following year, when the Meeting of Experts and the Meeting of States Parties shall be, and at MSP/2010, who will be the President-designate for the forthcoming Review Conference, when the Preparatory Committee shall meet and the dates for the Review Conference itself as well as the budget for the Review Conference. Consequently, making decisions where appropriate and on the basis of consensus should present no difficulties for future Meetings of States Parties.

The Confidence-Building Measures regime

13. The intersessional period since the Sixth Review Conference has seen much debate about the Confidence-Building Measures regime in side sessions and using an e-panel. From all of this consideration, it is apparent that there could be agreement to some modifications to the existing CBM regime at the Seventh Review Conference **and** agreement to set up a standing working group to consider further modifications to the CBM regime. As after the Second Review Conference when the modalities of the CBMs were finalised at a subsequent meeting in 1987, agreement to adopt further changes to the CBM process might be made at a subsequent Meeting of States Parties.

14. The chapter entitled *Article V: Confidence-Building Measures* in these *Key Points for the Seventh Review Conference* analyses the developments since the Sixth Review Conference and recommends particular amendments to the existing CBMs that should be adopted at the Seventh Review Conference. It further recommends that a standing working group reporting to the annual Meeting of States Parties throughout the intersessional process should be

established to examine further how the effectiveness of, and the participation in, the CBM regime might be enhanced.

Advances in Science and Technology

15. It is recognized that the present system – in which information on advances in science and technology is provided in a background paper for the Review Conference but is not adequately discussed or considered at the Review Conference – is inadequate for today's world in which the developments in science and technology have important implications for **all** the Articles of the Convention and need to be considered more frequently by States Parties. There appears to be general agreement to creating a standing working group of scientific and technical experts open to all States Parties. This group should address specific topics identified by the annual Meeting of States Parties, and could with advantage include participation by experts in the particular topics being addressed, perhaps following along the lines of the guests of the Chair in the Meetings of Experts in the Intersessional Process since the Sixth Review Conference in 2006. The standing working group of scientific and technical experts would report on the implications for all Articles of the Convention, with a view to the strengthening of the Convention, of the advances in the particular area of science and technology selected by the annual Meeting of States Parties. Its report would be received and considered at the next annual Meeting of States Parties. It is recommended that the Seventh Review Conference should agree the topic to be considered in the first year by the standing working group of scientific and technical experts – and that this should be *synthetic biology*.

The Implementation Support Unit

16. There has been universal praise for the work carried out by the Implementation Support Unit since its launch on 20 August 2007. However, it should be noted that because of its limited staff, it is currently unable to accept between one-third and one-half of the requests that it received to assist States Parties in the implementation of the Convention. A staff of about 6 to 7 would be necessary to carry out the Unit's **present** mandate fully.

17. It needs also to be recognized that additional staff would be needed for some of the proposals that are likely to attract consensus at the Seventh Review Conference such as an increased effort on universalisation of the Convention, providing support to the standing working groups reporting to the annual Meeting of States Parties, and an Action Plan on national implementation as such national implementation is fundamental and essential for effective implementation of the Convention.

International Cooperation and Assistance

18. Although there is less evident agreement on how this topic should be addressed, there is broad agreement that it needs to be addressed at the Seventh Review Conference. Whilst there have been proposals that there should be a specific mechanism to address international cooperation and assistance under Article X of the Convention, it is far from clear from a resource-benefit analysis viewpoint whether Article X, given that there is a huge amount of international cooperation already taking place, merits the devotion of the limited available resources to a detailed mechanism other than a clearing house mechanism. It is, however, an area which the Implementation Support Unit with a modest augmentation of its staff could extend its current clearing house activities to include. After all, the ISU should be able to

benefit from and build upon the experience gained by the clearing house to promote international cooperation established almost 20 years ago for the Convention on Biological Diversity⁴.

Compliance and Verification

19. Whilst there is even less agreement on how best this topic should be addressed, there is again broad agreement that it needs to be addressed at the Seventh Review Conference. There appears to be agreement that this is a suitable topic for a standing working group, subsequent to the Seventh Review Conference, that might consider through a conceptual discussion what measures would demonstrate compliance, and how clarification might be obtained in respect of any queries regarding compliance. It could with advantage look ahead to what sort of compliance regime the Convention should have a decade or so into the future⁵.

Topics on which extended understandings are required at the Seventh Review Conference

20. The extended understandings that have been developed by States Parties over the successive Review Conferences need to be reaffirmed and extended further. The detailed consideration on an Article by Article basis is provided in the relevant chapters of this *Key Points for the Seventh Review Conference*. In the subsequent paragraphs, particular points for some of the Articles that should be included in the Article by Article *Final Declaration* are noted.

Article I: Scope

21. This needs to reaffirm that Article I applies to **all** advances in science and technology. It also needs to recognize that these advances have applicability to animals and plants as well as to humans. In addition, the Article by Article *Final Declaration* should also include language that recognizes that the developments in science and technology have important implications for **all** the Articles of the Convention and that their implications need to be considered by States Parties by creating a standing working group of scientific and technical experts open to all States Parties reporting to the annual Meeting of States Parties. A cross reference – see *Part III: Decisions and Recommendations* – should link the Article by Article language to the more detailed provisions in the *Decisions and Recommendations* section.

Article II: Destruction of Agents and Weapons

22. Whilst Article II specifically addresses agents and weapons, the Seventh Review Conference could usefully extend this by affirming that any past biological weapons production facilities should be destroyed or diverted to peaceful purposes. Furthermore, in the *Decisions and Recommendations* section, the Conference should agree to extend CBM Form F so that information is provided about the production facilities in which the past offensive programmes were carried out and what those facilities are engaged in today.

⁴ See, for example, Graham S. Pearson, *Promoting International Cooperation in the Field of Peaceful Biological Activities*, Bradford Review Conference Paper No. 28, March 2011. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm> and on The Think Zone of unog.ch/bwc

⁵ See, for example, Graham S. Pearson, *A 2020 Vision for the Biological and Toxin Weapons Convention*, Bradford Review Conference Paper No. 29, March 2011. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm> and on The Think Zone of unog.ch/bwc

Article III: Non-Transfer

23. The Review Conference should reaffirm that Article III is sufficiently comprehensive to cover **any** recipient whatsoever at the international, national or sub-national levels. States Parties should be required to take and enforce effective measures to establish domestic controls to prevent the proliferation of biological weapons and their means of delivery, including by establishing appropriate controls over related materials – which should have been given an added impetus by the requirements of Security Council Resolutions 1540 (2004)⁶ and 1977(2011)⁷. In addition, the section addressing the Implementation Support Unit in the *Decisions and Recommendations* section should include specific mention that the ISU should liaise as appropriate with the 1540 Committee.

Article IV: National Implementation

24. The Review Conference should reaffirm the commitment of States Parties to take the necessary national measures under this Article. In addition, the Review Conference should agree an Action Plan for National Implementation (with the details set out in *Part III: Decisions and Recommendations*) and agree on an interim target for two thirds of the States Parties to the BTWC to have adopted effective national implementation legislation by the time of the Eighth Review Conference. In addition, given the activities being carried out by the 1540 Committee in regard to national implementation measures, the section addressing the Implementation Support Unit in the *Decisions and Recommendations* section should include specific mention that the ISU should liaise as appropriate with the 1540 Committee.

25. The Review Conference should recognise that the effective implementation of the Convention amongst all those engaged in the life sciences requires the States Parties to take top-down action – relying on bottom-up efforts will simply be ineffective in remedying the present abysmal level of awareness and education of life scientists around the world. There is thus a requirement for the States Parties to agree to take action to implement effective education of and outreach to all those engaged in the life sciences so that they are aware of their national and international obligations not to misuse the life sciences.

Article V: Consultation and Cooperation

26. The Review Conference should reaffirm that this Article provides an appropriate framework for States Parties to consult and cooperate with one another to resolve any problem and to make any request for clarification which may have arisen in relation to the objective of, or in the application of, the provisions of, the Convention. Furthermore, in regard to the Confidence-Building Measures regime, it is recommended that the Review Conference should note the comprehensive attention given to the Confidence-Building Measure regime at the Seventh Review Conference and welcome the amendments agreed to the Confidence-Building Measures [See *Part III: Decisions and Recommendations*]. In addition, the Review Conference should agree that a standing working group reporting to the annual Meeting of States Parties throughout the intersessional process be established to examine further how the effectiveness of, and the participation in, the CBM regime might be enhanced.

⁶ United Nations, *Resolution 1540 (2004) Adopted by the Security Council at its 4956th meeting, on 28 April 2004*, S/RES/1540 (2004), 28 April 2004.

⁷ United Nations Security Council, *Resolution 1977 (2011) Adopted by the Security Council at its 6518th meeting, on 20 April 2011*, S/RES/1977(2011), 20 April 2011.

27. In addition, the States Parties should recall their Solemn Declaration setting out their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability and to agree that an Accountability Framework would greatly enhance confidence in compliance with the Convention by all the States Parties. Details relating to this Accountability Framework would be set out in the *Decisions and Recommendations* section.

Article VI: Lodging of Complaints with and their Investigation by the Security Council

28. The Review Conference should adopt similar language to that agreed at the Sixth Review Conference but with the addition that the Implementation Support Unit should be named as being associated with UNODA in its ongoing activities to reinvigorate the Secretary-General's mechanism to investigate alleged use of biological weapons. In addition, the Implementation Support Unit should also be listed as a participating entity in the United Nations Counterterrorism Implementation Task Force (UNCITF) *Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks* in its consideration of how best to develop interagency mechanisms in the context of chemical and biological weapons and materials.

Article VII: Assistance to States Parties

29. Following on from the consideration of the topic at the Meeting of States Parties in 2010, there would be advantage in the States Parties at the Seventh Review Conference recognizing the need for appropriate detailed procedures for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons and agreeing that the annual Meeting of States Parties shall prepare and adopt such procedures. In addition, the Review Conference could with benefit recognize the value of a comprehensive range of information on sources of assistance and request that the Implementation Support Unit compile a document providing such information also including information as to how such assistance might be requested by States Parties. The detailed addition to the mandate of the ISU would need to be made in the *Decisions and Recommendations* section.

Article VIII: Geneva Protocol Obligations

30. The Review Conference should appeal to all States Parties to the 1925 Geneva Protocol to fulfil their obligations assumed under that Protocol and should urge all states not yet party to the Protocol to adhere to it without delay. Furthermore, the Review Conference should stress the importance of the withdrawal of all reservations to the 1925 Geneva Protocol related to the Convention. In addition, the troika made up of the President of the Seventh Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee supported by the Implementation Support Unit that is proposed to promote the universalisation of the Convention and to take opportunities to address states not party at the highest level should be charged, in close cooperation with France as Depositary for the Geneva Protocol, with following up requests made by successive Review Conferences calling on all States Parties not yet party to the Protocol to adhere to it without delay and calling upon States Parties which continue to maintain pertinent reservations to the Protocol

to withdraw such reservations. This would also be detailed in the *Decisions and Recommendations* section.

Article IX: Prohibition of Chemical Weapons

31. The Review Conference should welcome the fact that the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction entered into force on 29 April 1997 and that 188 instruments of ratification or accession have now been deposited with the United Nations. It should also call upon all states that have not yet done so to ratify or accede to that Convention without delay. In addition, the Review Conference should recognize that there are benefits to **both** those engaged in the BTWC **and** those engaged in the CWC being aware of each other's activities as there will frequently be common ground that can benefit the efforts in regard to both Conventions.

Article X: International Cooperation and Assistance

32. The Review Conference should adopt similar language to that at the Sixth Review Conference. It should recognise the importance of ensuring that there is effective coordination among relevant activities to minimise duplication and ensure a more comprehensive approach to building capacity, including through: improved coordination and information sharing among assistance providers both internationally and among national departments; enhanced communication among States Parties and with international efforts to tackle infectious disease, such as those undertaken by the FAO, IPPC, OIE and WHO, within their respective mandates; taking advantage of all appropriate routes for assistance – bilateral, regional, international and multilateral, including the Convention – to forge North-South, South-South and North-North partnerships; and improving cooperation, communication and networking among national institutions, departments, agencies and other stakeholders. In addition, the Review Conference should agree to set up a clearing-house mechanism with the requisite staff resources within the Implementation Support Unit to promote international cooperation and assistance.

Article XI: Amendments to the Convention

33. The Review Conference should, as at the Sixth Review Conference, reaffirm that the provisions of this Article should in principle be implemented in such a way as not to affect the universality of the Convention.

Article XII: Review Conferences

34. The Conference should ensure that the review process is continued, with Review Conferences every five years; but, in addition, it should also enable the States Parties to make fuller use of the years between the Review Conferences, in particular through the annual Meeting of States Parties and standing working groups, to build up and strengthen the BTWC regime. The Review Conference should decide that to further assure that the purposes of the Preamble and the provisions of the Convention are being realized, a Meeting of States Parties of one week's duration shall be held each year which shall make appropriate decisions by consensus and be prepared for by a Meeting of Experts or by meetings of standing working groups occupying two weeks in all. In addition, it should decide to maintain the momentum demonstrated prior to the Seventh Review Conference by agreeing that a troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and

the Chairman of the Drafting Committee acting on behalf of the States Parties and supported by the Implementation Support Unit should promote the strengthening of the overall BTWC regime including *inter alia* the universalization of the Convention and should report to the annual Meetings of States Parties and to the Eighth Review Conference. It should also agree that the Eighth Review Conference shall be held in Geneva not later than 2016. This would also be detailed in the *Decisions and Recommendations* section.

Article XIII: Duration and Withdrawal

35. The Review Conference should agree three extended understandings to discourage withdrawal. The first should be that, in the event of any State Party giving notice of its intention to withdraw from the Convention, a Special Conference shall be convened without delay in order to enable the States Parties to consider this and to address collectively the implications of such a withdrawal. The second should be that the United Nations Security Council shall be invited to use the powers at its disposal to ensure that the facts regarding the compliance of such a State with its obligations under the Convention while still party to it are established irrespective of its subsequent withdrawal from the Convention. And the third should be that the Review Conference noting the provisions of Article VIII of this Convention, declares that the withdrawal of a State Party from the Convention shall not in any way affect the duty of States to continue fulfilling the obligations assumed under any relevant rules of international law, particularly the Geneva Protocol of 1925.

Article XIV: Universal Adherence to the Convention

36. The Seventh Review Conference should use more concrete language for Article XIV than at the Sixth Review Conference. The Conference should consequently reaffirm its commitment to ensuring the universalization of the Convention and agree an interim target of achieving 190 States Parties by the Eighth Review Conference. Furthermore, the Conference should appoint the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee to serve as a troika, in close cooperation with the Russian Federation, United Kingdom and United States as the Depositaries, to lead and oversee the efforts of States Parties and of the Implementation Support Unit to achieve this target and also to take steps on behalf of the States Parties to promote the universalisation of the Convention and to take opportunities to address states not party at the highest level. This would also be detailed in the *Decisions and Recommendations* section. In addition, the Conference should request that the Implementation Support Unit liaise closely with the Organisation for the Prohibition of Chemical Weapons to achieve the ratification or accession to the Biological and Toxin Weapons Convention of all States that are already party to the Chemical Weapons Convention.

Article XV: Languages and Deposits of the Convention

37. The Seventh Review Conference should note the importance of this Article.

Conclusions

38. The points identified in this chapter first as decisions for the *Decisions and Recommendations* section and then as extended understandings for the Article by Article *Final Declaration* set out a set of entirely achievable and realistic ambitions. The President-designate and the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee together with the States Parties are urged to demonstrate their commitment to the Biological and Toxin Weapons Convention by achieving each and every one of the ambitions set out here thus demonstrating to all those engaged in the life sciences and to the public around the world their determination to make the world a safer place for all of us.

ARTICLE I – SCOPE

by Kathryn Nixdorff & Malcolm R. Dando

Consideration of Article I at the Sixth Review Conference

1. Article I of the Biological and Toxin Weapons Convention (BTWC) 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 States Parties have agreed extended understandings of these prohibitions in the Final Declarations of previous Review Conferences.

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*⁸ in respect of Article I stated that:

1. The Conference reaffirms the importance of Article I, as it defines the scope of the Convention. The Conference declares that the Convention is comprehensive in its scope and that all naturally or artificially created or altered microbial and other biological agents and toxins, as well as their components, regardless of their origin and method of production and whether they affect humans, animals or plants, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes, are unequivocally covered by Article I.

2. The Conference reaffirms that Article I applies to all scientific and technological developments in the life sciences and in other fields of science relevant to the Convention.

3. The Conference reaffirms that the use by the States Parties, in any way and under any circumstances, of microbial or other biological agents or toxins, that is not consistent with prophylactic, protective or other peaceful purposes, is effectively a violation of Article I. The Conference reaffirms the undertaking in Article I never in any circumstances to develop, produce, stockpile or otherwise acquire or retain weapons, equipment, or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict in order to exclude completely and forever the possibility of their use. The Conference affirms the determination of States Parties to condemn any use of biological agents or toxins for other than peaceful purposes, by anyone at any time.

⁸ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

4. The Conference notes that experimentation involving open-air release of pathogens or toxins harmful to humans, animals and plants that have no justification for prophylactic, protective or other peaceful purposes is inconsistent with the undertakings contained in Article I.

3. These four paragraphs had been developed from the nine paragraphs agreed on Article I in the *Final Declaration*⁹ of the Fourth Review Conference of the BTWC held from 25 November to 6 December 1996. Paragraph 1 in 2006 essentially covered paragraphs 1, 2 and 5 from 1996 using improved language that sets out clearly the comprehensiveness of the coverage of Article I, paragraph 2 using more comprehensive language in 2006 replaced paragraph 6 from 1996, paragraph 3 covered paragraphs 3 and 4 from 1996 and included the useful extended understanding that the Conference affirmed *the determination of States Parties to condemn any use of biological agents or toxins for other than peaceful purposes, by anyone at any time* and paragraph 4 reproduced paragraph 7 from 1996. Paragraph 8 in 1996 about the responsibilities of the scientific communities is now addressed in the language for the Article IV section of the *Final Declaration* and the substance is addressed in the chapter of these *Key Points on Article IV: Education, Outreach and Codes of Conduct*. The elements in paragraph 9 in 1996 about non-compliance were probably not addressed in 2006 for political reasons as the Sixth Review Conference was setting its sights low so as not to jeopardize the gradual recovery from the Fifth Review Conference. The substance of paragraph 9 is addressed in this chapter. The nine paragraphs in the Article I declaration in 1996 stated that:

1. The Conference notes the importance of Article I as the provision which defines the scope of the Convention. The Conference reaffirms its support for the provisions of this Article.

2. The Conference reaffirms that the Convention prohibits the development, production, stockpiling, other acquisition or retention of microbial or other biological agents or toxins harmful to plants and animals, as well as humans, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes.

3. The Conference reaffirms that the use by the States Parties, in any way and under any circumstances, of microbial or other biological agents or toxins, that is not consistent with prophylactic, protective or other peaceful purposes, is effectively a violation of Article I of the convention.

4. The Conference reaffirms the undertaking in Article I never in any circumstances to develop, produce, stockpile or otherwise acquire or retain weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict, in order to exclude completely and forever the possibility of their use.

5. The Conference also reaffirms that the Convention unequivocally covers all microbial or other biological agents or toxins, naturally or artificially created or

⁹ United Nations, The Fourth 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, *Final Document*, BWC/CONF.IV/9, Geneva, 25 November - 6 December 1996. Available at <http://www.opbw.org>

altered, as well as their components, whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes.

6. The Conference, conscious of apprehensions arising from relevant scientific and technological developments, inter alia, in the fields of microbiology, biotechnology, molecular biology, genetic engineering, and any applications resulting from genome studies, and the possibilities of their use for purposes inconsistent with the objectives and the provisions of the Convention, reaffirms that the undertaking given by the States Parties in Article I applies to all such developments.

7. The Conference notes that experimentation involving open-air release of pathogens or toxins harmful to man, animals or plants that have no justification for prophylactic, protective or other peaceful purposes is inconsistent with the undertakings contained in Article I.

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.

9. The Conference emphasizes, once more, the vital importance of full implementation by all States Parties of all the provisions of the Convention, especially Articles I, II and III. The Conference agrees that the application by States Parties of positive approaches in accordance with the provisions of the Convention is in the interest of all States Parties and that any non-compliance with its provisions could undermine confidence in the Convention. Non-compliance should be treated with determination in all cases, without selectivity or discrimination.

4. The 1996 *Final Declaration* therefore had two paragraphs (1 and 2) on the importance and full scope of the prohibition, two paragraphs on use (3 and 4), two paragraphs on scientific and technological developments (5 and 6), one paragraph on experimentation involving open-air release of pathogens (7), one paragraph appealing through States Parties to their scientific communities to support the Convention (8) and a final paragraph on non-compliance (9).

5. The fifth paragraph, together with the first and second paragraphs, in 1996 clearly demonstrated the comprehensive nature of the prohibition in its reaffirmation that the Convention unequivocally covers all natural or artificially created or altered microbial or other biological agents or toxins, as well as their components, whatever their origin or method of production. These points were again reaffirmed in 2006.

6. The successive Review Conferences in addressing Article I have considered three issues: the impact of scientific and technological changes; the possibility of non-compliance; and other issues (e.g. use in 1996) topical at the time of particular Review Conferences.

Developments since the Sixth Review Conference

7. In this section, consideration is given first to the scientific and technological advances since the Sixth Review Conference. The areas addressed in the background scientific and

technological paper for the Sixth Review Conference are first listed and then developments in the areas of synthetic biology, systems biology, delivery technology, nanotechnology and neuroscience are considered in turn. Attention is then given to risks to animals and plants. An overall appreciation is then given before going on to consider non-compliance and then bioterrorism. Finally, some recent events in relation to science and technology are summarised.

Scientific and Technological Advances

8. Successive Review Conferences have given attention to relevant scientific and technological developments as part of the consideration of Article I. Thus paragraphs 5 and 6 of the nine paragraphs of the *Final Declaration*¹⁰ of the Fourth Review Conference were concerned with the extended understandings of these scientific and technological changes. One paragraph reaffirmed the scope of the prohibitions and the other addressed apprehensions¹¹. The *Final Declaration* stated that:

5. The Conference also reaffirms that the Convention covers all microbial or other biological agents or toxins, naturally or artificially created or altered, as well as their components, whatever their origin or method of production, of types and in quantities that have no justification for prophylactic protective or other peaceful purposes.

6. The Conference, conscious of apprehensions arising from relevant scientific and technological developments, inter alia in the fields of microbiology, biotechnology, molecular biology, genetic engineering and any application resulting from genome studies, and the possibilities of their use for purposes inconsistent with the objectives and the provisions of the Convention, reaffirms that the undertakings given by the States Parties in Article I applies to all such developments.

The reference to genome studies was new. The 1996 Fourth Review Conference had therefore extended the shared understandings from those of the 1991 Third Review Conference to include "any application resulting from genome studies" well in advance of the completion of the Human Genome Project at the turn of the 20th century.¹²

9. In the Article I section of their *Final Declaration*¹³ the States Parties to the 2006 Sixth Review Conference did not incorporate a detailed list of the various scientific developments considered relevant to the Convention, but instead adopted an all-encompassing formulation of the application of the Convention to new developments:

2. The Conference reaffirms that Article I applies to all scientific and technological

¹⁰ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva, 1996. Available at <http://www.opbw.org>.

¹¹ Graham S. Pearson, *New Scientific and Technological Developments of Relevance to the Fifth Review Conference*. Review Conference Paper No. 3, Department of Peace Studies, University of Bradford, July 2001. Available at <http://www.brad.ac.uk/acad/sbtwc>.

¹² Macintyre, B., *Opening the book of life*. The Times, London, p 1, 27 June 2000.

¹³ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

developments in the life sciences and in other fields of science relevant to the Convention.

Background Paper on Science and Technology for the Sixth Review Conference

10. Unlike at previous Review Conferences when the background document on new scientific and technological developments relevant to the Convention had been prepared by reproducing the individual inputs provided by the States Parties, the background document INF.4¹⁴ for the Sixth Review Conference was compiled by the Secretariat drawing upon the information provided by the individual States Parties (which were made available only on the unog.ch/bwc website and not in the document) as well as from information taken from a variety of documents made available by intergovernmental, international and professional scientific organizations. This was a clear departure from previous practice, requiring a more time-consuming effort in order to access information as to what developments the individual States Parties felt were relevant. In order to enable the views of the individual States Parties on scientific and technological developments to be readily available, the inclusion of individual contributions from the States Parties directly in the background document for the Seventh Review Conference is recommended.

11. The background document INF.4 summarised developments since the Fifth Review Conference under eight headings:

Biotechnology;
Genomics;
Proteomics;
Bioinformatics and Computational Biology;
Systems Biology;
Drug Discovery, Design and Delivery;
Synthetic Biology and Biological Engineering; and
Other Relevant Developments.

Certain characteristics of the developments in the background document stood out because they were mentioned repeatedly. Thus early on, in paragraphs 6, the worldwide spread of biotechnology is clearly pointed out:

*6. Biotechnology has yielded public health, agricultural and economic benefits as well as feeding back into the life sciences to improve development. Numerous commercial applications have been found and the last few years have seen dramatic increases in reliance on this technology. **The benefits derived from biotechnology can be found increasingly in developing countries...** [Emphasis added]*

12. In this chapter, we consider the scientific and technological advances in some of the areas identified in 2006 as well as others that we consider of particular relevance to the Seventh Review Conference.

¹⁴ United Nations, Sixth 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, 28 September, 2006, *Background Information Document on New Scientific and Technological Developments Relevant to the Convention*, BWC/CONF. VI/INF4, Available at <http://www.opbw.org>.

Synthetic biology

13. In addition to the geographical spread of relevant science and technology, the background document INF.4 makes clear that the scope of the advances is widening. Thus paragraph 60 noted that *Synthetic biology has developed as a concept since the Fifth Review Conference. There have been notable successes in using it to design biological systems.* Just how far this capability has advanced since 2006 is evident from the announcement¹⁵ in 2010 that the J. Craig Venter Institute had created the first self-replicating bacterial cell comprised exclusively of synthetic DNA. What they actually did was to synthesize and assemble a modified version of an intact bacterial genome of one species (*Mycoplasma mycoides*) and transfer this to a living bacterium of a different species (*Mycoplasma capricolum*). Of particular significance was that this synthetic genome was able to direct the bacterium to produce cells of the transferred genomic species (*M. mycoides*). While this accomplishment represents essentially a *resynthesis of a naturally occurring genome*¹⁶ and thus falls short of actually creating synthetic “life”, it is nonetheless a milestone in the ability to genetically modify organisms on a scale never previously achieved, and, *because this work clearly lies on a trajectory leading to more substantial risk in the future and because the subject is rife with potentially misleading terms and ethically charged concepts, communication of risks and benefits and careful education of the public are critical.*¹⁷

14. Synthetic biology is thus advancing beyond sophisticated engineering of microorganisms to perform new tasks by outfitting them with DNA-based biological circuits built from standardized biological parts. Sub-fields of synthetic biology are now reaching into the realm of creating engineered biological systems that do not exist in nature (xenobiotic forms) as well as artificial life from chemical components¹⁸. Although there has been a substantial amount of thought put into minimizing the risks involved in synthetic biology, the governance proposals made to date are not in any way keeping pace with the developments¹⁹.

Systems biology

15. The relatively new area of *systems biology* looks at interacting physiological systems and seeks to understand how these systems operate as a whole, by integrating all levels of functional information into a cohesive model. Information technology is clearly crucial for such an endeavour and while the approach is said to be *still in its infancy* paragraph 39 of the background paper INF.4 goes on to note that *There has, however, been significant progress in examining the interactions of complex mechanisms in bioregulation, especially in neurobiology and immunology.* There can be little doubt that the convergence of such new approaches and technologies is changing the nature of the life sciences and that this process will continue. Of particular interest is the fact that an international collaboration consortium

¹⁵ Gibson, D.G. et al., *Creation of a bacterial cell controlled by a chemically synthesized genome.* Science, **329**, 52-56, 2010.

¹⁶ Cho, M.K. and D.A. Relman, *Synthetic “life,” ethics, national security, and public discourse,* Science **329**, 38-39, 2010.

¹⁷ Cho, M.K. and D.A. Relman, *Synthetic “life,” ethics, national security, and public discourse,* Science **329**, 38-39, 2010.

¹⁸ Schmidt, M., *Do I understand what I can create?* in *Synthetic biology. The technoscience and its societal consequences*, ed. M. Schmidt, A. Kelle, A. Ganguli-Mitra and H. de Vriend, 81-100, 2009. Dordrecht et al.: Springer.

¹⁹ Kelle, A, *Security issues related to synthetic biology. Between threat perceptions and governance options.* in *Synthetic biology. The technoscience and its societal consequences*, ed. M. Schmidt, A. Kelle, A. Ganguli-Mitra and H. de Vriend, 101-119, 2009 Dordrecht et al.: Springer, 2009.

called FANTOM (Functional Annotation of Mouse) involving more than 100 laboratories is looking into regulatory networks of transcription factors (these are the molecules that drive gene transcription i.e. gene expression), which is called transcriptome profiling.²⁰ It is safe to conclude that this work could open up new ways to manipulate gene expression, such as by facilitating gene silencing (“switching off” of genes) techniques using RNA interference (RNAi) molecules²¹ that can block transcription and thus prevent synthesis of the gene product.

Delivery technology

16. Both a report of the US National Academies in 2006²² and the BWTC background paper INF.4²³ on developments in science and technology noted the importance of advances in delivery technology for making use of all kinds of biological materials for either therapeutic or malevolent purposes much more feasible. The National Academies report stated that:

The ability to manipulate “biological systems” in a defined, deliberate manner—for either beneficial or malevolent purposes—depends on the ability to produce and deliver such interventions. Technologies that allow for such production and delivery are evolving very quickly, driven by the goals and needs of the pharmaceutical, agricultural, and healthcare sectors. Some of these technologies, which clearly have immense potential future impact on biology, have not been traditionally viewed as biotechnologies or as having relevance to future biological threats. A prime example is the potential now offered by developments in nanoparticle science for the creation of novel and highly efficient delivery systems for previously difficult-to-deliver biologically-active compounds.

Two kinds of delivery were singled out as being particularly relevant: *aerosol delivery* and *viral vector technology*. Since 2006, advances in both of these areas have been significant.

17. Many recent improvements in ***aerosol delivery*** technology including the production of defined nanoparticles; new methods for improving absorption of agents through the nasal passages, respiratory tract and across the blood-brain barrier; and protection of vectors against detrimental environmental conditions through new microencapsulation techniques^{24,25,26} create a potential for greatly improved aerosol delivery of bioactive agents of all kinds.

18. ***Viral vector technologies*** for use in vaccine, cancer, drug, and immune system therapies

²⁰ Ledford, H., *FANTOM sees networks in cells*. Nature, **458**, 95, 2009.

²¹ Lederman, L., *siRNA and microRNA*. BioTechniques, **46**, 257-259, 2009.

²² National Research Council, *Globalization, Biosecurity, and the Future of the Life Sciences*. 2006. National Academies Press, Washington, D.C. Available at <http://www.nap.edu>.

²³ United Nations, Sixth 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, 28 September, 2006, *Background Information Document on New Scientific and Technological Developments Relevant to the Convention*, BWC/CONF. VI/INF4, Available at <http://www.opbw.org>

²⁴ Suri, S.S., Fenniri, H. and Singh, B., *Nano-technology-based drug delivery systems*. Journal of Occupational Medicine and Technology, **2**, 16-21, 2007.

²⁵ Mahajan, H.S. and Gattani, S.G., *Gellan gum based microparticles of metoclopramide hydrochloride for intranasal delivery: development and evaluation*. Chemical and Pharmaceutical Bulletin, **57**, 388-392, 2009.

²⁶ Van der Walle, C.F., G. Sharma, and M. Ravi Kumar, *Current approaches to stabilising and analysing proteins during microencapsulation in PLGA*. Expert Opinion on Drug Delivery, **6**, 177-186, 2009.

are continuing to be developed. Viruses that are being used for this purpose include vaccinia virus, adenoviruses, adeno-associated viruses and lentiviruses. In the science and technology background information document INF.4 for the Sixth Review Conference, it was concluded that *the few human clinical trials [with viral vectors] which have taken place have been, however, less successful than hoped. There are still significant issues to be overcome for delivery systems and gene expression rate.* Recent work shows that improvements in specific targeting, gene transfer and gene expression efficacy of viral vectors have indeed been attained over the past five years, and that significant therapeutic benefit has been achieved in several cases.²⁷⁻²⁸⁻²⁹ The implications here for the States Parties at the Seventh Review Conference are two-fold. The ever-increasing therapeutic successes with viral vectors that are being documented make their use for both good and malign purposes much more feasible than five years ago. In the case of misuse, they raise the possibility of achieving efficient viral infection plus some additional, unexpected effect delivered by the gene-directed payload, a double action that would be much more difficult to diagnose and counter.

19. For research and clinical studies, viral vectors have largely been administered by injection, in some cases using repeated application, which would not be practical for use as a weapon. However, some studies have indicated that administering a viral vector through inhalation is feasible.³⁰⁻³¹⁻³² While these inhalation studies do not exactly mimic the release of agents in a biological weapons deployment manner, they at least offer proof of principle for the effectiveness of viral and non-viral vectors in aerosol application.

20. When advances in aerosol delivery technology are combined with improvements in targeting and gene transfer efficacy of viral vectors, the potential synergy effects make their possible dissemination for malevolent purposes much more feasible than in the past.

Nanotechnology

21. Developments in nanotechnology are not only relevant for the BTWC in the context of improved delivery systems for biological agents but also in the production of non-biological substances that bind to specific targets (aptamers) and exert effects on biological systems. This demonstrates the convergence of biology and chemistry. An example is the synthesis of non-biological nanoparticles made from acrylic chemicals that nevertheless have *antibody-like affinity and selectivity (i.e. plastic antibodies)*³³, which have been shown to function as such in the bloodstream of living animals. Whilst there is little doubt that such non-biological nanoparticles acting as plastic antibodies are embraced by the language in the first paragraph of the Article I section of the *Final Declaration* in 2006 that states:

²⁷ Liu, T.C., Galanis, E. and Kirn, D., *Clinical trial results with oncolytic virotherapy: A century of promise, a decade of progress.* Nature Clinical Practice Oncology, **4**(2), 101–117, 2007.

²⁸ Griesenbach, U. and Alton, E.W.F.W., *Gene transfer to the lung: lessons learned from more than 2 decades of CF gene therapy.* Advanced Drug Delivery Reviews, **61**, 128-139, 2009.

²⁹ Schambach, A. and Baum, C., *Clinical application of lentiviral vectors – concepts and practice.* Current Gene Therapy, **8**: 474-482, 2008.

³⁰ Medina, M.F. *et al.*, *Lentiviral vectors pseudotyped with minimal filovirus envelopes increased gene transfer in murine lung.* Molecular Therapy, **8**(5), 2003. 777–789.

³¹ Laube, B, *The expanding role of aerosols in systemic drug delivery.* Respiratory Care, **50**, 1161-1176, 2005.

³² Hwang, S.K. *et al.*, *Lentivirus-mediated carboxyterminal modulator protein gene transfection via aerosol in lungs of K-ras Null mice.* Gene Therapy, **14**, 1721–1730, 2007.

³³ Hoshino, Y., H. Koide, T. Urakami, H. Kanazawa, T. Kodama, N. Oku, and K.J. Shea, *Recognition, neutralization, and clearance of target peptides in the bloodstream of living mice by molecularly imprinted polymer nanoparticles: a plastic antibody.* Journal of the American Chemical Society **132**: 6644-6645, 2010.

the Convention is comprehensive in its scope and that all naturally or artificially created or altered microbial and other biological agents and toxins, as well as their components, regardless of their origin and method of production and whether they affect humans, animals or plants,

it would be clearly beneficial for there to be closer scrutiny and assessment by the States Parties of the relevance of such developments for the BTWC.

Neuroscience

22. A particular problem arising during the rapidly advancing scientific and technological revolution in the life sciences is that there can be a convergence of different approaches³⁴ so making it very difficult to predict how and where radical new developments may take place in fields relevant to the Convention. An example of such convergence is in the field of neuroscience. Here advances in genomics recently led to a huge increase in the understanding of the neuroreceptors and neurotransmitters in the brain³⁵. At the same time advances in brain imaging allowed a much greater insight into how different circuits in the brain functioned to produce different behaviours and where different receptors are located in these circuits, whilst the use of genetically engineered mice and chemical modification of agents opened up possibilities of specific alterations of receptor function within designated circuits and thus directed alteration of behaviour³⁶. This profound development in the understanding of the brain and behaviour and its potential societal consequences³⁷ could hardly have been predicted just a decade or two ago.

Risks to Animals and Plants

23. It is important to stress, in considering the implications of advances in science and technology, that such advances can impact the whole of the life sciences – animal and plant as well as human – and that they can bring enormous benefit as well as potential dangers. The risks to animals and plants were addressed³⁸ in the *Key Points for the Sixth Review Conference* and the situation is even more relevant today for the Seventh Review Conference.

24. An outstanding example of such benign developments was announced by the Food and Agriculture Organization (FAO) in June 2011 when it confirmed officially that the deadly cattle disease Rinderpest had been eradicated³⁹. Rinderpest, a Morbillivirus related to measles, thus joined smallpox as only the second scourge of mankind eliminated by a global campaign. The disease was well documented as the cause of devastating destruction of cattle herds and consequent social and economic disasters, and unsurprisingly was also considered as a biological weapons agent in the last century. Whilst the disease affected other species besides cattle it remained a single strain and thus the same vaccine could be used to protect all

³⁴ Whitman, J., *Governance challenges of technological systems convergence*. Bulletin of Science, Technology and Society, **26**, (5), 398-409, 2006.

³⁵ See <<http://www.iuphar-db.org/index.jsp>>.

³⁶ Dando, M.R., *Biotechnology Research International*, ID 973851, 2011.

³⁷ Royal Society, *Brain Waves Module 1: Neuroscience, society and policy*. Royal Society, London, 2010. Available at <http://royalsociety.org/brainwaves-society/>.

³⁸ Dando, M. R. and Whitby, S., *Article I – Scope*, in *Key Points for the Sixth Review Conference*, University of Bradford, September 2006. Available at <http://www.brad.ac.uk/acad/sbtwc/key6rev/contents.htm>

³⁹ FAO, Rinderpest eradicated – what next? Eradication of the deadly virus is a model for other diseases. 28 June, 2011. Available at <http://www.fao.org/news/story/en/item/80894/icode/>.

animals. Major advances such as the development of a heat stable vaccine and a simple diagnostic test facilitated the eradication, but eliminating the threat also required a longterm global campaign in poor and war torn countries, involving amongst other institutions, the Food and Agriculture Organization (FAO) and the World Organization of Animal Health (OIE) as well as considerable funding, for example from the European Union. This international cooperative effort is set to continue in a post-eradication strategy designed both to deal with any potential new outbreak and to ensure the safety and security of remaining stocks of the virus in laboratory collections.

25. In a side event seminar hosted by the OIE during the 2010 Meeting of States Parties in Geneva, concerns about a number of other serious infectious diseases of animals were expressed, particularly in regard to their relevance as potential biological agents. A prime example is the African Swine Fever Virus (AFSV), a DNA virus of the *Asfarviridae* family that is the causative agent of a highly contagious hemorrhagic disease of wild and domestic pigs, with mortality rates approaching 100 per cent and for which no vaccine is available. Once it is introduced into a country, it is extremely difficult to eradicate not only because of the lack of a vaccine, but also because of the presence of wildlife reservoirs (animal and tick hosts) and inadequate methods for laboratory diagnosis. There is much interest in characterizing various isolates of the virus genetically, in particular for vaccine development and diagnostic purposes, understanding its pathogenic properties and tracking the spread of infection⁴⁰.

26. Agriculture has been said to be one of the easiest sectors of the economy to disrupt through attacks on the food chain, and this has been termed a *key security challenge for the 21st century*.⁴¹ Plants are at the base of the food chain and thus represent a prime target. Because of the devastation that plant diseases could and do cause, there has been a great deal of effort put into deciphering the virulence mechanisms of plant pathogens. Enormous progress has been made recently in understanding the mechanisms of plant-pathogen interactions at the molecular level. Elucidation of plant pathogen virulence effectors and plant immunity mechanisms have over the past few years provided crucial input for improving disease control measures to protect agricultural production.⁴²

27. Investigators have only recently begun to understand and appreciate the role that receptor-pathogen recognition plays in inducing plant resistance to infection and the ways in which plant pathogens can evade immunity to cause disease. Plants possess an innate immune system which operates on mechanisms reminiscent of those of the innate immune system of mammals. Plants can perceive certain patterns of molecular components of pathogens, called pathogen-associated molecular patterns (PAMPs), through receptors on the plant cell surface, called pattern recognition receptors (PRRs), and respond by eliciting multifaceted downstream immune responses. Evasion tactics of plant pathogens are based primarily on the production of virulence effectors that can suppress PAMP-triggered innate immunity⁴³, or on

⁴⁰ Chapman, Darby, A.C., Upton, C., Radford, A.D. and Dixon, L.K., *Genomic analysis of highly virulent Georgia 2007/1 isolate of African swine fever virus*. *Emerging Infectious Diseases*, **17** (4), 599-605.

⁴¹ Cupp, O.S., Walker, D.E. II. and Hillison, J., *Agroterrorism in the U.S.: key security challenge for the 21st century*. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice and Science*, **2** (2), 97-105, 2004.

⁴² Boller, T. and He, S.Y., *Innate immunity in plants: an arms race between pattern recognition receptors in plants and effectors in microbial pathogens*, *Science*, **324** (5928), 742-744, 2009.

⁴³ Boller, T. and He, S.Y., *Innate immunity in plants: an arms race between pattern recognition receptors in plants and effectors in microbial pathogens*, *Science*, **324** (5928), 742-744, 2009.

suppression of RNA silencing strategies.⁴⁴ RNA silencing refers to the interference or silencing of the transcription of genes by small RNA molecules. In plants, RNA silencing strategies include, among other things, the interference of the production of DNA viruses in plant cells. Thus, RNA silencing can serve as a defence mechanism in plants, and as a counter defence, viruses and bacteria have evolved suppressors of RNA silencing.⁴⁵ It is interesting to note that plant pathogen virulence effector proteins are being studied at the systems biology level with respect to their action in the plant immune system.⁴⁶ Although the elucidation of these molecular mechanisms has contributed greatly to the development of more effective plant disease control measures, the same information may be used to manipulate plant-pathogen interactions in destructive ways.

28. The success of the Rinderpest eradication demonstrates that ensuring food-chain security takes the concerted, coordinated efforts of international agencies dedicated to that task. In this regard, coordinated action of OIE, FAO and the World Health Organization (WHO) to help countries meet their obligations under the BTWC through their respective overarching programmes for the safeguarding of animal, plant and human health is vital.

Overall appreciation

29. It is recalled that the Netherlands in its contribution⁴⁷ to the background document on scientific and technological developments relevant to the Biological Weapons Convention for the Sixth Review Conference (1) made the point that:

2. Generally speaking, two criteria have to be met in order to produce an effective biological weapon:

(i) a pathogenic (disease-causing) micro-organism or toxin has to be available in sufficiently large quantities to infect or poison a number of people;

(ii) an effective method of delivering pathogens or toxins which ensures that they penetrate the host while remaining active.

Both these criteria must be met for the biological weapon to work.

30. It then continued with the following assessment of the impact of recent advances:

3. Over the last ten years new techniques for designing, producing and delivering pathogens/toxins have been developed and existing techniques improved. Using these techniques, it is in principle possible to make an advanced, second-generation biological weapon against which current methods of detection and therapy offer no protection...

⁴⁴ Hohn, T. and Vasquez, F., *RNA silencing pathways of plants: Silencing and its suppression by plant DNA viruses*. Biochim. Biophys. Acta, doi:10.1016/j.bbagr.2011.06.002, 2011.

⁴⁵ Ibid.

⁴⁶ Mukhtar, M.S., Carvunis, A.-R., Dreze, M., et. al., Independently evolved virulence effectors converge onto hubs in a plant immune system network. *Science* 333, 596-601, 2011.

⁴⁷ The Netherlands, *Scientific and technological developments relevant to the Biological Weapons Convention*, Contribution to the background document on new developments in science and technology. Sixth Review Conference. Available at <http://www.opbw.org>.

The ongoing advances in science and technology relevant to the Convention since the Sixth Review Conference strongly reinforce this assessment of the impact on Article I.

31. It is evident that the impact of these advances in science and technology is so significant for all the Articles of the Convention that it is vital that the States Parties establish a mechanism whereby a standing working group on science and technology can each year examine the implications for the Convention of these advances in a specific area of science and technology. This is elaborated later in this chapter.

Non-Compliance

32. At previous Review Conferences concerns over non-compliance by States Parties have been expressed.⁴⁸ Such concerns were reflected in the ninth paragraph of the Article I section in the *Final Declaration*⁴⁹ of the Fourth Review Conference that stated:

9. The Conference emphasizes, once more, the vital importance of full implementation by all States Parties of all the provisions of the Convention, especially Articles I, II and III. The Conference agrees that the application by States Parties of positive approaches in accordance with the provisions of the Convention is in the interest of all States Parties and that any non-compliance with its provisions could undermine confidence in the Convention. Non-compliance should be treated with determination in all cases, without selectivity or discrimination.

33. The 2005 US report⁵⁰ on compliance to Congress in regard to the BTWC included country assessments for China, Cuba, Iran, Iraq, Libya, North Korea, Russia and Syria. It is, however, to be welcomed that the report includes for each country a section on “*Compliance-Related Dialogue and Analysis*” which gives some indication of whether the United States has engaged bilaterally with the State concerned regarding the US concerns.

34. In a statement⁵¹ to the Sixth Review Conference the US Assistant Secretary of State for International Security and Nonproliferation, John C. Rood, reported that “*since the last review conference the United States has engaged several states through diplomatic channels on issues of possible non-compliance with Article I and other BWC obligations,*” and went on to say that “*Noncompliance with the fundamental requirement not to develop biological weapons is of paramount concern*”. Three countries of specific concern for the US were named:

The activities of North Korea, Iran, and Syria are of particular concern given their support for terrorism and lack of compliance with their international obligations.

⁴⁸ Graham S. Pearson and Malcolm R. Dando (eds), *Strengthening the Biological Weapons Convention: Key Points for the Fourth Review Conference*, University of Bradford, Department of Peace Studies, November 1996. Available at <http://www.brad.ac.uk/acad/sbtwc>.

⁴⁹ United Nations, The Fourth 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, *Final Document*, BWC/CONF.IV/9, Geneva, 25 November - 6 December 1996. Available at <http://www.opbw.org>.

⁵⁰ United States, *Adherence to and Compliance with Arms Control, Nonproliferation and Disarmament Agreements and Commitments*. Department of State, Washington, D.C., August 2005. Available at: <http://www.state.gov/t/avc/rls/rpt/c15720.htm>

⁵¹ United States, *United States of America Address to the Sixth Biological Weapons Convention Review Conference*. Geneva, November 20, 2006. Available at <http://www.opbw.org>.

Each of these countries was identified in the most recent edition of the U.S. noncompliance report published in August 2005.

We believe that Iran probably has an offensive biological weapons program in violation of the BWC. Similarly, we also believe North Korea has a biological warfare capability and may have developed, produced and weaponized for use biological weapons, also in violation of its BWC obligations. Finally, we remain seriously concerned that Syria - a signatory but not a party to the BWC - has conducted research and development for an offensive BW program.

35. However, it should be noted that some commentators⁵² have expressed concern as to whether certain parts of the vast increase in US biodefence activities⁵³ during the past few years might be misperceived by other countries unless very careful measures are taken by the United States to ensure adequate transparency in their confidence-building measure (CBM) declarations. However, it needs to be recognised that focussing on the term *biodefence* can be misleading as many countries have programmes to counter outbreaks of disease – whether natural or deliberate. And it is such programmes to counter outbreaks of disease – whether natural or deliberate – that should be declared under the CBMs which should not be regarded as being limited to programmes within a ministry of defence. The posting of CBM declarations on the web by the United States and other States Parties is to be particularly welcomed in this context.

36. In the latest 2011 US report⁵⁴ to Congress on *Adherence to and Compliance with Arms Control, Non proliferation, and Disarmament Agreements and Commitments* the eight countries mentioned in the 2005 report and three others – Egypt, India, and Pakistan – are considered. With respect to the three countries of particular concern to the United States at the last Review Conference the report states that in regard to North Korea:

North Korea may still consider the use of biological weapons as an option, contrary to the BWC. North Korea continues to develop its biological research and development capabilities, but has yet to declare any relevant developments as part of the BWC confidence-building measures.

In regard to Iran:

Available information indicated Iran continued during the reporting period to engage in activities with potential dual-use BW applications. It remained unclear whether any of these activities were prohibited by the BWC.

And in regard to Syria:

It remained unclear during the reporting period whether Syria, a signatory to the BWC, is engaged in activities prohibited by the BWC and whether it would consider

⁵² Petro, J. B. and Carus, W. S., *Biological threat characterization research: A critical component of national biodefense*. *Biosecurity and Bioterrorism*, 3 (4), 295-308, 2005. See also correspondence between Tucker, J. and the authors in *Biosecurity and Bioterrorism*, 4 (2), 195-199 and 200-203.

⁵³ See the CRS Report for Congress RL34160, *The National Bio- and Agro-Defence Facility: Issues for Congress*. updated 25 November 2008.

⁵⁴ United States, *Adherence to and Compliance with Arms Control, Nonproliferation and Disarmament Agreements and Commitments*, Department of State, Washington, D.C., August, 2011. Available at: <http://www.state.gov/t/avc/rls/rpt/170447.htm>

the use of biological weapons as a military option.

37. Nevertheless, the fact that compliance or rather non-compliance remains an issue underlines the absence of adequate mechanisms under the BTWC to enable States Parties to demonstrate compliance with the provisions of Article I. At the very least, the Seventh Review Conference should reaffirm the extended understanding of Article I which the Fourth Review Conference recorded in paragraph 9 of the Article I section in its *Final Declaration*:

9. The Conference emphasizes, once more, the vital importance of full implementation by all States Parties of all the provisions of the Convention, especially Articles I, II and III. The Conference agrees that the application by States Parties of positive approaches in accordance with the provisions of the Convention is in the interest of all States Parties and that any non-compliance with its provisions could undermine confidence in the Convention. Non-compliance should be treated with determination in all cases, without selectivity or discrimination.

and carry forward the essential elements of this understanding into its own *Final Declaration*. It should, with advantage, resolve to strengthen the capacity of the BTWC to detect and deal with non-compliance.

Bioterrorism

38. Concerns about the possible use of biological agents by sub-state groups have continued and have led to a large literature concerning this potential threat⁵⁵, including the possible impact of advances in science and technology⁵⁶. Other concerns, on the other hand, have arisen because of the potential consequences of the large increases in expenditure and investment, for example in BL4 laboratories, in response to the perceived threat of bioterrorism.⁵⁷ Such concerns were reinforced by the FBI's determination that the perpetrator of the anthrax letter attacks in the United States was a biodefence specialist.⁵⁸ It needs to be recognised that bioterrorism attacks are more likely to be relatively small-scale incidents rather than large-scale attacks that can cause more extensive disruption and harm. Some have questioned whether the historical record of bioterrorist acts is such as to justify concerns about large-scale bioterrorism and thus the associated investments in dealing with such a threat.⁵⁹ In considering measures to counter large-scale attacks a focus on bioterrorism is far less appropriate than a focus on State-sponsored programmes.

⁵⁵ Katz, R. and Zilinskas, R.A.(eds.), *Encyclopedia of bioterrorism defense*, second edition, 2011. Hoboken, New Jersey: Wiley-Blackwell.

⁵⁶ Zilinskas, R.A., Dando, M. and Nixdorff, K., *Biotechnology and bioterrorism*, in *Encyclopedia of bioterrorism defense*, second edition, ed. R. Katz and R.A. Zilinskas, 91-104, 2011. Hoboken, New Jersey: Wiley-Blackwell.

⁵⁷ Atlas, R.M., *Biosecurity concerns: changing the face of academic research*. Chemical Health and Safety, **12**, 15-23, 2005.

⁵⁸ Perez, E., Gorman, S., Fields, G. and Williamson, E., *FBI paints chilling portrait of Anthrax-attack suspect*. The Wall Street Journal, August 7, 2008

⁵⁹ Leitenberg, M., *Assessing the biological weapons and bioterrorism threat*. Carlisle, PA: The Strategic Studies Institute of the US Army War College, 2005. Available at <http://www.strategicstudiesinstitute.army.mil/pdffiles/pub639.pdf>.

39. Regarding the scope of Article I in relation to bioterrorism, a statement⁶⁰ submitted by Germany to the Sixth Review Conference recalled the obligation to implement the prohibitions in Article I as stated in Article IV of the Convention. It was stated that since Article IV *does not specify the actor, the recipient or the beneficiary of any of the prohibited activities, national legislation must be constructed in such a way as to effectively cover all potential actors involved in such BW activities* [emphasis added]. Consequently, the prohibitions in Article I should be implemented by States Parties nationally under Article IV in such a way as to ensure that the Convention covers bioterrorist activities of **both** sub-state groups **and** biowarfare activities of States Parties.

Recent events

40. There has been recent recognition of the wider implications of advances in science and technology for the BTWC review process.

41. An international workshop⁶¹ entitled *Trends in Science and Technology Relevant to the Biological and Toxin Weapons Convention* was held 31 October – 3 November 2010 at the Institute of Biophysics of the Chinese Academy of Sciences in Beijing. It was planned by the US National Research Council (NRC) of the National Academies and was convened in collaboration with the Global Network of Science Academies (IAP), the International Union of Biochemistry and Molecular Biology (IUBMB), the International Union of Microbiological Societies (IUMS) and the Chinese Academy of Sciences. Some 80 scientists and policy makers from 28 countries and representatives of several international organizations took part in the workshop.

42. The areas in science and technology that were covered included bioinformatics and computational tools; systems biology; synthetic biology; bioreactors and transgenic animals; transgenic plants and recombinant pharmaceuticals; neuroscience; dispersion and delivery technology; bioforensics; and biosensor developments. The presentations by the scientists conveyed a feeling not only of the rapidity with which advances are occurring but also of the immensity and complexity of the knowledge that is accumulating. This underscored how enormous the task has become in assessing the risks involved, and in dealing adequately with these risks. The need for more frequent and extensive reviews of science and technology developments as well as a meticulous assessment of their relevance for the BTWC was recognised.

43. Other sessions at that workshop stressed the importance of considering how advances in science and technology might have positive applications not only for health and well-being but also in the prevention of or response to biological attacks. The summary report⁶² noted that *developments in science and technology also affect the other key articles of the convention that provide for the operation of the treaty such as the adequacy of national*

⁶⁰ Germany, *EU Paper on Assessment of National Implementation of the BTWC*. BTWC Sixth Review Conference 2006. EU Paper, Germany. Geneva, 19 September 2006, listed under Advance copies of other documents, EU WP 02 at <http://www.opbw.org>.

⁶¹ See a summary by the National Research Council. *Trends in Science and Technology Relevant to the Biological and Toxin Weapons Convention*. National Academies Press, Washington, D.C. Available at <http://.nap.edu>.

⁶² See a summary by the National Research Council. *Trends in Science and Technology Relevant to the Biological and Toxin Weapons Convention*. National Academies Press, Washington, D.C. Available at <http://.nap.edu>.

implementation of the Convention through national policies and regulatory systems, the capabilities to carry out investigations of alleged use of biological weapons, and the design of international cooperation to ensure that all States Parties (i.e., those who have signed and ratified the agreement [Convention]), have access to the benefits of peaceful applications of biology.

44. A workshop organized and hosted by Norway, Indonesia and the BTWC Implementation Support Unit was held in Montreux, Switzerland in April 2011 on the theme of *Developing Practical Proposals for the Seventh Review Conference of the Biological Weapons Convention*. One session (Session 4) was devoted to discussing developments in science and technology and their relevance for the BTWC⁶³. The contributions reflected on advances in science and technology particularly in relation to those presented at the Beijing workshop and discussed how future reviews might be carried out. It was reported that *There appeared to be agreement that a new process is needed that might consider a couple of topics each year and build on the two-way links between the BWC and the InterAcademies Panel (IAP), and that developments in science and technology had important implications for all the Articles of the Convention and should be considered by States Parties.*⁶⁴

45. A technical report⁶⁵ of the International Union of Pure and Applied Chemistry (IUPAC) in 2008 noted the impact that developments in science and technology have for the Chemical Weapons Convention (CWC) as well as the BTWC in regard to the convergence of chemistry and biology:

1. Science and technology continue to advance rapidly in areas that directly relate to the scientific foundations of the CWC. A key feature in this process is that chemistry and biology are converging, thus reinforcing the importance of the overlap between the prohibitions and requirements of the CWC and the Biological Weapons Convention (BWC).

2. Three aspects converge in this regard: the ability to synthesize and test large numbers of new chemical entities for biological activity; significant advances in the understanding of complex life processes in a post-genomic area; and the ability to model life processes and develop synthetic and virtual replicas of living organisms. All this is further amplified by an increasing integration of chemistry into biology, together with engineering and the information sciences.

⁶³ Pearson, G.S., *Special HSP Report from Montreux*, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/>

⁶⁴ Pearson, G.S., *Special HSP Report from Montreux*, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Ibid>.

⁶⁵ IUPAC, *Impact of scientific developments on the Chemical Weapons Convention* (IUPAC Technical Report), Pure and Applied Chemistry, **80**, (1), 175-200, 2008.

Issues for the Seventh Review Conference

More Frequent Reviews of Science and Technology

46. At the end of the introduction to its detailed review of scientific and technological advances relevant to the Convention for the Fifth Review Conference of 2001 the UK stated⁶⁶ that:

18. Throughout the various studies and consultations carried out by the UK to inform this review, it has been clear that the rate of change in science and technology fields relevant to the BTWC has been much greater than in the previous five year period, that is between the third and fourth Review Conferences. A number of advances in scientific knowledge and its applications could be of consequence for the provisions of the BTWC. Given the accelerating pace in science and technology, the UK wonders whether it is prudent to maintain a five year gap between such assessments under the BTWC. The UK suggests that the upcoming Review Conference consider establishing a mechanism for States Parties to work together on a more frequent basis to conduct such scientific and technical reviews and to consider any implications at the necessary level of expertise.

And the UK repeated this view in its contribution⁶⁷ to the background document on scientific and technological advances for the Sixth Review Conference when it noted that:

given the accelerating pace of developments in science and technology in general, the UK continues to hold the view, as expressed in its paper for the Fifth Review Conference, that the Review Conference should consider a process of more frequent, perhaps annual, assessments of scientific and technological developments relevant to the BTWC

47. No action has yet been taken to carry out more frequent reviews of scientific and technological advances, although the necessity for the development of a mechanism for more frequent reviews has become widely recognised⁶⁸. The present system is unsatisfactory not just because assessments of the scientific and technological developments relevant to the BTWC take place only at each Review Conference but also because there is no formal consideration of the papers submitted on the advances on science and technology at the Review Conference.

48. In other international conventions where advances in science and technology are important a wide variety of ways have been found to create a suitable mechanism to assess the relevant advances and their implications⁶⁹; the key point is that the mechanism should be suitable for the particular convention. Thus given the way in which the BTWC has developed,

⁶⁶ United Kingdom, *Background paper on new scientific and technological developments relevant to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their destruction*. BWC/CON.V/4/Add.1, December 2001.

⁶⁷ United Kingdom, *Scientific and technological developments relevant to the Biological Weapons Convention*, Contribution to the background document on new developments in science and technology, Sixth Review Conference, Geneva 2006. Available at <http://www.opbw.org>

⁶⁸ Bowman, K. Hughes, K. and Husbands, J.L., *Moving forward: Trends in science and technology and the future of the Biological Weapons Convention*. Bulletin of the Atomic Scientists, July 2011, p. 16-25.

⁶⁹ Rhodes, C. and Dando, M.R., *Options for a scientific advisory panel for the Biological and Toxin Weapons Convention*. pp. 95-114 in *A web of prevention. Biological weapons, life sciences and the governance of research*, ed. B. Rappert and C. McLeish, London: Earthscan, 2007.

the optimum way forward would be as a development of the intersessional process. There would be benefit from establishing a standing working group of scientific and technical experts who would consider the scientific and technological developments in a particular scientific/technical area relevant to the BTWC and consider its applications and implications for the whole of the Convention⁷⁰. The standing working group would then report to a subsequent annual Meeting of States Parties which could then decide if further work was needed on the specific topic, or, more probably, identify a further topic for the standing working group of scientific and technical experts to consider and then report on. Such an arrangement is very attractive as it builds in the flexibility needed to enable the Meeting of States Parties to ask the standing working group to address an area in which there have been some recent significant developments.

49. An example of the sort of topic that the annual Meeting of States Parties might choose to ask its standing working group of scientific and technical experts to consider would be *to assess the implications for all aspects of the Convention of recent and likely future developments in synthetic biology*. Its standing working group would then announce that it was going to hold a meeting on *synthetic biology* and it would invite representatives from scientific academies and associations as well as other experts who have demonstrated their competence in regard to the topic being considered by standing working group of scientific and technical experts to submit a request that they participate as an observer and be prepared to contribute to the discussion on *synthetic biology* so as to consider in regard to the Convention:

- A. Implications for potential benefits not only for health and well-being, but also for developing more effective countermeasures
- B. Implications for potential misuse
- C. Implications for preparing for outbreaks of disease whether natural, accidental or deliberate
- D. Implications for the implementation of the Convention – such as Article III, Article IV, Article V, Article VII and Article X.

50. The standing working group of scientific and technical experts would then be able to benefit from the exchange of information with synthetic biologists who have already both nationally and internationally, as well as in both academia and industry sought to design and implement systems that could prevent attempts at misuse. For example, in the field of synthetic biology approaches have been made to analyse how orders for strands of DNA should be checked against known pathogenic elements through the use of information technology and expert review. But clearly such approaches are far from universally agreed and implemented, and they are unable to deal with the capabilities that will arise as new desktop synthesizers increasingly allow those engaged in synthetic biology to construct their own material.

51. The standing working group of scientific and technical experts would also be required at the same meeting to carry out a specific consideration of the implication of advances in synthetic biology in regard to other articles of the Convention than Article I. Consideration should be given to what amendments to national legislation and regulation under Article IV might be required to minimise the dangers that could arise from these advances, and what

⁷⁰ Malcolm R. Dando and Graham S. Pearson, *The Provision of Scientific and Technological Advice to the Biological and Toxin Weapons Convention*. Review Conference Paper No 27, University of Bradford, February 2011. Available at: www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm

adjustments to export control systems under Article III might be necessary. In addition, consideration should be given to what steps might be taken to promote international cooperation and capacity-building for peaceful purposes. Such considerations and recommendations, from a scientific and technical viewpoint, as to what actions should be taken to address the implications of *synthetic biology* would then be incorporated into a report for consideration at the subsequent annual Meeting of States Parties.

52. In order not to delay the start of the standing working group of scientific and technical experts, it is recommended that the States Parties at the Seventh Review Conference should in the *Part III: Decisions and Recommendations* section of the *Final Document* include a decision that the first topic to be considered by the standing working group of scientific and technical experts should be *synthetic biology*. It would be appropriate to start with *synthetic biology*, as this field has advanced most rapidly in both dimension and scope since the Sixth Review Conference. Furthermore, it embodies the convergence of several fields of technology and the advances achieved pose some of the greatest potentials for misuse.

Risks to animals and plants

53. As noted earlier, it is important, in considering the implications of advances in science and technology to stress that such advances can impact the whole of the life sciences – animal and plant as well as human – and that they can bring enormous benefit as well as potential dangers. It is therefore important to ensure that the Article I section of the *Final Declaration* clearly recognises the risk to animals and plants as well as to humans.

Points for the *Final Document*

54. It is recommended that in respect of Article I the language in the *Final Document* at the Seventh Review Conference would be similar to that adopted at the Sixth Review Conference but with agreement to set up a standing working group of scientific and technical experts who would consider the implications of scientific and technological developments in a particular scientific/technical area relevant to the BTWC for the whole of the Convention. It should be recognized that the present system – in which information on advances in science and technology is provided in a background paper for the Review Conference but is not adequately discussed or considered at the Review Conference – is inadequate for today's world in which the developments in science and technology have important implications for **all** the Articles of the Convention and need to be considered more frequently by States Parties. Consideration is given here to both the Article by Article *Final Declaration* and then to the *Decisions and Recommendations* section (*Part III* of the *Final Document*).

Article I in the Article by Article *Final Declaration*

55. The language to be adopted by the Seventh Review Conference in its *Final Declaration* might be similar to that adopted at the Sixth Review Conference but with an additional point setting up a standing working group of scientific and technical experts who would consider the implications of scientific and technological developments in a particular scientific/technical area relevant to the BTWC for the whole of the Convention. The following points are recommended:

1. To reaffirm the importance of Article I as it defines the scope of the Convention.
2. To declare that the Convention is comprehensive in its scope and that all naturally or artificially created or altered microbial and other biological agents and toxins, as well as their components, regardless of their origin and method of production and whether they affect humans, animals or plants, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes, are unequivocally covered by Article I.
3. To reaffirm that Article I applies to all scientific and technological developments in the life sciences and in other fields of science relevant to the Convention.
4. To agree to set up a standing working group of scientific and technical experts who would consider the scientific and technological developments in a particular scientific/technical area relevant to the BTWC and consider their applications and implications for the whole of the Convention and report to the annual Meeting of States Parties. (See *Part III: Decisions and Recommendations*)
5. To reaffirm that the use by the States Parties, in any way and under any circumstances, of microbial or other biological agents or toxins, that is not consistent with prophylactic, protective or other peaceful purposes, is effectively a violation of Article I.
6. To reaffirm the undertaking in Article I never in any circumstances to develop, produce, stockpile or otherwise acquire or retain weapons, equipment, or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict in order to exclude completely and forever the possibility of their use.
7. To reaffirm the determination of States Parties to condemn any use of biological agents or toxins for other than peaceful purposes, by anyone at any time.
8. To reaffirm that the application by States Parties of positive approaches in accordance with the provisions of the Convention is in the interest of all States Parties and that any non-compliance with its provisions could undermine confidence in the Convention.
9. To reaffirm that non-compliance should be treated with determination in all cases, without selectivity or discrimination, and to resolve to strengthen the capacity of the BTWC to detect and deal with non-compliance.
10. To note that experimentation involving open-air release of pathogens or toxins harmful to humans, animals and plants that have no justification for prophylactic, protective or other peaceful purposes is inconsistent with the undertakings contained in Article I and is thus prohibited.

Decisions and Recommendations section of the Final Document

56. The section addressing the Intersessional Program 2011 – 2016 in the *Decisions and Recommendations* section (Part III of the *Final Document*) should include the following points:

1. A standing working group of scientific and technical experts shall meet to consider the scientific and technological developments in a particular scientific/technical area relevant to the BTWC and to consider their applications and implications for the whole of the Convention and to report its findings to the annual Meeting of States Parties.
2. The topic to be considered in the first year shall be to assess the implications for all aspects of the Convention of recent and likely future developments in *synthetic biology*.
3. The standing working group of scientific and technical experts shall invite representatives from scientific academies and associations as well as individual experts who have demonstrated their competence in regard to the particular scientific/technical area to participate as observers and to contribute to the discussion.
4. The topic for the following year or whether additional work is required on a previously selected scientific/technical area shall be determined by the annual Meeting of States Parties.

ARTICLE II: DESTRUCTION OF AGENTS AND WEAPONS

by Graham S Pearson

Consideration of Article II at the Sixth Review Conference

1. Article II of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*⁷¹ in respect of Article II stated that:

5. The Conference reaffirms for any state ratifying or acceding to the Convention, the destruction or diversion to peaceful purposes specified in Article II would be completed upon accession to, or upon ratification of, the Convention.

6. The Conference emphasises that states must take all necessary safety and security provisions to protect populations and the environment when carrying out such destruction and/or diversion. The Conference also stresses that these States Parties should provide appropriate information to all States Parties via the exchange of information (confidence-building measures form F).

7. The Conference welcomes statements made by States Parties, and newly acceding and ratifying States Parties, that they do not possess agents, toxins, weapons, equipment or means of delivery as prohibited by Article I of the Convention.

3. The *Final Declaration* in 2006 in its three paragraphs essentially repeated what had been said in four paragraphs at the Fourth Review Conference of the BTWC held from 25 November to 6 December 1996, when the *Final Declaration*⁷² in respect of Article II stated that:

1. The Conference recognizes that for any State acceding to the Convention after the entry into force of the Convention, the destruction or diversion to peaceful purposes specified in Article II would be completed upon accession to the Convention. The Conference emphasizes that the destruction or diversion to peaceful purposes specified in Article II should be carried out completely and effectively.

⁷¹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

⁷² United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

2. *The Conference notes the importance of Article II and welcomes the statements made by States which have become Parties to the Convention since the Third Review Conference that they do not possess agents, toxins, weapons, equipment or means of delivery referred to in Article I of the Convention.*

3. *The Conference notes that the submission to the Centre for Disarmament Affairs of appropriate information on destruction by States Parties which had stockpiles and have destroyed them in fulfilment of their Article II obligations and which have not already made such submissions could enhance confidence in the Convention and its objectives.*

4. *The Conference stresses that States which become Parties to the Convention, implementing the provisions of this Article, shall observe all necessary safety precautions to protect populations and the environment.*

4. This *Final Declaration* had two new additional paragraphs -- the first and third -- to the two paragraphs -- the second and fourth -- which were closely similar to the two paragraphs of the *Final Declaration*⁷³ of the Third Review Conference:

The Conference notes the importance of Article II and welcomes the statements made by States which have become parties to the Convention since the Second Review Conference that they do not possess agents, toxins, weapons, equipment or means of delivery referred to in Article I of the Convention. The Conference believes that such statements contribute to enhancing confidence in the Convention.

The Conference stresses that States which become Parties to the Convention, implementing the provisions of this Article, shall observe all necessary safety precautions to protect populations and the environment.

Developments since the Sixth Review Conference

5. Since the Sixth Review Conference a number of States have become States Parties to the Biological and Toxin Weapons Convention and may have made such statements of non-possession.

5. In the Key Points⁷⁴ prepared for the Sixth Review Conference, it was noted that a development since the Fourth Review Conference has been the entry into force of the Chemical Weapons Convention (CWC)⁷⁵. The consideration of production facilities in the CWC is markedly different from that in the Biological and Toxin Weapons Convention (BTWC). This difference is recalled here and consideration is given to how this anomaly

⁷³ United Nations, The Third 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, 9 - 27 September 1991, *Final Document*, BWC/CONF.III/23, Geneva 1991. Available at <http://www.opbw.org>

⁷⁴ Graham S. Pearson, Nicholas A. Sims & Malcolm R. Dando (eds), *Key Points for the Sixth Review Conference*, September 2006. Department of Peace Studies, University of Bradford, Bradford, West Yorkshire, United Kingdom. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/keypoints.htm>

⁷⁵ United Nations, *Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction*, Corrected version. Available at <http://www.opcw.org/chemical-weapons-convention/download-the-cwc/>

might be remedied by language in the *Final Declaration* to be adopted by the Seventh Review Conference.

Production Facilities in the BTWC

6. There is no explicit mention of "**production facilities**" in the BTWC. The basic prohibition in Article I is all embracing in respect of both biological agents and the means of delivery:

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.

7. Article II places an undertaking on States Parties to destroy, or divert to peaceful purposes, all biological agents, toxins, weapons and means of delivery in a safe way:

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

8. Article IV obliges each State Party to take any necessary measures to prohibit **and prevent** the development, production, stockpiling, acquisition, or retention of the agents specified in Article I:

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

It can be argued that it is thus **implicit** that there should be no biological weapons production facilities within a State Party and that any such facilities should, in accordance with Article II, have been destroyed or diverted to peaceful purposes upon entry into force of the Convention for a State Party.

Production Facilities in the CWC

9. In contrast to the BTWC, there is considerable explicit attention paid in the CWC to chemical weapons production facilities (CWPF) with a specific undertaking in Article I *General Obligations* obliging each State Party to destroy any CWPF:

4. *Each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention.*

Furthermore Article V *Chemical Weapons Production Facilities* sets out the specific requirements relating to CWPF with detailed requirements for the implementation of this Article being specified in the Verification Annex *Part V: Destruction of Chemical Weapons Production Facilities and its Verification Pursuant to Article V*.

10. It is clear from the CWC that the intention is that CWPF should be destroyed. However, there is provision for a State Party to request, in **exceptional cases of compelling need**, permission from the Conference of the States Parties to use the CWPF for purposes not prohibited under the Convention as elaborated in paragraphs 13 to 15 of Article V:

13. *A State Party may request, in exceptional cases of compelling need, permission to use a chemical weapons production facility specified in paragraph 1 for purposes not prohibited under this Convention. Upon the recommendation of the Executive Council, the Conference of the States Parties shall decide whether or not to approve the request and shall establish the conditions upon which approval is contingent in accordance with Part V, Section D, of the Verification Annex.*

14. *The chemical weapons production facility shall be converted in such a manner that the converted facility is not more capable of being reconverted into a chemical weapons production facility than any other facility used for industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes not involving chemicals listed in Schedule 1.*

15. *All converted facilities shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments in accordance with Part V, Section D, of the Verification Annex.*

11. Detailed procedures for the conversion of CWPF are set out in the Verification Annex, Part V, Section D, *Conversion of Chemical Weapons Production Facilities to Purposes not prohibited under this Convention*. This includes procedures for requesting conversion, actions pending a decision, conditions for conversion, decisions by the Executive Council and the Conference of the States Parties, detailed plans for conversion and a review of the detailed plans. It also includes provision for verification for a minimum of 10 years after the Director-General has certified that conversion is complete:

85. *For the 10 years after the Director-General certifies that conversion is complete, the State Party shall provide to inspectors unimpeded access to the facility at any time. The inspectors shall have the right to observe all areas, all activities, and all items of equipment at the facility. The inspectors shall have the right to verify that the activities at the facility are consistent with any conditions established under this Section, by the Executive Council and the Conference. The inspectors shall also have the right, in accordance with provisions of Part II, Section E, of this Annex to receive samples from any area of the facility and to analyse them to verify the absence of Schedule 1 chemicals, their stable by-products and decomposition products and of Schedule 2 chemicals and to verify that the activities at the facility are consistent with*

any other conditions on chemical activities established under this Section, by the Executive Council and the Conference. The inspectors shall also have the right to managed access, in accordance with Part X, Section C, of this Annex, to the plant site at which the facility is located. During the 10-year period, the State Party shall report annually on the activities at the converted facility. Upon completion of the 10-year period, the Executive Council, taking into account recommendations of the Technical Secretariat, shall decide on the nature of continued verification measures.

Analysis

12. Although it is interesting to speculate why the treatment of production facilities under the BTWC and the CWC is so different⁷⁶, it is nevertheless a clear difference and one which should be addressed as the continued existence of biological weapons production facilities presents undoubted risks to the BTWC. Although it had been proposed⁷⁷ that the regime being negotiated in 1995 to 2001 to strengthen the effectiveness and improve the implementation of the Convention should subject past biological weapons facilities, particularly those remaining in government ownership, to an appropriate compliance monitoring regime, paralleling that under the CWC, this was not taken forward by these negotiations. Although the rolling text and the Chairman's composite text⁷⁸ included requirements for the declaration of a past offensive biological weapons programme *including a list of all facilities, including test ranges, that participated in such programmes and/or activities*, there were no provisions for a compliance monitoring regime for past offensive biological weapons production facilities as such.

13. Examination of the obligations in Articles I, II and IV of the Convention makes it clear that States Parties are required to *take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of the agents, toxins, weapons, equipment and means of delivery specified in article I of the Convention* [Emphasis added] and thus that there is an **implicit** requirement to ensure that all production facilities which participated in past offensive biological weapon programmes are converted or destroyed.

14. A further development since the Sixth Review Conference has been the consideration of how the Confidence-Building Measure (CBM) regime might be improved. Bradford Review Conference Paper No. 24⁷⁹ noted that that many proposals have been put forward by the

⁷⁶ The different treatment may well reflect the negotiation of the CWC in a situation where at least two States -- the USA and the Soviet Union -- were admitted possessors of chemical weapons and thus the continued possession of chemical weapon production facilities presented a clear risk to the Convention. In contrast, the BTWC was negotiated at a time when arms control treaties were still short documents without any detailed provisions for verification or for monitoring of compliance, following the unilateral abandonment by the United States of its biological and toxin weapons and of its production facilities and without any admission by the Soviet Union of its biological weapon capabilities.

⁷⁷ Graham S. Pearson, *The Ad-Hoc Group: Past Biological Weapons Facilities* in Erhard Geissler, Lajos Gázsó and Ernst Buder (eds), *Conversion of Former BTW Facilities*, Kluwer Academic Press, Dordrecht, NATO Science Series, 1. Disarmament Technologies, Vol 21. pp. 201-208. Graham S. Pearson, *Past Biological Weapons Facilities: An Opportunity for the Ad Hoc Group*, ASA Newsletter 97-6, 4 December 1997, issue number 63, p.1, 16-17.

⁷⁸ United Nations, *Procedural Report of the Ad Hoc Group 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*, BWC/AD HOC GROUP/56-1 and 56-2, 18 May 2001, Geneva.

⁷⁹ Filippa Lenzos, *Improving the BTWC Confidence-Building Measure Regime*, Bradford Review Conference Paper No. 24, October 2010. Division of Peace Studies, University of Bradford, Bradford, West Yorkshire, United Kingdom. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

various papers and events since the Sixth Review Conference. RCP No. 24 drew on these proposals and the outcome of these workshops⁸⁰ to outline a set of proposals for the Seventh Review Conference to adopt to improve the CBM regime. This included the proposal that *CBM Form F: Declaration of past activities in offensive and/or defensive biological research and development programmes* should be extended to provide information about the production facilities at which the past offensive programmes were carried out and what those facilities are engaged in today. This would provide a significant addition to building transparency and confidence, and should present few difficulties in completion as only a few States Parties have submitted Form Fs. It was proposed that Form F should be extended by addition of the following additional paragraph:

4. Production facilities at which the past offensive programme was carried out. For each facility provide the following information:

(a) What was the name of the facility when it was engaged in the past offensive programme?

(b) Where was it located (include both address and geographical location)?

(c) What is the name of the facility today?

(d) What activities are carried out at the facility today?

15. It is suggested that a useful strengthening of the BTWC regime could be achieved by the Seventh Review Conference in its *Final Declaration* adopting language that would affirm the requirement for the conversion to peaceful purposes or destruction of **all** production facilities which participated in past offensive biological weapon programmes and/or activities. This could readily be achieved by extending the language adopted in the *Final Declaration* for Article II which at the Sixth Review Conference declared that:

5. The Conference reaffirms for any state ratifying or acceding to the Convention, the destruction or diversion to peaceful purposes specified in Article II would be completed upon accession to, or upon ratification of, the Convention.

and in the next paragraph stated that:

6. ... The Conference also stresses that these States Parties should provide appropriate information to all States Parties via the exchange of information (confidence-building measures form F).

16. The desired extension could be achieved by the States Parties in the Article II section including language that affirmed that any past biological weapons production facilities should likewise be destroyed or diverted to peaceful purposes. It would also be desirable to extend CBM Form F to include a declaration of information about the production facilities at which the past offensive programmes were carried out and what those facilities are engaged in today.

⁸⁰ Filippa Lentzos and R. Alexander Hamilton, *Preparing for a comprehensive review of the CBM mechanism at the Seventh BWC Review Conference*, August 2010.

Points for the *Final Declaration*

17. It is therefore recommended that the Seventh Review Conference should adopt similar language to that in the *Final Declaration* of the Sixth Review Conference:

- a. To reaffirm for any state ratifying or acceding to the Convention, the destruction or diversion to peaceful purposes specified in Article II would be completed upon accession to, or upon ratification of, the Convention.
- b. To emphasise that states must take all necessary safety and security provisions to protect populations and the environment when carrying out such destruction and/or diversion.
- c. To stress that these States Parties should provide appropriate information to all States Parties via the exchange of information (confidence-building measures form F).
- d. To welcome statements made by States Parties, and newly acceding and ratifying States Parties, that they do not possess agents, toxins, weapons, equipment or means of delivery as prohibited by Article I of the Convention.

and that this language should be extended to address two additional points:

- e. To affirm that any past biological weapons production facilities should be destroyed or diverted to peaceful purposes.
- f. To extend CBM Form F so that information is provided about the production facilities in which the past offensive programmes were carried out and what those facilities are engaged in today.

ARTICLE III: NON-TRANSFER

by Graham S. Pearson

Consideration of Article III at the Sixth Review Conference

1. Article III of the Convention 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 the Convention.

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*⁸¹ in respect of Article III stated that:

8. The Conference reaffirms that Article III is sufficiently comprehensive to cover any recipient whatsoever at the international, national or sub-national levels. The Conference calls for appropriate measures, including effective national export controls, by all States Parties to implement this Article, in order to ensure that direct and indirect transfers relevant to the Convention, to any recipient whatsoever, are authorized only when the intended use is for purposes not prohibited under the Convention.

9. The Conference calls for appropriate measures by all States Parties to ensure that biological agents and toxins relevant to the Convention are protected and safeguarded, including through measures to control access to and handling of such agents and toxins;

10. The Conference reiterates that States Parties should not use the provisions of this Article to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials under Article X.

3. The three paragraphs in this *Final Declaration* had developed from the four paragraphs on Article III in the *Final Declaration* of the Fourth Review Conference⁸² held from 25 November to 6 December 1996:

1. The Conference notes the importance of Article III and welcomes the statements which States that have acceded to the Convention have made to the effect that they have not transferred agents, toxins, weapons, equipment or means of delivery as

⁸¹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

⁸² United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

specified in Article I of the Convention, to any recipient whatsoever and have not furnished assistance, encouragement or inducement to any State, group of States or international organizations to manufacture or otherwise acquire them. The Conference affirms that Article III is sufficiently comprehensive to cover any recipient whatsoever at international, national or subnational levels.

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 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. Transfers relevant to the Convention should be authorized only when the intended use is for purposes not prohibited under the Convention.

3. 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. In the development of implementation of Article III, the Conference notes that States Parties should also consider ways and means to ensure that individuals or subnational groups are effectively prevented from acquiring, through transfers, biological agents and toxins for other than peaceful purposes. The Conference notes that these issues are being considered as part of the ongoing process of strengthening the Convention.

4. The Conference reiterates that the provisions of this Article should not be used to impose restrictions and/or limitations on the transfers for purposes consistent with the objectives and purposes of the Convention of scientific knowledge, technology, equipment and materials under Article X.

The first two paragraphs in the Sixth Review Conference *Final Declaration* in regard to Article III are streamlined versions of the first three paragraphs in the Fourth Review Conference *Final Declaration*. In particular, the emphasis on addressing transfers to *any recipient whatsoever* is carried forward and the appropriate measures to be taken are extended to *including through measures to control access to and handling of such agents and toxins*. The third and final paragraph in the Sixth Review Conference *Final Declaration* is essentially identical to the fourth and final paragraph in the Fourth Review Conference *Final Declaration*.

Developments since the Sixth Review Conference

Meeting of States Parties in 2008

4. The States Parties at the Sixth Review Conference agreed in their *Final Document*⁸³ to hold an annual Meeting of States Parties and in 2008 to consider two topics:

⁸³ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

(iii) National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.

(iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

It was also agreed that:

(e) The Seventh Review Conference will consider the work and outcome of these meetings and decide on any further action.

12. The first topic is directly relevant to Article III and to *measures to control access to and handling of such agents and toxins* agreed at the Sixth Review Conference. The second topic is more directly relevant to Article IV of the Convention although it has relevance to Article III. Consequently, the outcome of the annual Meeting of States Parties at which these topics were considered is directly relevant to the consideration of Article III at the Seventh Review Conference and, furthermore, the Seventh Review Conference is mandated to *consider the work and outcome of these meetings and decide on any further action*. As a starting point in deciding on any further action, the Conference could usefully endorse the principal findings of the 2008 Meeting of States Parties and write them into the cumulative text of *its Final Declaration* as extended understandings of the implications of Article III and Article IV.

13. The report⁸⁴ of the Meeting of States Parties in 2008 included the following:

21. Recognising that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention, States Parties agreed on the value of:

(i) National authorities defining and implementing biosafety and biosecurity concepts in accordance with relevant national laws, regulations and policies, consistent with the provisions of the Convention and taking advantage of relevant guidance and standards, such as those produced by the FAO, OIE and WHO;

(ii) National governments taking the leading role, including by nominating a lead agency (or focal point), specifying mandates for participating departments or agencies, ensuring effective enforcement and regular review of relevant measures, and integrating such measures into relevant existing arrangements at the national, regional and international level;

(iii) National governments, supported by other relevant organisations as appropriate, using tools such as: accreditation, certification, audit or licensing for facilities, organizations or individuals; requirements for staff

⁸⁴ United Nations, Meeting 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, 2008 Meeting, Geneva, 1-5 December 2008, *Report of the Meeting of States Parties*, BWC/MSP/2008/5, 12 December 2008. Available at <http://www.opbw.org>

members to have appropriate training in biosafety and biosecurity; mechanisms to check qualifications, expertise and training of individuals; national criteria for relevant activities; and national lists of relevant agents, equipment and other resources.

(iv) Ensuring measures adopted are practical, sustainable, enforceable, are readily understood and are developed in concert with national stakeholders⁸⁵, avoid unduly restricting the pursuit of the biological sciences for peaceful purposes, are adapted for local needs, and appropriate for the agents being handled and the work being undertaken, including through applying appropriate risk assessment and risk management strategies.

(v) Building networks between scientific communities and academic institutions and increasing interaction with professional associations and working groups at the national regional and international level, including through dedicated workshops, seminars, meetings and other events, as well as using modern information technologies and appropriate risk communication strategies and tools;

(vi) International cooperation on biosafety and biosecurity at the bilateral, regional and international levels, in particular to overcome difficulties encountered by some States Parties where additional resources, improved infrastructure, additional technical expertise, appropriate equipment and increased financial resources are needed to build capacity.

(vii) The Implementation Support Unit, in accordance with its mandate, facilitating networking activities, maintaining lists of relevant contacts, and acting as a clearing house for opportunities for international cooperation and assistance on biosafety and biosecurity, including through tools such as a database containing information on such opportunities for international cooperation and assistance.

22. States Parties noted that pursuing biosafety and biosecurity measures could also contribute to the fulfilment of their other respective international obligations and agreements, such as the revised International Health Regulations of the WHO, and relevant codes of the World Organisation for Animal Health (OIE). The States Parties recalled United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention.

23. Recalling that the Sixth Review Conference stressed the legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes, States Parties recognised the value of cooperation and assistance to build biosafety and biosecurity capacity, particularly in States Parties in need of assistance in the fields of disease

⁸⁵ *In this report, the term “stakeholders” refers, as appropriate according to national circumstances, to relevant actors such as scientists, researchers and other professionals in the life sciences; editors and publishers of life science publications and websites; and organizations, institutions, government agencies, and private companies acting in life sciences research or education, and any other legal entity that is involved in the stockpiling, transport or use of biological agents, toxins or other resources relevant to the Convention.*

surveillance, detection, diagnosis and combating of infectious diseases and related research.

24. States Parties encouraged those States Parties in a position to do so to provide assistance, upon request, to other States Parties to enact and improve national legislation to implement biosafety and biosecurity; to strengthen laboratory infrastructure, technology, security and management; to conduct courses and provide training; and to help incorporate biosafety and biosecurity in existing efforts to address emerging or re-emerging diseases. States Parties noted that where relevant assistance is currently available bilaterally and regionally, as well as through international organisations, those seeking assistance are encouraged, as appropriate, to make use of existing offers to the fullest extent possible.

25. Having considered the oversight of science, States Parties recognised the value of developing national frameworks to prohibit and prevent the possibility of biological agents or toxins being used as weapons, including measures to oversee relevant people, materials, knowledge and information, in the private and public sectors and throughout the scientific life cycle. Recognising the need to ensure that such measures are proportional to risk, do not cause unnecessary burdens, are practical and usable and do not unduly restrict permitted biological activities, States Parties agreed on the importance of involving national stakeholders in all stages of the design and implementation of oversight frameworks. States Parties also noted the value of harmonizing, where possible and appropriate, national, regional and international oversight efforts.

26. States Parties recognized the importance of ensuring that those working in the biological sciences are aware of their obligations under the Convention and relevant national legislation and guidelines, have a clear understanding of the content, purpose and foreseeable social, environmental, health and security consequences of their activities, and are encouraged to take an active role in addressing the threats posed by the potential misuse of biological agents and toxins as weapons, including for bioterrorism. States Parties noted that formal requirements for seminars, modules or courses, including possible mandatory components, in relevant scientific and engineering training programmes and continuing professional education could assist in raising awareness and in implementing the Convention.

27. States Parties agreed on the value of education and awareness programmes:

(i) Explaining the risks associated with the potential misuse of the biological sciences and biotechnology;

(ii) Covering the moral and ethical obligations incumbent on those using the biological sciences;

(iii) Providing guidance on the types of activities which could be contrary to the aims of the Convention and relevant national laws and regulations and international law;

(iv) Being supported by accessible teaching materials, train-the-trainer programmes, seminars, workshops, publications, and audio-visual materials;

(v) Addressing leading scientists and those with responsibility for oversight of research or for evaluation of projects or publications at a senior level, as well as future generations of scientists, with the aim of building a culture of responsibility;

(vi) Being integrated into existing efforts at the international, regional and national levels.

28. Having considered codes of conduct, States Parties agreed that such codes can complement national legislative, regulatory and oversight frameworks and help guide science so that it is not misused for prohibited purposes. States Parties recognised the need to further develop strategies to encourage national stakeholders to voluntarily develop, adopt and promulgate codes of conduct in line with the common understandings reached by the 2005 Meeting of States Parties and taking into account discussions at the 2008 Meeting of Experts.

29. States Parties noted the importance of balancing "top-down" government or institutional controls with "bottom-up" oversight by scientific establishments and scientists themselves. Within the framework of oversight, States Parties recognised the value of being informed about advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention and the necessity of strengthening ties with the scientific community. States Parties welcomed the important contributions made to their work by the scientific community and academia, including national and international academies of science and professional associations, as well as industry-led initiatives to address recent developments in science and technology, and encouraged greater cooperation between scientific bodies in various States Parties.

14. In addition, the Meeting of Experts agreed that the considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions made by delegations on the topics under discussion at the Meeting of Experts should be included in Annex I of the Report of the Meeting of Experts (BWC/MSP/2008/MX/3) and the Meeting of States Parties agreed that the synthesis of these considerations, lessons, perspectives, recommendations, conclusions and proposals should be included in Annex I of the Report of the Meeting of States Parties (BWC/MSP/2008/5). Consequently, these two Annexes provide a valuable resource of information on the two topics considered in 2008 that is available to the States Parties in preparation for the Seventh Review Conference.

15. Furthermore, the Meeting of States Parties also agreed that:

31. States Parties are encouraged to inform the Seventh Review Conference of, inter alia, any actions, measures or other steps that they may have taken on the basis of the discussions at the 2008 Meeting of Experts and the outcome of the 2008 Meeting of States Parties, in order to facilitate the Seventh Review Conference's consideration of the work and outcome of these meetings and its decision on any further action, in accordance with the decision of the Sixth Review Conference (BWC/CONF.VI/6, Part III, paragraph 7 (e)).

16. Bearing in mind that the States Parties at the Sixth Review Conference had agreed paragraph 9 in regard to Article III:

9. *The Conference calls for appropriate measures by all States Parties to ensure that biological agents and toxins relevant to the Convention are protected and safeguarded, including through measures to control access to and handling of such agents and toxins;*

our recommendation is that the Article III section of the *Final Declaration* for the Seventh Review Conference could usefully include the following points developed from the language in MSP/2008/5:

- a. to recognize that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention.
- b. to note that pursuing biosafety and biosecurity measures could also contribute to the fulfilment of their other respective international obligations and agreements, such as the revised International Health Regulations of the WHO, and relevant codes of the World Organisation for Animal Health (OIE), and also to recall that United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention.
- c. to agree that national authorities should define and implement biosafety and biosecurity concepts in accordance with relevant national laws, regulations and policies, consistent with the provisions of the Convention and taking advantage of relevant guidance and standards, such as those produced by the FAO, OIE and WHO;
- d. to agree that national governments, supported by other relevant organisations as appropriate, should use tools such as: accreditation, certification, audit or licensing for facilities, organizations or individuals; requirements for staff members to have appropriate training in biosafety and biosecurity; mechanisms to check qualifications, expertise and training of individuals; national criteria for relevant activities; and national lists of relevant agents, equipment and other resources.

17. At the Preparatory Committee meeting for the Seventh Review Conference, it was agreed⁸⁶ that the Secretariat should prepare for the States Parties:

(b) A background information document on compliance by States Parties with all their obligations under the Convention, to be compiled from information submitted by States Parties;

Although there is no specific mention of *including any actions taken following the Meetings of Experts and Meetings of States Parties held from 2007-2010*, it is to be expected that States Parties will indeed include information on any actions that they have taken following the annual Meetings of Experts and Meetings of States Parties during 2007 to 2010. In many cases these actions are likely to relate to compliance with Article III.

⁸⁶ United Nations, The Seventh 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, 5 December - 22 December 2011, *Report of the Preparatory Committee*, BWC/CONF.VII/PC/2, 26 April 2011. Available at <http://www.opbw.org>

Security Council Resolution 1540 (2004)

18. It will be recalled that Security Council Resolution 1540 (2004)⁸⁷ was adopted on 28 April 2004. This recorded in its second paragraph that the Security Council:

2. Decides also that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;

19. Furthermore, in its third paragraph this resolution recorded that the Security Council:

3. Decides also that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall:

(a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;

(b) Develop and maintain appropriate effective physical protection measures;

(c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;

(d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

20. The resolution also made the point in its fifth paragraph that the Security Council:

5. Decides that none of the obligations set forth in this resolution shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons;

21. Further paragraphs in the resolution recorded that the Security Council:

⁸⁷ United Nations, *Resolution 1540 (2004) Adopted by the Security Council at its 4956th meeting, on 28 April 2004*, S/RES/1540 (2004), 28 April 2004.

6. Recognizes the utility in implementing this resolution of effective national control lists and calls upon all Member States, when necessary, to pursue at the earliest opportunity the development of such lists;

7. Recognizes that some States may require assistance in implementing the provisions of this resolution within their territories and invites States in a position to do so to offer assistance as appropriate in response to specific requests to the States lacking the legal and regulatory infrastructure, implementation experience and/or resources for fulfilling the above provisions;

8. Calls upon all States:

(a) To promote the universal adoption and full implementation, and, where necessary, strengthening of multilateral treaties to which they are parties, whose aim is to prevent the proliferation of nuclear, biological or chemical weapons;

(b) To adopt national rules and regulations, where it has not yet been done, to ensure compliance with their commitments under the key multilateral nonproliferation treaties;

(c) To renew and fulfil their commitment to multilateral cooperation, in particular within the framework of the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons and the Biological and Toxin Weapons Convention, as important means of pursuing and achieving their common objectives in the area of non-proliferation and of promoting international cooperation for peaceful purposes;

(d) To develop appropriate ways to work with and inform industry and the public regarding their obligations under such laws;

9. Calls upon all States to promote dialogue and cooperation on nonproliferation so as to address the threat posed by proliferation of nuclear, chemical, or biological weapons, and their means of delivery;

10. Further to counter that threat, calls upon all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials*;

* The term *related materials* is defined in SCR 1540 (2004) for the purpose of the resolution only as being *materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.*

22. This resolution thus placed an obligation on **all** States, whether they are party to the BTWC or not, to *adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, **transfer** or use nuclear, chemical or **biological weapons** and their means of delivery* [Emphasis added]. However, it needs to

be recognized that the obligations under Article III of the BTWC are more comprehensive in scope than those addressed in SCR 1540 (2004) in that Article III requires that *Each State Party to this Convention undertakes not to transfer to any recipient whatsoever, directly or indirectly* and is thus not limited to non-State actors. Unlike paragraph 2 of SCR 1540, the BTWC is addressed as fully to States and individuals in the service of a State as to anyone else. Article III does not differentiate between agents of the State and others.

23. However, it also needs to be noted that in one respect, namely “*illicit trafficking*”, SCR 1540 is more demanding in its requirement in its tenth paragraph calling upon *all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to **prevent** illicit trafficking in nuclear, chemical or **biological** weapons, their means of delivery, and related materials*; This **prevention** requirement sets a high standard of effectiveness. It is indeed a very stringent criterion to attach to requirements to prevent illicit trafficking, but it is explicitly included in SCR 1540 and thus constitutes one of the obligations flowing from the Resolution. It can usefully be regarded as a test of the effectiveness of legislation and other measures relating to transfers in each State Party. If a State Party's legislative and other prohibitions are not strong enough even when enforced to **prevent** such activities involving biological weapons and related materials, they will not meet the SCR 1540 standard of “*action to prevent illicit trafficking*”.

24. At the Sixth Review Conference, the States Parties took note of Security Council Resolution 1540 (2004) in several places in their *Final Declaration*. First the States Parties solemnly declared:

(vii) Their conviction that terrorism in all its forms and manifestations and whatever its motivation, is abhorrent and unacceptable to the international community, and that terrorists must be prevented from developing, producing, stockpiling, or otherwise acquiring or retaining, and using under any circumstances, biological agents and toxins, equipment, or means of delivery of agents or toxins, for nonpeaceful purposes, and their recognition of the contribution of full and effective implementation of United Nations Security Council Resolution 1540 by all states to assist in achieving the objectives of this Convention;

25. Secondly, as part of their language in the section of the *Final Declaration* headed Article IV, they agreed:

17. The Conference recalls United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention. The Conference notes that Resolution 1540 affirms support for the multilateral treaties whose aim is to eliminate or prevent proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability. The Conference also notes that information provided to the United Nations by states in accordance with Resolution 1540 may provide a useful resource for States Parties in fulfilling their obligations under this Article.

Although similar language could have been included under Article III or the language for Article IV could usefully have been broadened to read “*a useful resource for States Parties in fulfilling their obligations under this and other Articles.*” the Sixth Review Conference did not do so.

26. Since 2006, the 1540 Committee established by the Security Council to oversee implementation of Resolution 1540 has continued to collect and analyse the information that all States are required to report on measures they have taken or intend to take to implement the obligations under the resolution. The first report⁸⁸ was presented in April 2006 and was based on information contained in the following: 129 Member States of the United Nations and one organization (the European Union) had submitted first national reports to the Committee established pursuant to resolution 1540 (2004), known as the 1540 Committee; 62 Member States had yet to submit their first report. In response to the examination of the first national reports by the Committee, 79 States provided additional information.

27. A further report⁸⁹ was presented in July 2008 in which it is stated that at 1 July 2008, 103 States have responded to the Committee's 2007 request. The total number of States that have submitted at least one report since 2004 stands at 155, with one organization (the European Union) also having submitted a report. Of those States that have submitted first reports, 102 have submitted additional information. Thirty-seven States have not submitted a first report to the Committee.

28. The July 2008 report includes a section that considers what steps have been taken by States Parties in regard to paragraphs 3 (c) and 3(d) of Security Council resolution 1540 (2004) which require that all States shall:

(c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;

(d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

29. In regard to biological weapons, this section reports that

53. A number of States reported that goods, technologies and services that had primarily commercial but also potential weapons of mass destruction-related applications (i.e., dual-use items) fell within the remit of the same authorities in charge of each State's international trade. The Committee observes a significant increase, compared to its findings in 2006, in the number of States identified as having taken measures towards enhancing border and export controls. However, it is

⁸⁸ United Nations Security Council, *Letter dated 25 April 2006 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2006/257, 25 April 2006. Available at <http://www.un.org/Docs/journal/asp/ws.asp?m=S/2006/257>

⁸⁹ United Nations Security Council, *Letter dated 8 July 2008 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2008/493, 30 July 2008. Available at <http://www.un.org/Docs/journal/asp/ws.asp?m=S/2008/493>

also recognized that passing legislation and regulations is not sufficient in and of itself. There also need to be effective domestic enforcement; credible control lists of dual-use items; appropriate implementation and enforcement measures; effective training of enforcement officials; and information sharing. In resolution 1810 (2008), the Security Council reaffirmed that prevention of proliferation of nuclear, chemical and biological weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes, while goals of peaceful utilization should not be used as a cover for proliferation.

30. The 2008 report provides a tabulation in Annex XVI.A entitled *Progress of implementation as reflected in the matrices of Member States: comparative information for 2006 and 2008 for the 127 States that reported by 2006 — paragraph 3 (c) and (d) — biological weapons and related materials* that shows the progress made between 2006 and 2008. In addition, a tabulation is provided in Annex XVI.B entitled *Current assessment of implementation for 192 Member States — paragraph 3 (c) and (d) — biological weapons and related materials* that puts the 2008 information in the context of the then 192 Member States of the United Nations. These two annexes are reproduced on the next two pages:

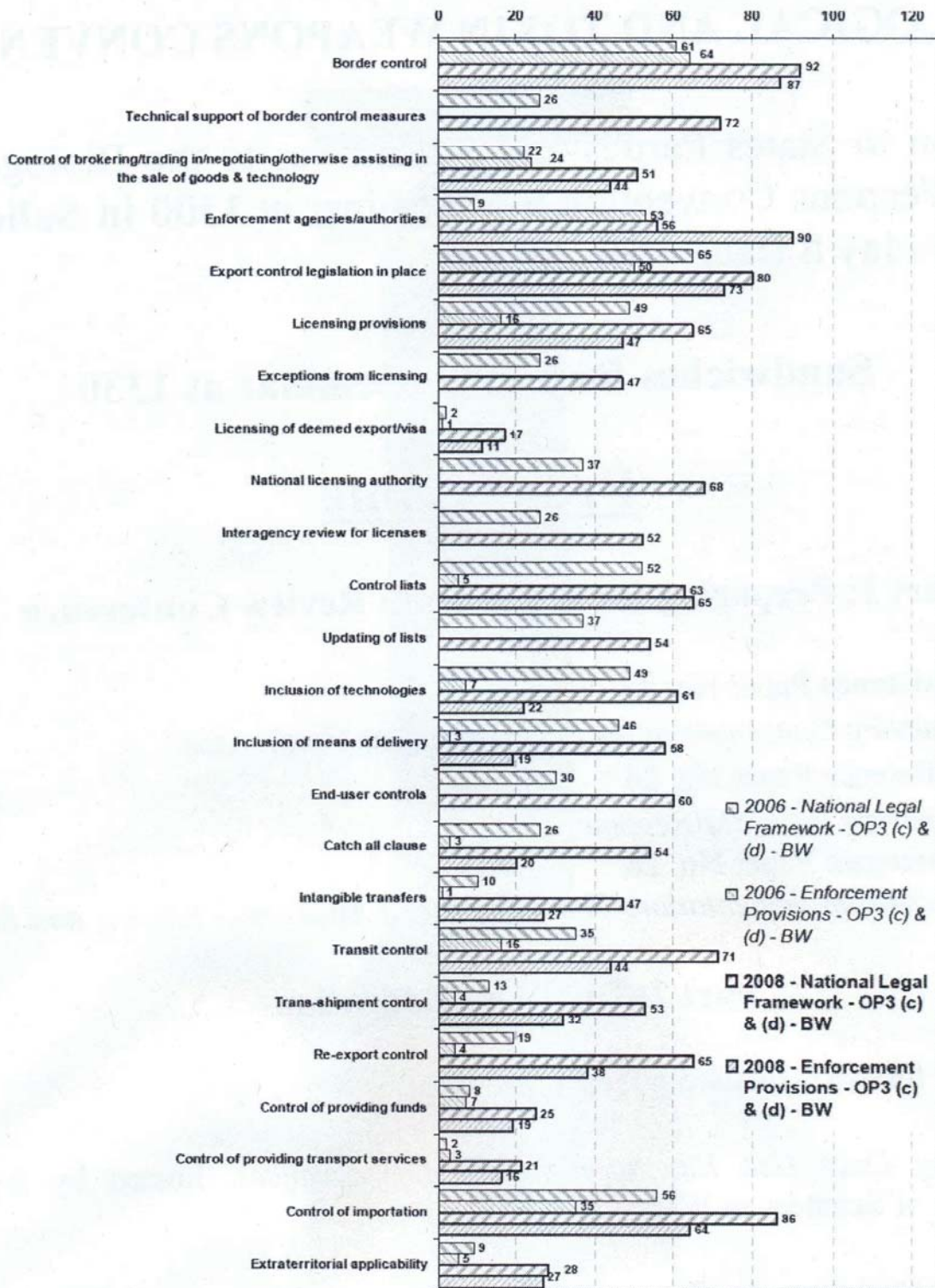
31. The 2008 report draws the following overall conclusions:

The new reports submitted by a number of States since 2006 and the additional information received from other States, or otherwise identified from official governmental sources, have enabled the Committee to present a more complete picture of the measures already in place or planned in the near future. Thus, it has been possible to demonstrate a qualitative improvement in progress towards achieving full implementation of the resolution.

Notwithstanding that progress, the Committee concludes that Member States need to do far more than they have already done to implement resolution 1540 (2004).

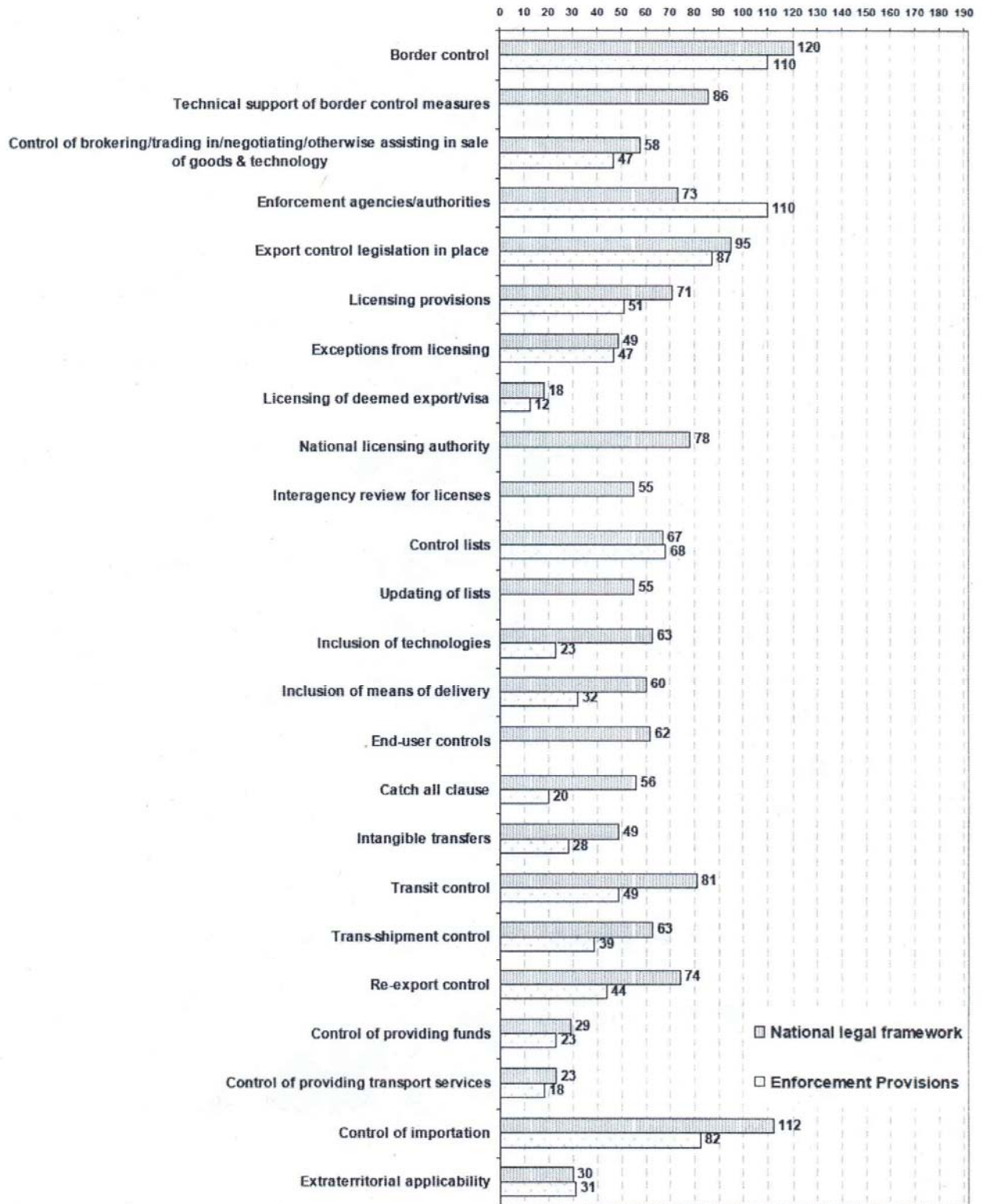
Annex XVI.A

Progress of implementation as reflected in the matrices of Member States: comparative information for 2006 and 2008 for the 127 States that reported by 2006 — paragraph 3 (c) and (d) — biological weapons and related materials



Annex XVI.B

Current assessment of implementation for 192 Member States — paragraph 3 (c) and (d) — biological weapons and related materials



32. A further comprehensive review was carried out by the 1540 Committee in 2009. It was, however, specified⁹⁰ that *The final outcome of the review should not constitute an update of the report of the Committee on compliance, presented in July 2008, but rather be of a complementary nature.* The subsequent report⁹¹ of the 2009 comprehensive review included the following observations:

*26. In addition, the comprehensive review acknowledged the significant number of measures that States have taken to implement resolution 1540 (2004) obligations, but identified some areas in which States have adopted fewer measures, such as **biological weapons**, means of delivery, national control lists, and access to related materials and financing of prohibited or illicit proliferation activities. [Emphasis added]*

and

29. It was also recognized that in the framework of its activities the Committee should continue to raise awareness about the multilateral treaties whose aim is to prevent the proliferation of or eliminate weapons of mass destruction so as to contribute to their universality.

33. It is also to be noted that on 20 April 2011, the Security Council adopted Resolution 1977 (2011)⁹² that includes in its operative paragraphs:

2. Decides to extend the mandate of the 1540 Committee for a period of 10 years until 25 April 2021;

3. Decides that the 1540 Committee will conduct a comprehensive review on the status of implementation of resolution 1540 (2004), both after five years and prior to the renewal of its mandate, including, if necessary, recommendations on adjustments to the mandate, and will submit to the Security Council a report on the conclusions of those reviews, and decides that, accordingly, the first review should be held before December 2016;

In regard to collaboration with international, regional and sub-regional organisations, the resolution states:

18. Calls upon relevant international, regional and subregional organizations to designate and provide the 1540 Committee by 31 August 2011 with a point of contact or coordinator for the implementation of resolution 1540 (2004); and encourages them to enhance cooperation and information sharing with the 1540 Committee on technical assistance and all other issues of relevance for the implementation of resolution 1540 (2004);

⁹⁰ United Nations Security Council, *Letter dated 27 March 2009 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2009/170, 1 April 2009.

⁹¹ United Nations Security Council, *Letter dated 29 January 2010 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2010/52, 1 February 2010.

⁹² United Nations Security Council, *Resolution 1977 (2011) Adopted by the Security Council at its 6518th meeting, on 20 April 2011*, S/RES/1977(2011), 20 April 2011.

It would thus be appropriate for the States Parties to the BTWC to agree that, on practical and functional grounds, the Implementation Support Unit should provide the 1540 Committee with a point of contact or coordinator.

34. The 1540 Committee has prepared matrices for each of the Member States of the United Nations which following approval by the Committee in November and December 2010 are available at <http://www.un.org/sc/1540/1540matrix.shtml>. This in *OP 3 (c) and (d) and related matters from OP 6 and OP 10 - Controls of BW including Related Materials* requests States to answer the question

Which of the following legislation procedures, measures, agencies exist to control border crossings, export/import and other transfers of BW and Related Materials? Can violators be penalized?

in regard to some 26 categories:

- 1 *Border control*
- 2 *Technical support of border control measures*
- 3 *Control of brokering, trading in, negotiating, otherwise assisting in sale of goods and technology*
- 4 *Enforcement agencies/authorities*
- 5 *Export control legislation in place*
- 6 *Licensing provisions*
- 7 *Individual licensing*
- 8 *General licensing*
- 9 *Exceptions from licensing*
- 10 *Licensing of deemed export/visa*
- 11 *National licensing authority*
- 12 *Interagency review for licenses*
- 13 *Control lists*
- 14 *Updating of lists*
- 15 *Inclusion of technologies*
- 16 *Inclusion of means of delivery*
- 17 *End-user controls*
- 18 *Catch all clause*
- 19 *Intangible transfers*
- 20 *Transit control*
- 21 *Trans-shipment control*
- 22 *Re-export control*
- 23 *Control of providing funds*
- 24 *Control of providing transport services*
- 25 *Control of importation*
- 26 *Extraterritorial applicability*
- 27 *Other*

These matrices provide a valuable resource that can be drawn upon by the States Parties to the BTWC in promoting the implementation of Article III of the Convention.

35. The States Parties to the BTWC at the Seventh Review Conference need to apply the same rigorous understanding of their own undertakings under Article III in order therefore to

address the requirements *not to transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce*. This should be understood to include unwitting assistance through negligence or recklessness. The requirements of SCR 1540 for all States to pursue at the earliest opportunity the development of national control lists and for all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to **prevent** illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials should be reflected as regards biological weapons, their means of delivery, and related materials, and extended beyond illegal trafficking alone, in the Article III section of the *Final Declaration of the Seventh Review Conference*.

European Union Joint Actions

36. A further development has been the adoption by the European Union of a Joint Action 2006/184/CFSP⁹³. This Joint Action carried out in 2006 and 2007 had as one of its objectives *support for the implementation of the BTWC by the States Parties through the carrying out of a project aimed at assistance to States Parties for the national implementation of the BTWC, in order to ensure that States Parties transpose the international obligations of the BTWC into their national legislation and administrative measures*. This set out three common elements that must be achieved in the national implementing approach of the States Parties as being:

(i) adoption of national legislation, including penal legislation, which encompasses the full scope of the prohibitions of the Convention;

*(ii) effective regulations or legislation to **control and monitor transfers of relevant dual-use technologies**;*

(iii) effective implementation and enforcement to prevent violations and to sanction breaches. [Emphasis added]

37. Although the subsequent Joint Action 2008/858/CFSP⁹⁴ whilst promoting universalisation, national implementation, submission of CBMs and supporting the Inter-Sessional Process makes no mention of *effective regulations or legislation to control and monitor transfers of relevant dual-use technologies* in the Joint Action itself, it is good that the website for the Joint Action at <http://www.unog.ch/bwc> in regard to national implementation does include the following elements:

⁹³ European Union, *Council Joint Action 2006/184/CFSP of 27 February 2006 in support of the Biological and Toxin Weapons Convention, in the framework of the EU Strategy against the Proliferation of Weapons of Mass Destruction*, Official Journal of the European Union, L 65/51, 7.3.2006.

⁹⁴ European Union, *Council Joint Action 2008/858/CFSP of 10 November 2008 in support of the Biological and Toxin Weapons Convention, in the framework of the EU Strategy against the Proliferation of Weapons of Mass Destruction*, Official Journal of the European Union, L 302/29, 13.11.2008.

OBJECTIVE	ASSISTANCE AVAILABLE
Effective means of national implementation and enforcement	Legal advice related to implementation, enforcement, penalization, import-export controls etc.
	Drafting assistance for legislative and administrative measures, incl. enforcement, prohibition, prevention, penalization, import-export controls etc.

Issues for the Seventh Review Conference

38. The principal Article III issue for the States Parties to consider at the Seventh Review Conference will be to call upon all States Parties to ensure that they do not *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 the Convention*. States Parties should be required to take and enforce effective measures to establish domestic controls to prevent the proliferation of biological weapons and their means of delivery, including by establishing appropriate controls over related materials. This should have been given an added impetus by the requirements of Security Council Resolution 1540 (2004)⁹⁵. As already indicated, the requirements of SCR 1540 (2004) could usefully be reflected in the Article III section of the *Final Declaration*.

39. As there continues to be great concern about the dangers of terrorist attack and other criminal activity, including the use of biological agents, it can be expected that the States Parties will be keen to adopt strong language in their *Final Declaration* at the Seventh Review Conference urging all States Parties to adopt any necessary national measures and national controls over biological materials.

40. At the Seventh Review Conference it will be necessary to identify the ways and means to ensure that individuals and subnational groups are effectively prevented from acquiring through transfers, biological agents and toxins for other than peaceful purposes. Language needs to be adopted in both the Article III and Article IV sections of the *Final Declaration* of the Seventh Review Conference to require the strengthening of national controls of pathogens and toxins both internally and in regard to international transfers.

Points for the Final Document

41. It is recommended that the Seventh Review Conference in its *Final Declaration* would be similar to that adopted at the Sixth Review Conference but with stronger encouragement of States Parties to enact national measures and with a clearer recognition of the requirements of Security Council Resolution 1540(2004) together with a recognition of the value of the Implementation Support Unit working closely with the 1540 Committee. Consideration is given here to the Article by Article *Final Declaration* and then to the *Part III: Decisions and Recommendations* section.

⁹⁵ United Nations, *Resolution 1540 (2004) Adopted by the Security Council at its 4956th meeting, on 28 April 2004*, S/RES/1540 (2004), 28 April 2004.

Article III in the Article by Article *Final Declaration*

42. The language for Article III should start with similar points to those for this Article in 2006:

- a. To reaffirm that Article III is sufficiently comprehensive to cover any recipient whatsoever at the international, national or sub-national levels.
- b. To call for appropriate measures, including effective national export controls, by all States Parties to implement this Article, in order to ensure that direct and indirect transfers relevant to the Convention, to any recipient whatsoever, are authorized only when the intended use is for purposes not prohibited under the Convention.
- c. To call for appropriate measures to ensure that States Parties do not in any way, knowingly or unwittingly through negligence or recklessness, assist, encourage or induce any transfers for purposes prohibited under the Convention.
- d. To call for appropriate measures by all States Parties to ensure that biological agents and toxins relevant to the Convention are protected and safeguarded, including through measures to control access to and handling of such agents and toxins.
- e. To reiterate that States Parties should not use the provisions of this Article to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials under Article X.
- f. To recall that United Nations Security Council Resolution 1540 (2004) places obligations on all states and is consistent with the provisions of the Convention.
- g. To note that Resolution 1540 affirms support for the multilateral treaties whose aim is to eliminate or prevent proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability.
- h. To note that information provided to the United Nations by states in accordance with Resolution 1540 may provide a useful resource for States Parties in fulfilling their obligations under this and other Articles of the Convention.

43. The obligations under the Convention together with those under Resolution 1540 might with advantage be addressed by further points:

- i. Taking note of SCR 1540 (2004), to agree that all States Parties, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any recipient whatsoever, including any non-State actor, to manufacture, acquire, possess, develop, transport, transfer or use biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them.
- j. To agree that all States Parties shall take and enforce effective measures to establish

domestic controls to prevent the proliferation of biological weapons and their means of delivery, including by establishing appropriate controls over related materials which could be used for the design, development, production or use of biological weapons and their means of delivery, and to this end shall:

- (a) develop and maintain appropriate effective physical protection measures;
- (b) develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;
- (c) establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations.

k. To recognize the utility of effective national control lists and calls upon all States Parties, when necessary, to pursue at the earliest opportunity the development of such lists.

l. To further recognize that some States Parties may require assistance in implementing such measures within their territories and invites States Parties in a position to do so to offer assistance as appropriate in response to specific requests to the States Parties lacking the legal and regulatory infrastructure, implementation experience and/or resources for fulfilling the above provisions.

44. In addition, as noted earlier, the outcome of the Intersessional Programme in 2008 might with advantage be reflected by the following points:

m. To recognize that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention.

n. To note that pursuing biosafety and biosecurity measures could also contribute to the fulfilment of their other respective international obligations and agreements, such as the revised International Health Regulations of the WHO, and relevant codes of the World Organisation for Animal Health (OIE), and to also recall United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention.

o. To agree that national authorities should define and implement biosafety and biosecurity concepts in accordance with relevant national laws, regulations and policies, consistent with the provisions of the Convention and taking advantage of relevant guidance and standards, such as those produced by the FAO, OIE and WHO.

p. To agree that national governments, supported by other relevant organisations as appropriate, should use tools such as: accreditation, certification, audit or licensing for facilities, organizations or individuals; requirements for staff members to have appropriate training in biosafety and biosecurity; mechanisms to check qualifications, expertise and training of individuals; national criteria for relevant activities; and national lists of relevant agents, equipment and other resources.

Decisions and Recommendations section of the Final Document

45. The section addressing the *Implementation Support Unit* in the *Part III: Decisions and Recommendations* section should include specific mention of liaising as appropriate with the 1540 Committee in the context of the comprehensive implementation of the BTWC by including the following point:

a. to promote the comprehensive implementation of the Convention by liaising as appropriate with the 1540 Committee.

ARTICLE IV: NATIONAL IMPLEMENTATION: LEGISLATIVE AND REGULATORY ASPECTS

by Nicholas A Sims & Graham S. Pearson

Consideration of Article IV at the Sixth Review Conference

1. Article IV of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*⁹⁶ in respect of Article IV stated that:

11. The Conference reaffirms the commitment of States Parties to take the necessary national measures under this Article. The Conference also reaffirms that the enactment and implementation of necessary national measures under this Article would strengthen the effectiveness of the Convention. In this context, the Conference calls upon States Parties to adopt, in accordance with their constitutional processes, legislative, administrative, judicial and other measures, including penal legislation, designed to:

(i) enhance domestic implementation of the Convention and ensure the prohibition and prevention of the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipments and means of delivery as specified in Article I of the Convention;

(ii) apply within their territory, under their jurisdiction or under their control anywhere and apply, if constitutionally possible and in conformity with international law, to actions taken anywhere by natural or legal persons possessing their nationality;

(iii) ensure the safety and security of microbial or other biological agents or toxins in laboratories, facilities, and during transportation, to prevent unauthorized access to and removal of such agents or toxins.

12. The Conference welcomes those measures taken by States Parties in this regard, and reiterates its call to any State Party that has not yet taken any necessary measures to do so without delay. The Conference encourages States Parties to provide appropriate information on any such measures they have taken, as well as any other useful information on their implementation, to the United Nations Department for Disarmament Affairs.

⁹⁶ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

13. *The Conference reaffirms the commitment of States Parties to take the necessary national measures to strengthen methods and capacities for surveillance and detection of outbreaks of disease at the national, regional and international levels.*

14. *The Conference urges the inclusion in medical, scientific and military educational materials and programmes of information on the Convention and the 1925 Geneva Protocol. The Conference urges States Parties to promote the development of training and education programmes for those granted access to biological agents and toxins relevant to the Convention and for those with the knowledge or capacity to modify such agents and toxins, in order to raise awareness of the risks, as well as of the obligations of States Parties under the Convention.*

15. *The Conference encourages States Parties to take necessary measures to promote awareness amongst relevant professionals of the need to report activities conducted within their territory or under their jurisdiction or under their control that could constitute a violation of the Convention or related national criminal law. In this context, the Conference recognises the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and calls upon States Parties to support and encourage their development, promulgation and adoption.*

16. *The Conference urges States Parties with relevant experience in legal and administrative measures for the implementation of the provisions of the Convention, to provide assistance on request to other States Parties. The Conference also encourages such initiatives on a regional basis.*

17. *The Conference recalls United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention. The Conference notes that Resolution 1540 affirms support for the multilateral treaties whose aim is to eliminate or prevent proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability. The Conference also notes that information provided to the United Nations by states in accordance with Resolution 1540 may provide a useful resource for States Parties in fulfilling their obligations under this Article.*

18. *The Conference encourages States Parties to designate a national focal point for coordinating national implementation of the Convention and communicating with other States Parties and relevant international organizations.*

19. *The Conference reaffirms that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the Convention.*

3. The nine paragraphs agreed at the Sixth Review Conference further underlined the recognition by the States Parties of Article IV as this was an increase over the seven paragraphs agreed at the Fourth Review Conference⁹⁷ held from 25 November to 6 December 1996:

⁹⁷ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

1. The Conference underlines the importance of Article IV. It reaffirms the commitment of States Parties to take the necessary national measures under this Article, in accordance with their constitutional processes. These measures are to ensure the prohibition and prevention of the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention anywhere within their territory, under their jurisdiction or under their control, in order to prevent their use for purposes contrary to the Convention. The States Parties recognize the need to ensure, through the review and/or adoption of national measures, the effective fulfilment of their obligations under the Convention in order, *inter alia*, to exclude use of biological and toxin weapons in terrorist or criminal activity.

2. The Conference notes those measures already taken by a number of States Parties in this regard, for example the adoption of penal legislation, and reiterates its call to any State Party that has not yet taken any necessary measures to do so immediately, in accordance with its constitutional processes. Such measures should apply within its territory, under its jurisdiction or under its control anywhere. The Conference invites each State Party to consider, if constitutionally possible and in conformity with international law, the application of such measures also to actions taken anywhere by natural persons possessing its nationality.

3. The Conference notes the importance of:

- Legislative, administrative and other measures designed to enhance domestic compliance with the Convention;

- Legislation regarding the physical protection of laboratories and facilities to prevent unauthorized access to and removal of microbial or other biological agents, or toxins;

- 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.

4. The Conference believes that such measures which States Parties might undertake in accordance with their constitutional processes would strengthen the effectiveness of the Convention, as requested by the Second and Third Review Conferences.

5. The Conference notes that some States Parties, as requested by the Second Review Conference, have provided to the United Nations Department for Disarmament Affairs information on the texts of specific legislation enacted or other measures taken to assure domestic compliance with the Convention. The Conference invites these States Parties, and encourages all States Parties, to provide such information and texts in the future. In this regard the Conference welcomes information provided by States Parties in response to the confidence-building measure agreed to at the Third Review Conference entitled "Declaration of legislation, regulations and other measures". In addition, the Conference encourages all States Parties to provide any useful information on the implementation of such measures.

6. *The Conference encourages cooperation and initiatives, including regional ones, towards the strengthening and implementation of the Biological and Toxin Weapons Convention regime.*

7. *The Conference reaffirms that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the Convention.*

4. It is also noted that *Part III, Decisions and Recommendations* of the *Final Document* of the Sixth Review Conference included mention of implementation in the context of the decisions relating to the Implementation Support Unit as follows:

Implementation Support Unit

5. *Taking into account the importance of providing administrative support to meetings agreed by the Review Conference as well as comprehensive implementation and universalization of the Convention and the exchange of confidence-building measures, the Conference decides that an “Implementation Support Unit” (ISU) shall be established and will consist of three full time staff members within the Geneva Branch of the United Nations Department for Disarmament Affairs, funded by States Parties for the period from 2007-2011, to perform the following tasks:*

5. In addition, the Sixth Review Conference agreed that two of the topics to be considered by the Intersessional Process in 2007 were directly related to implementation:

(i) *Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.*

(ii) *Regional and sub-regional cooperation on implementation of the Convention.*

Analysis of the Article IV paragraphs of the Sixth Review Conference

6. The Article IV section of the *Final Declaration* comprised nine paragraphs at the Sixth Review Conference in 2006 instead of the seven in 1996. Paragraph 11 is a much clearer and stronger version of what had appeared previously as it includes the requirement for ‘*including penal legislation*’:

11. *The Conference reaffirms the commitment of States Parties to take the necessary national measures under this Article. The Conference also reaffirms that the enactment and implementation of necessary national measures under this Article would strengthen the effectiveness of the Convention. In this context, the Conference calls upon States Parties to adopt, in accordance with their constitutional processes, legislative, administrative, judicial and other measures, **including penal legislation**, designed to:*

(i) *enhance domestic implementation of the Convention and ensure the prohibition and prevention of the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipments and means of delivery as specified in Article I of the Convention;*

(ii) *apply within their territory, under their jurisdiction or under their control anywhere and apply, if constitutionally possible and in conformity with*

international law, to actions taken anywhere by natural or legal persons possessing its nationality;
(iii) ensure the safety and security of microbial or other biological agents or toxins in laboratories, facilities, and during transportation, to prevent unauthorized access to and removal of such agents or toxins. [Emphasis added].

7. Paragraph 13 is also new calling for measures for surveillance of outbreaks of disease:

13. The Conference reaffirms the commitment of States Parties to take the necessary national measures to strengthen methods and capacities for surveillance and detection of outbreaks of disease at the national, regional and international levels.

8. Paragraph 14 has a first sentence which reflects the previous paragraph 3 but then has a new second sentence which addresses training and education:

The Conference urges States Parties to promote the development of training and education programmes for those granted access to biological agents and toxins relevant to the Convention and for those with the knowledge or capacity to modify such agents and toxins, in order to raise awareness of the risks, as well as of the obligations of States Parties under the Convention.

9. Paragraph 15, also new, takes this message further to call for professionals to report activities conducted in breach of the Convention and also to recognize the importance of codes of conduct:

15. The Conference encourages States Parties to take necessary measures to promote awareness amongst relevant professionals of the need to report activities conducted within their territory or under their jurisdiction or under their control that could constitute a violation of the Convention or related national criminal law. In this context, the Conference recognises the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and calls upon States Parties to support and encourage their development, promulgation and adoption.

10. Paragraphs 16, 17 and 18 are all new addressing provision of assistance, Security Council Resolution 1540 and designation of a national focal point respectively:

16. The Conference urges States Parties with relevant experience in legal and administrative measures for the implementation of the provisions of the Convention, to provide assistance on request to other States Parties. The Conference also encourages such initiatives on a regional basis.

17. The Conference recalls UN Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention. The Conference notes that Resolution 1540 affirms support for the multilateral treaties whose aim is to eliminate or prevent proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability. The Conference also notes that information provided to the United Nations by states in accordance with Resolution 1540 may provide a useful resource for States Parties in fulfilling their obligations under this Article.

18. *The Conference encourages States Parties to designate a national focal point for coordinating national implementation of the Convention and communicating with other States Parties and relevant international organizations.*

Developments since the Sixth Review Conference

Intersessional Process in 2007

11. The two topics addressed in the Intersessional Process in 2007 were both directly related to implementation:

(i) Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.

(ii) Regional and sub-regional cooperation on implementation of the Convention.

12. The substantive outcome paragraphs in the report⁹⁸ of the Meeting of States Parties in 2007 stated that:

19. Having considered ways and means to enhance national implementation of the Convention, and recognising the need to take into account their respective national circumstances and legal and constitutional processes, the States Parties agreed on the fundamental importance of effective national measures in implementing the obligations of the Convention. The States Parties further agreed on the need to nationally manage, coordinate, enforce and regularly review the operation of these measures to ensure their effectiveness. It was recognised that full implementation of all the provisions of the Convention should facilitate economic and technological development and international cooperation in the field of peaceful biological activities.

20. The States Parties recognised the value of ensuring that national implementation measures:

(i) penalize and prevent activities that breach any of the prohibitions of the Convention, and are sufficient for prosecuting prohibited activities;

(ii) prohibit assisting, encouraging or inducing others to breach any of the prohibitions of the Convention;

(iii) are not limited to enacting relevant laws, but also strengthen their national capacities, including the development of necessary human and technological resources;

(iv) include an effective system of export/import controls, adapted to national circumstances and regulatory systems;

⁹⁸ United Nations, Meeting 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, 10-14 December 2007, *Report of the 2007 Meeting of States Parties*, BWC/MSP/2007/5, 7 January 2008. Available at <http://www.opbw.org>

(v) avoid hampering the economic and technological development of States Parties, or international cooperation in the field of peaceful uses of biological science and technology.

21. Recognising the importance of developing a coordinated and harmonised domestic mechanism to implement the obligations of the Convention, the States Parties agreed on the value of moving from adjacency to synergy, with their governments taking the lead by promoting cooperation and coordination among domestic agencies; of clearly defining the roles and responsibilities of each; and of raising awareness of the Convention among all relevant stakeholders, including policy makers, the scientific community, industry, academia, media and the public in general, and improving dialogue and communication among them. The States Parties noted that, where appropriate, the establishment of a central body or lead organization and the creation of a national implementation plan may be useful in this regard.

22. The States Parties agreed on the value of ensuring effective enforcement of their legislative and regulatory measures, including through building capacity to collect evidence, to develop early-warning systems, to coordinate between relevant agencies, to train law enforcement personnel, and to provide enforcement agencies with the necessary scientific and technological support.

23. Recognising that implementing the Convention is a continuing process, the States Parties agreed on the importance of regular national reviews of the adopted measures, including by ensuring the continued relevance of their national measures in light of scientific and technological developments; by updating lists of agents and equipment relevant to safety, security and transfer regimes; and by implementing additional measures as required.

24. Having considered regional and sub-regional cooperation on implementation of the Convention, the States Parties agreed that such cooperation can complement and reinforce national measures, which remain the obligation of States Parties. In this context, the States Parties agreed on the value of regional and sub-regional efforts to, where appropriate:

(i) develop common approaches to implementing the Convention and provide relevant assistance and support, building upon shared languages and legal traditions where appropriate;

(ii) engage regional resources (such as those concerned with police, customs, public health or agriculture) which may have relevant expertise or technical knowledge;

(iii) include implementation of the Convention on the agendas of regional meetings and activities, including ministerial and high-level regional consultations.

25. The States Parties recognised that adequate resources are necessary for pursuing both effective national implementation measures and regional and sub-regional cooperation, and in this context called on States Parties in a position to do so to provide technical assistance and support to States Parties requesting it. In this context, the States Parties agreed on the value of the Implementation Support Unit,

and of making full use of resources and expertise available from other States Parties and relevant international and regional organizations.

26. The States Parties agreed on the value of promoting international cooperation at all levels, in order to exchange experiences and best practices on the implementation of the Convention. To facilitate the sharing of information on national implementation and regional cooperation, States Parties are urged to nominate a national point of contact in accordance with the decision of the Sixth Review Conference, and to inform the Implementation Support Unit of their national measures and any updates or changes to them (for example, through the submission of confidence-building measures), and of any relevant regional or sub-regional activities.

13. Consideration is given later as to how the Seventh Review Conference should address the outcome of the 2007 meetings and decide on any further action.

Intersessional Process in 2008

14. The two topics considered in the Intersessional Process in 2008 were also directly related to implementation:

(iii) National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.

(iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

15. The substantive outcome paragraphs in the report⁹⁹ of the Meeting of States Parties stated that:

19. With respect to both topics of the Meeting, States Parties recognised the need for proportional measures, for carefully assessing risks, for balancing security concerns against the need to avoid hampering the peaceful development of biological science and technology, and for taking national and local circumstances into account.

20. Having considered national, regional and international measures to improve biosafety and biosecurity, and recognising the need to take into account respective national circumstances and legal and regulatory processes, States Parties noted their common understanding that in the context of the Convention, biosafety refers to principles, technologies, practices and measures implemented to prevent the accidental release of, or unintentional exposure to, biological agents and toxins, and biosecurity refers to the protection, control and accountability measures implemented to prevent the loss, theft, misuse, diversion or intentional release of biological agents and toxins and related resources as well as unauthorized access to, retention or transfer of such material.

⁹⁹ United Nations, Meeting 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, 2008 Meeting, Geneva, 1-5 December 2008, *Report of the Meeting of States Parties*, BWC/MSP/2008/5, 12 December 2008. Available at <http://www.opbw.org>

21. *Recognising that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention, States Parties agreed on the value of:*

(i) National authorities defining and implementing biosafety and biosecurity concepts in accordance with relevant national laws, regulations and policies, consistent with the provisions of the Convention and taking advantage of relevant guidance and standards, such as those produced by the FAO, OIE and WHO;

(ii) National governments taking the leading role, including by nominating a lead agency (or focal point), specifying mandates for participating departments or agencies, ensuring effective enforcement and regular review of relevant measures, and integrating such measures into relevant existing arrangements at the national, regional and international level;

(iii) National governments, supported by other relevant organisations as appropriate, using tools such as: accreditation, certification, audit or licensing for facilities, organizations or individuals; requirements for staff members to have appropriate training in biosafety and biosecurity; mechanisms to check qualifications, expertise and training of individuals; national criteria for relevant activities; and national lists of relevant agents, equipment and other resources;

(iv) Ensuring measures adopted are practical, sustainable, enforceable, are readily understood and are developed in concert with national stakeholders¹⁰⁰, avoid unduly restricting the pursuit of the biological sciences for peaceful purposes, are adapted for local needs, and appropriate for the agents being handled and the work being undertaken, including through applying appropriate risk assessment and risk management strategies;

(v) Building networks between scientific communities and academic institutions and increasing interaction with professional associations and working groups at the national regional and international level, including through dedicated workshops, seminars, meetings and other events, as well as using modern information technologies and appropriate risk communication strategies and tools;

(vi) International cooperation on biosafety and biosecurity at the bilateral, regional and international levels, in particular to overcome difficulties encountered by some States Parties where additional resources, improved infrastructure, additional technical expertise, appropriate equipment and increased financial resources are needed to build capacity;

¹⁰⁰ *In this report, the term “stakeholders” refers, as appropriate according to national circumstances, to relevant actors such as scientists, researchers and other professionals in the life sciences; editors and publishers of life science publications and websites; and organizations, institutions, government agencies, and private companies acting in life sciences research or education, and any other legal entity that is involved in the stockpiling, transport or use of biological agents, toxins or other resources relevant to the Convention.*

(vii) The Implementation Support Unit, in accordance with its mandate, facilitating networking activities, maintaining lists of relevant contacts, and acting as a clearing house for opportunities for international cooperation and assistance on biosafety and biosecurity, including through tools such as a database containing information on such opportunities for international cooperation and assistance.

22. States Parties noted that pursuing biosafety and biosecurity measures could also contribute to the fulfilment of their other respective international obligations and agreements, such as the revised International Health Regulations of the WHO, and relevant codes of the World Organisation for Animal Health (OIE). The States Parties recalled United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention.

23. Recalling that the Sixth Review Conference stressed the legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes, States Parties recognised the value of cooperation and assistance to build biosafety and biosecurity capacity, particularly in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research.

24. States Parties encouraged those States Parties in a position to do so to provide assistance, upon request, to other States Parties to enact and improve national legislation to implement biosafety and biosecurity; to strengthen laboratory infrastructure, technology, security and management; to conduct courses and provide training; and to help incorporate biosafety and biosecurity in existing efforts to address emerging or re-emerging diseases. States Parties noted that where relevant assistance is currently available bilaterally and regionally, as well as through international organisations, those seeking assistance are encouraged, as appropriate, to make use of existing offers to the fullest extent possible.

25. Having considered the oversight of science, States Parties recognised the value of developing national frameworks to prohibit and prevent the possibility of biological agents or toxins being used as weapons, including measures to oversee relevant people, materials, knowledge and information, in the private and public sectors and throughout the scientific life cycle. Recognising the need to ensure that such measures are proportional to risk, do not cause unnecessary burdens, are practical and usable and do not unduly restrict permitted biological activities, States Parties agreed on the importance of involving national stakeholders in all stages of the design and implementation of oversight frameworks. States Parties also noted the value of harmonizing, where possible and appropriate, national, regional and international oversight efforts.

26. States Parties recognized the importance of ensuring that those working in the biological sciences are aware of their obligations under the Convention and relevant national legislation and guidelines, have a clear understanding of the content, purpose and foreseeable social, environmental, health and security consequences of their activities, and are encouraged to take an active role in addressing the threats

posed by the potential misuse of biological agents and toxins as weapons, including for bioterrorism. States Parties noted that formal requirements for seminars, modules or courses, including possible mandatory components, in relevant scientific and engineering training programmes and continuing professional education could assist in raising awareness and in implementing the Convention.

27. States Parties agreed on the value of education and awareness programmes:

(i) Explaining the risks associated with the potential misuse of the biological sciences and biotechnology;

(ii) Covering the moral and ethical obligations incumbent on those using the biological sciences;

(iii) Providing guidance on the types of activities which could be contrary to the aims of the Convention and relevant national laws and regulations and international law;

(iv) Being supported by accessible teaching materials, train-the-trainer programmes, seminars, workshops, publications, and audio-visual materials;

(v) Addressing leading scientists and those with responsibility for oversight of research or for evaluation of projects or publications at a senior level, as well as future generations of scientists, with the aim of building a culture of responsibility;

(vi) Being integrated into existing efforts at the international, regional and national levels.

28. Having considered codes of conduct, States Parties agreed that such codes can complement national legislative, regulatory and oversight frameworks and help guide science so that it is not misused for prohibited purposes. States Parties recognised the need to further develop strategies to encourage national stakeholders to voluntarily develop, adopt and promulgate codes of conduct in line with the common understandings reached by the 2005 Meeting of States Parties and taking into account discussions at the 2008 Meeting of Experts.

29. States Parties noted the importance of balancing "top-down" government or institutional controls with "bottom-up" oversight by scientific establishments and scientists themselves. Within the framework of oversight, States Parties recognised the value of being informed about advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention and the necessity of strengthening ties with the scientific community. States Parties welcomed the important contributions made to their work by the scientific community and academia, including national and international academies of science and professional associations, as well as industry-led initiatives to address recent developments in science and technology, and encouraged greater cooperation between scientific bodies in various States Parties.

16. Consideration is given later in this chapter as to how the Seventh Review Conference should address the outcome of the 2008 meetings and decide on any further action. However,

those aspects relating to education, outreach and codes of conduct are addressed in the chapter entitled *Article IV: National Implementation: Education, Outreach and Codes of Conduct* in these *Key Points*.

ISU Annual Reports on Implementation of the Convention

17. The annual reports of the Implementation Support Unit from 2007 through to 2010 have included a section entitled *III. Implementation of the Convention*. The report¹⁰¹ in 2007 noted that one State Party contacted the Unit requesting assistance with national implementation of the Convention and that the ISU was in the course of facilitating communication between this State Party and a number of States Parties which might be in a position to offer the required assistance. It also reported that the ISU had revised and updated the 2003 Information Repository originally compiled to assist States Parties with the 2003 meetings on national implementation and biosecurity. The resulting National Implementation Database in December 2007 included a total of 2022 measures, from 119 States Parties (representing 76% of the then States Parties), five signatories, six states not party, and one regional organisation. The NID is available on the ISU website (<http://www.unog.ch/bwc/NID>). In addition, the 2007 report noted that the ISU had collected details of national points of contact for the Convention and that in December 2007 52 States Parties had nominated national points of contact as requested by the Sixth Review Conference. Finally, it reported that a visit had been made to the Organisation for the Prohibition of Chemical Weapons (OPCW) in The Hague in November 2007² to learn from the experience of that organisation in assisting States Parties to the CWC with national implementation.

18. The ISU report¹⁰² in 2008 noted that two States Parties had contacted the ISU requesting assistance with national implementation of the Convention. One State Party sought assistance in drafting and enacting relevant national legislation. The other requested assistance in developing enforcement capacity. In the first case, the ISU provided examples of legislation from the region and in the language of the country. The Unit then helped to find an assistance provider, which had subsequently carried out a survey of existing legislation in the State Party and was, with the support of several other States Parties, in the process of planning an in-country drafting assistance visit. In the second case, the Unit was asked to help in finding assistance on several specific aspects of developing law enforcement capacity to deal with chemical and biological weapons. The Unit brokered the provision of assistance from relevant international organisations, including INTERPOL and the OPCW, and was in the process of identifying potential providers of bilateral assistance. The ISU remained in contact with both States Parties and would continue to provide assistance and clearing-house activities in accordance with its mandate. The report also stated that The ISU maintained and updated the online *National Implementation Database* (NID) and that this in November 2008 included a total of 2010 measures [12 less than in December 2007], from 121 [2 more

¹⁰¹ United Nations, Meeting 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, 10 - 14 December 2007, *Report of the Implementation Support Unit*, BWC/MSP/2007/3, 4 December 2007. Available at <http://www.opbw.org>

¹⁰² United Nations, Meeting 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, 1 - 5 December 2008, *2008 Report of the Implementation Support Unit*, BWC/MSP/2008/3, 28 November 2008. Available at <http://www.opbw.org>

than in December 2007] States Parties (representing 75 per cent of the then States Parties), four signatories, five states not party, and one regional organisation.

19. In addition, the 2008 report noted that at the request of the Chairman, the Unit also developed two *Compendiums of National Activities* (CNA) for the topics under consideration in 2008. These compendiums provided a repository for details of activities of States Parties relevant to biosafety, biosecurity, oversight of science, education, and awareness-raising, as provided in working papers, statements, presentations and other communications. The compendiums were developed to provide a regularly-updated central gateway for accessing information provided to the meetings, and a convenient resource showing how legislative and regulatory measures were put into practice in different settings. As of 1 November 2008, the *Compendium of Biosafety and Biosecurity Activities* covered nine States Parties and the *Compendium of Oversight of Science, Education and Awareness Raising* covered four States Parties. Finally, the ISU continued to collect details of national points of contact for the Convention. In November 2008, 65 States Parties had nominated national points of contact as requested by the Sixth Review Conference (an increase of 13 from 2007). In addition, the ISU had contact points for three signatory states, four states not party and one regional organization.

20. The ISU report¹⁰³ in 2009 noted that the ISU was contacted by five States Parties with requests concerning national implementation of the Convention. One State Party contacted the ISU requesting general assistance with national implementation of the Convention. The ISU referred the State Party to the European Union Joint Action in support of the BTWC. One State Party requested assistance in surveying its existing legislation relevant to the Convention, training law enforcement officers, and assistance in building capacity in dealing with illicit trafficking of biological materials. Another State Party also requested assistance with training law enforcement officers, as well as training in the diagnosis and detection of biological agents. The Unit said it was in discussions with relevant providers in order to secure assistance for these States Parties. Finally, two States Parties requested model legislation for the implementation of the Convention in their native languages. The ISU said it was then facilitating the provision of this model legislation and that the ISU would remain in contact with these States Parties and would continue to provide assistance and clearinghouse activities in accordance with its mandate. The report also stated that the ISU had maintained and updated the online *National Implementation Database* (NID) and that this in November 2008 had a total of 2101 measures [91 more than in 2008], from 121 States Parties [the same number as in 2008] (representing 74.2 per cent of the States Parties), four signatories, five states not party, and one regional organisation.

21. In addition, the 2009 report noted that at the request of the Chairman, the Unit also developed three *Compendiums of National Activities* (CNA) for the topics under consideration in 2009. These compendiums performed a similar function to the ones developed for the topics under consideration in 2008. As of 1 November 2009, the *Compendium of Biosafety and Biosecurity Activities* covered 19 States Parties, the *Compendium of Oversight of Science, Education and Awareness Raising* covered 14 States Parties, and the *Compendium of Approaches in the Fields of Disease Surveillance, Detection, Diagnosis, and Containment of Infectious Diseases (Including Efforts to Build Capacity)*

¹⁰³ United Nations, Meeting 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, 7 - 11 December 2009, *2009 Report of the Implementation Support Unit*, BWC/MSP/2009/2, 10 November 2009. Available at <http://www.opbw.org>

covered 24 States Parties. Finally, the ISU continued to collect details of national points of contact for the Convention. In November 2009, 68 States Parties had nominated national points of contact as requested by the Sixth Review Conference (an increase of 3 from 2007). In addition, the ISU had contact points for four signatory states, four states not party and one regional organization.

22. The ISU report¹⁰⁴ in 2010 noted that the ISU was contacted by 14 States Parties seeking assistance on aspects of national implementation. There were six requests connected to legislation, regulations and national coordination bodies. The ISU facilitated contact with the relevant assistance providers, including the European Union Joint Action in Support of the BTWC, and the Verification Research, Training and Information Centre (VERTIC). Another three requests focused on building national awareness of the Convention. These requests were forwarded to the European Union Joint Action in Support of the BTWC. The ISU was also able to directly raise awareness amongst States Parties and international organizations, including by addressing meetings of the African Union and the OIF (Organisation Internationale de la Francophonie). Two states requested assistance relevant to building biosafety and biosecurity capacity. These requests were subsequently brokered with two other States Parties using the information provided in the restricted area of the website. A further two requests focused on law enforcement or border control which were passed on to INTERPOL and the European Union Joint Action in Support of the BTWC. The report also stated that the ISU had maintained and updated the online *National Implementation Database* (NID) and that in November 2010 this included a total of 2160 measures [59 more than in 2009], from 131 States Parties [10 more than in 2009] (representing 80.3 per cent of the States Parties), four signatories, five states not party, and one regional organisation.

23. In addition, the 2010 report noted that at the request of the Chairman, the Unit continued to develop four *Compendiums of National Activities* (CNA). These compendiums performed a similar function to the ones developed for the topics under consideration in 2008 and in 2009. As of 18 November 2010, the *Compendium of Biosafety and Biosecurity Activities* covered 20 States Parties, the *Compendium of Oversight of Science, Education and Awareness Raising* covered 14 States Parties, and *Compendium of Approaches in the Fields of Disease Surveillance, Detection, Diagnosis, and Containment of Infectious Diseases (Including Efforts to Build Capacity)* covered 31 States Parties. The ISU would update these compendiums in light of additional information. The ISU was also developing a *Compendium of Approaches to Respond to Cases of the Alleged Use of Biological or Toxin Weapons*. Finally, the ISU continued to collect details of national points of contact for the Convention. In November 2010, 72 States Parties had nominated national points of contact as requested by the Sixth Review Conference (an increase of four from 2009). In addition, the ISU had contact points for four signatory states, four states not party and one regional organization.

24. It is thus evident that the ISU has been engaged in a range of activities designed to support and assist States Parties who are seeking to improve their national implementation of the Convention.

¹⁰⁴ United Nations, Meeting 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, 6 - 10 December 2010, *2010 Report of the Implementation Support Unit*, BWC/MSP/2009/2, 23 November 2010. Available at <http://www.opbw.org>

EU Joint Action in support of the BTWC

25. In addition to the actions taken by the ISU, the European Union on 10 November 2008 adopted a Council Joint Action 2008/858/CFSP in support of the Biological and Toxin Weapons Convention that runs from May 2009 until 2011 which includes as one of its general objectives *Providing Support for the Implementation of the BWC by the States Parties* that offers¹⁰⁵ the following forms of assistance to States Parties:

OBJECTIVE	ASSISTANCE AVAILABLE
Effective means of national implementation and enforcement	Legal advice related to implementation, enforcement, penalization, import-export controls etc.
Effective means of national implementation and enforcement	Drafting assistance for legislative and administrative measures, incl. enforcement, prohibition, prevention, penalization, import-export controls etc.
Coordination and networking on national level	Awareness-raising workshops on national implementation and enforcement for a wide spectrum of stakeholders – governmental and legislative officials, state authorities, industry, academic and research institutions, NGOs, etc.

26. This Joint Action adopted on 10 November 2008 was one that followed on from Joint Action 2006/184/CFSP adopted on 27 February 2006¹⁰⁶ earlier in the same year in which the Sixth Review Conference took place in November – December 2006. The 2006 Joint Action had as one of its objectives that of *support for implementation of the BTWC by the States Parties of the BTWC* and included organizing a conference in the context of the preparation for the 2006 BTWC Review Conference in order to receive specific needs of requesting States Parties who had yet to fulfil their BTWC obligations. Assistance visits on legal and technical aspects in order to respond to specific needs of requesting States Parties would be organised. In addition, assistance visits would be arranged to address the drafting of national legislation to ensure that the obligations of the BTWC were effectively transformed into a range of national laws and measures, including appropriate criminal provisions. In addition, States Parties would be assisted to adopt measures in order to ensure the appropriate physical protection of biological agents and toxins, as well as related material and equipment.

¹⁰⁵ European Union, Council Joint Action 2008/858/CFSP in support of the Biological and Toxin Weapons Convention. See [http://www.unog.ch/80256EE600585943/\(httpPages\)/F3C85A0F411931EFC12575E4004B0492?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/F3C85A0F411931EFC12575E4004B0492?OpenDocument) Also see item listed under BTWC on <http://www.consilium.europa.eu/showpage.aspx?id=718&lang=en#Bookmark7>

¹⁰⁶ European Union, Council Joint Action 2006/184/CFSP in support of the Biological and Toxin Weapons Convention. See item listed under BTWC on <http://www.consilium.europa.eu/showpage.aspx?id=718&lang=en#Bookmark7>

27. The Joint Action 2008/858/CFSP provides the following description of the project:

Project description

Based on positive experience of cooperation in the area of legislative assistance relating to the implementation of the BTWC in Peru and Nigeria, the EU will continue to provide legal advice to a maximum of seven interested States Parties.

The ISU will be asked to inform the States Parties of the EU assistance available for the implementation of the BTWC, which can take the following forms:

(a) legal advice and assistance relating to the drafting of legislative and administrative measures relevant for the implementation of any prohibitions and preventive measures provided for in the BTWC or agreed on by virtue of a common understanding;

(b) awareness-raising workshops relating to the national implementation of the BTWC and the enforcement of national measures, which may target:

- the decision-making authorities and national legislatures in order to facilitate political consensus on this issue,*
- the government stakeholders involved in the implementation of the BTWC in order to create networks and designate points of contact/competent national authorities,*
- the industry, universities and research institutes and non-governmental organisations to create public-private partnerships.*

A strong preference will be given to bilateral projects focused on legal drafting.

28. Although there are six-monthly EU progress reports¹⁰⁷ which include this Joint Action, these make little mention of work to support the national implementation of the BTWC. It is evident, however, that two experts have been appointed under the Joint Action to augment the Implementation Support Unit and consequently that their efforts are included in the annual reports on implementation of the Convention issued by the ISU. It is, moreover, noted that in 2010, a successful regional workshop on national implementation of the BTWC for West and Central Africa was held in Abuja, Nigeria on 24-27 October 2010. In December 2010 it was reported that preparations for the drafting of a *National Implementation Guide* had started with the aim to comprise the core obligations under the BTWC as well as other international obligations and commitments, such as UNSCR 1540 (2004) and 1373 (2001). Following the earlier *Guide on Participating in the CBMs*, the implementation guide is intended to become another key instrument compiled under the Joint Action helping States Parties to meet their BTWC obligations.

¹⁰⁷ Six-monthly progress reports on the implementation of the EU Strategy on WMD – which includes a section on Biological Weapons and the Joint Action 2008/858/CFSP adopted on 10 November 2008 – are available at <http://www.consilium.europa.eu/showpage.aspx?id=718&lang=en#Bookmark4>

Security Council Resolution 1540 (2004)

29. It will be recalled that Security Council Resolution 1540 (2004)¹⁰⁸ was adopted on 28 April 2004. In its fifth preambular paragraph this affirmed the support of the Security Council for the full implementation by States Parties of *inter alia* the treaty to eliminate biological weapons:

*Affirming its support for the multilateral treaties whose aim is to eliminate or prevent the proliferation of nuclear, chemical or biological weapons and the importance for all States parties to these treaties **to implement them fully** in order to promote international stability, [Emphasis added].*

30. In the second operative paragraph the Security Council:

2. Decides also that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;

31. Furthermore, in its third paragraph this resolution recorded that the Security Council:

3. Decides also that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall:

(a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;

(b) Develop and maintain appropriate effective physical protection measures;

(c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;

(d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

¹⁰⁸ United Nations, *Resolution 1540 (2004) Adopted by the Security Council at its 4956th meeting, on 28 April 2004*, S/RES/1540 (2004), 28 April 2004.

32. The resolution also made the point in its fifth paragraph that the Security Council:

5. Decides that none of the obligations set forth in this resolution shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons;

33. Further paragraphs in the resolution recorded that the Security Council:

7. Recognizes that some States may require assistance in implementing the provisions of this resolution within their territories and invites States in a position to do so to offer assistance as appropriate in response to specific requests to the States lacking the legal and regulatory infrastructure, implementation experience and/or resources for fulfilling the above provisions;

8. Calls upon all States:

(a) To promote the universal adoption and full implementation, and, where necessary, strengthening of multilateral treaties to which they are parties, whose aim is to prevent the proliferation of nuclear, biological or chemical weapons;

(b) To adopt national rules and regulations, where it has not yet been done, to ensure compliance with their commitments under the key multilateral nonproliferation treaties;

(c) To renew and fulfil their commitment to multilateral cooperation, in particular within the framework of the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons and the Biological and Toxin Weapons Convention, as important means of pursuing and achieving their common objectives in the area of non-proliferation and of promoting international cooperation for peaceful purposes;

(d) To develop appropriate ways to work with and inform industry and the public regarding their obligations under such laws;

9. Calls upon all States to promote dialogue and cooperation on nonproliferation so as to address the threat posed by proliferation of nuclear, chemical, or biological weapons, and their means of delivery;

10. Further to counter that threat, calls upon all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials;*

** The term related materials is defined in SCR 1540 (2004) for the purpose of the resolution only as being materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.*

34. At the Sixth Review Conference, the States Parties took note of Security Council Resolution 1540 (2004) in several places in their *Final Declaration*. First the States Parties solemnly declared:

(vii) Their conviction that terrorism in all its forms and manifestations and whatever its motivation, is abhorrent and unacceptable to the international community, and that terrorists must be prevented from developing, producing, stockpiling, or otherwise acquiring or retaining, and using under any circumstances, biological agents and toxins, equipment, or means of delivery of agents or toxins, for nonpeaceful purposes, and their recognition of the contribution of full and effective implementation of United Nations Security Council Resolution 1540 by all states to assist in achieving the objectives of this Convention;

35. Secondly, as part of their language in the section of the *Final Declaration* headed Article IV, they agreed:

17. The Conference recalls United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention. The Conference notes that Resolution 1540 affirms support for the multilateral treaties whose aim is to eliminate or prevent proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability. The Conference also notes that information provided to the United Nations by states in accordance with Resolution 1540 may provide a useful resource for States Parties in fulfilling their obligations under this Article.

36. The special committee which the Security Council established under SCR 1540 to report to the Council on the implementation of the resolution, known as the 1540 Committee, has, since 2006, continued to collect and analyse the information that all States are required to report on measures they have taken or intend to take to implement the obligations under the resolution. The first report¹⁰⁹ was presented in April 2006 and was based on information contained in the following: 129 Member States of the United Nations and one organization (the European Union) had submitted first national reports to the Committee established pursuant to resolution 1540 (2004); 62 Member States had yet to submit their first report. In response to the examination of the first national reports by the Committee, 79 States provided additional information.

37. A further report¹¹⁰ was presented in July 2008 in which it is stated that at 1 July 2008, 103 States have responded to the Committee's 2007 request. The total number of States that have submitted at least one report since 2004 stands at 155, with one organization (the European Union) also having submitted a report. Of those States that have submitted first reports, 102 have submitted additional information. Thirty-seven States have not submitted a first report to the Committee.

¹⁰⁹ United Nations Security Council, *Letter dated 25 April 2006 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2006/257, 25 April 2006. Available at <http://www.un.org/Docs/journal/asp/ws.asp?m=S/2006/257>

¹¹⁰ United Nations Security Council, *Letter dated 8 July 2008 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2008/493, 30 July 2008. Available at <http://www.un.org/Docs/journal/asp/ws.asp?m=S/2008/493>

38. The July 2008 report includes a section that considers what steps have been taken by States Parties in regard to paragraph 2 of Security Council resolution 1540 (2004) which requires that:

2. ... all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;

39. In regard to biological weapons, this section reports that

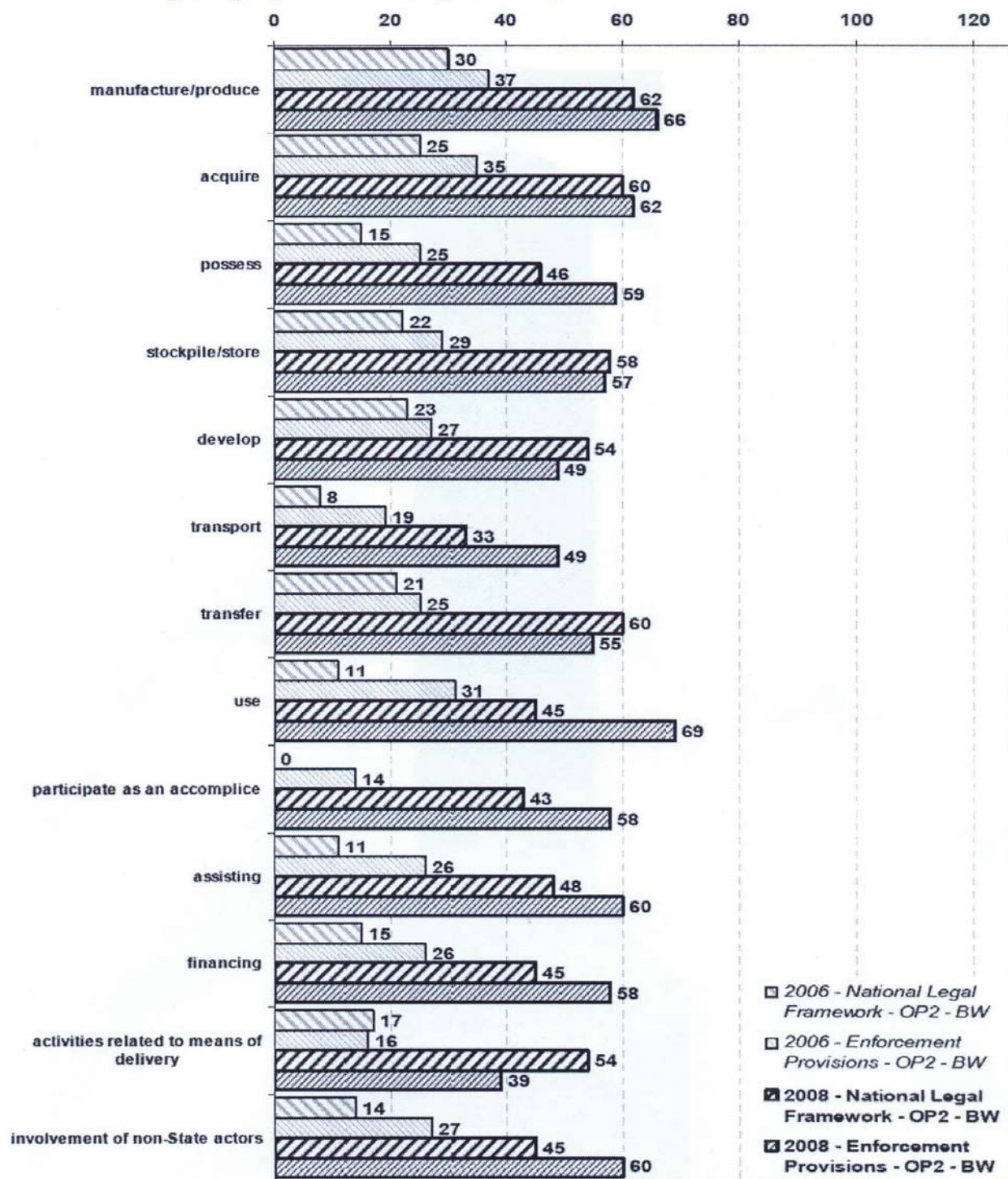
30. Since 2006, the issue of preventing the manufacture/production and acquisition of biological weapons, their means of delivery and related materials by non-State actors has been identified as requiring more specific attention in the future. The issues involved, including the need for legislative assistance and other implementation measures, were explored in a thematic debate of the Committee in December 2007.

31. Resolution 1540 (2004) adds several prohibited activities to those already covered by the Biological and Toxin Weapons Convention, namely, transport, transfer and use. These activities had a lower rate of coverage in national legislation than in penal legislation. Penal and criminal codes, along with counter-terrorism legislation, tend to provide general penalty clauses linked to a variety of offences that focus more on prohibition of use, and the ancillary offences of assisting, acting as an accomplice in or financing these activities, including by non-State actors. In the information they provided to the Committee, many States made reference to their intention to make amendments in the future to counter-terrorism legislation, which could incorporate the prohibited activities under paragraph 2 of the resolution. At present, the Committee notes, 76 States have a national legal framework prohibiting the manufacture, acquisition, stockpiling, development or transfer of biological weapons and a comparable number have measures in place to penalize violations. Details of the national implementation of prohibitions relating to biological weapons are given in annexes IX.A and IX.B.

40. The 2008 report provides a tabulation in Annex IX.A entitled *Progress of implementation as reflected in the matrices of Member States: comparative information for 2006 and 2008 for the 127 States that reported by 2006 — paragraph 2 — biological weapons and related materials* that shows the progress made between 2006 and 2008. In addition, a tabulation is provided in Annex IX.B entitled *Current assessment of implementation for 192 Member States — paragraph 2 — biological weapons and related materials* that puts the 2008 information in the context of the 192 then Member States of the United Nations. These two annexes are reproduced on the next two pages.

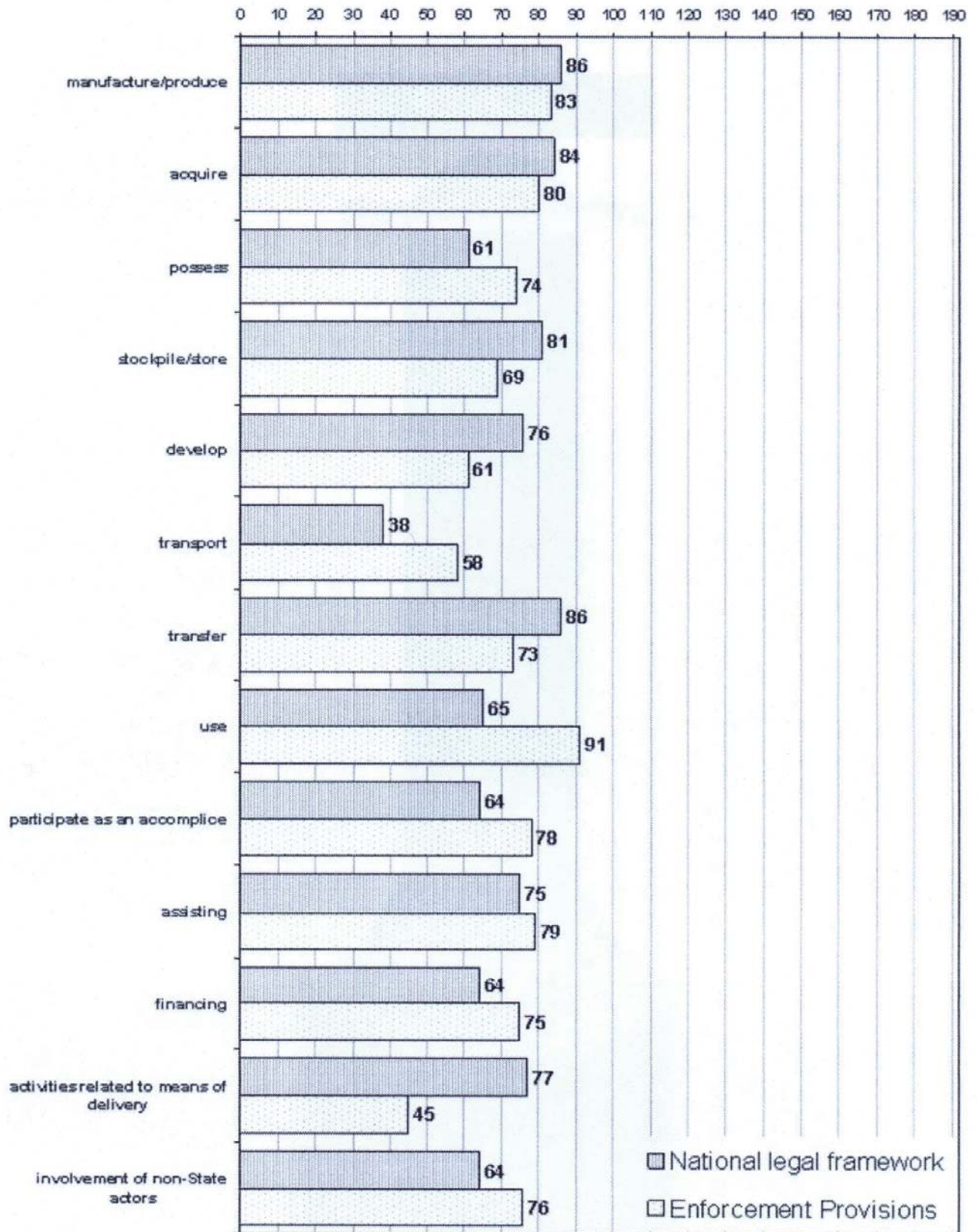
Annex IX.A

Progress of implementation as reflected in the matrices of Member States: comparative information for 2006 and 2008 for the 127 States that reported by 2006 — paragraph 2 — biological weapons



Annex IX.B

Current assessment of implementation for 192 Member States — paragraph 2 — biological weapons



41. In addition, the July 2008 report includes a section that considers what steps have been taken by States Parties in regard to paragraphs 3 (a) and (b) of Security Council resolution 1540 (2004) which:

3. Decides also that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall:

(a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;

(b) Develop and maintain appropriate effective physical protection measures;

42. In regard to biological weapons, this section reports:

47. A number of States consider that the rapid advances in and diversity of the biotechnology industry worldwide may have an impact on the complexity of accounting for, securing and physically protecting sensitive material for legitimate purposes while preventing their use for prohibited ones. Biological weapon-related materials may include agents such as living organisms that replicate, commercially available dual-use equipment and processes for handling micro-organisms. The Committee notes that accounting for biological weapon-related materials may be addressed in national legislation differently from accounting for chemical weapon-related and nuclear weapon-related materials that are produced, used and stored in finite, measurable quantities.

48. A number of States reported that, apart from toxins, accounting measures for biological weapons-related materials focused primarily on keeping inventory logs of the use, production and possession of such types of agents, further distinguished by their role in causing human, animal or plant diseases. From the data available for all States, the Committee notes that 66 States have adopted legislation and regulations for licensing the use, production and possession of biological weapon-related materials as permitted activities for commercial, industrial and public health purposes. In addition, 37 States regulate genetic engineering activities relating to biological weapon-related materials in separate laws.

49. A number of States reported that the above-mentioned controls and measures were administered or enforced by public and/or veterinary health, plant control and environmental protection agencies. The Committee notes, however, that of the States that reported having licensing provisions, 46 reported having provisions in place to enforce them by criminal or administrative penalties.

50. The Committee notes a considerable increase in the number of States that reported having measures to secure biological weapon-related materials and physically protect their transportation. From the data available for all States, the Committee notes that 38 States reported having measures in place to account for biological weapon-related materials, whereas 53 States reported having measures in place to secure them. While this may indicate an increased awareness by States of the potential risk from the accidental release of biological weapon-related materials, the

Committee notes that only 25 States reported having measures in place to undertake reliability checks of personnel working with sensitive materials.

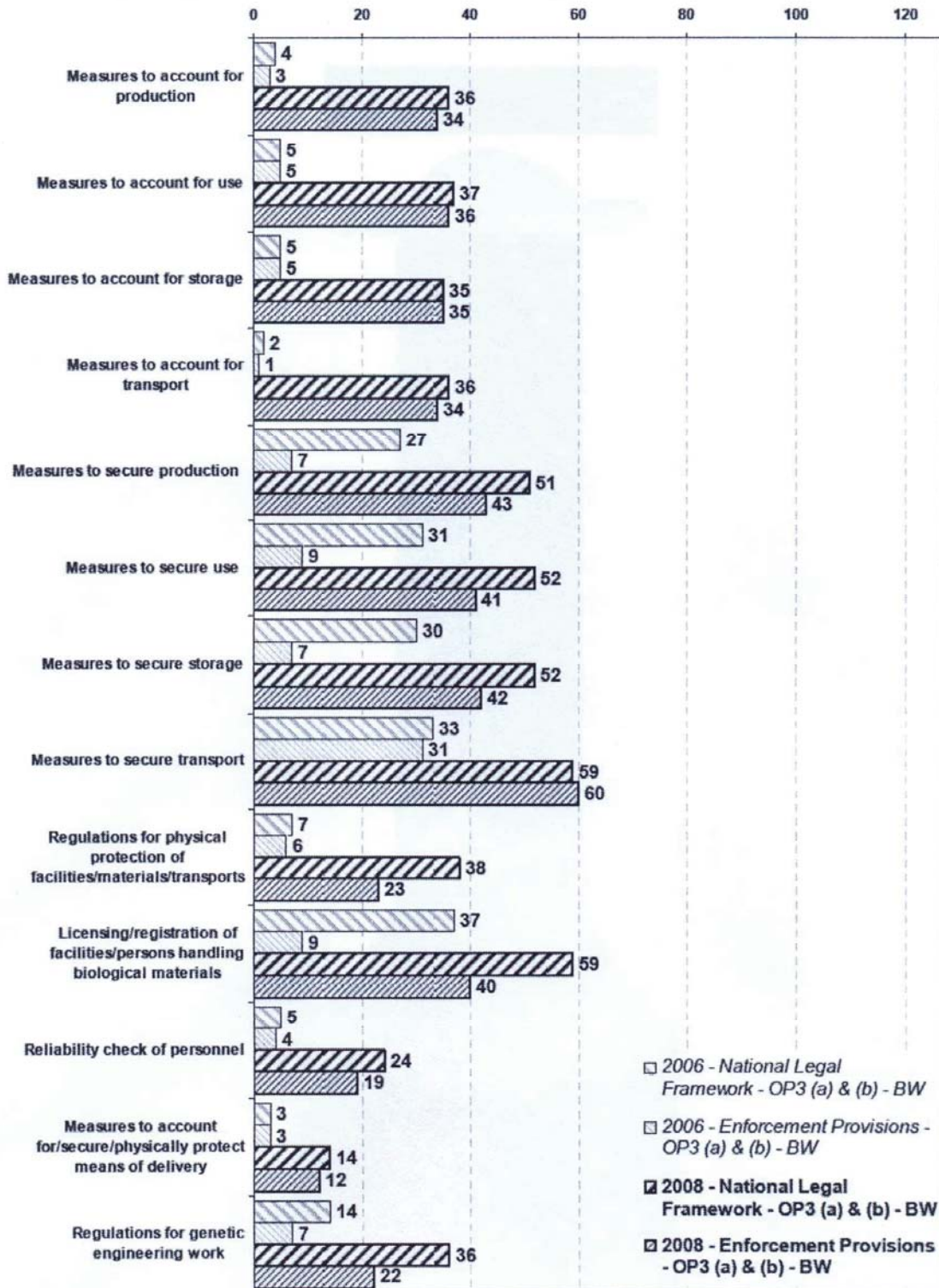
51. A smaller proportion of States reported having provisions for criminal or administrative penalties to enforce measures for the accounting and securing of biological weapon-related materials.

52. Details of the national implementation measures addressed in paragraph 3 (a) and (b) with regard to biological weapons, their means of delivery and related materials are contained in annex XIII.A and XIII.B.

43. This provides a tabulation in Annex XIII.A entitled *Progress of implementation as reflected in the matrices of Member States: comparative information for 2006 and 2008 for the 127 States that reported by 2006 — paragraph 3 (a) and (b) — biological weapons and related materials* that shows the progress between 2006 and 2008. In addition, a tabulation is provided in Annex XIII.B entitled *Current assessment of implementation for 192 Member States — paragraph 3 (a) and (b) — biological weapons and related materials* that puts the 2008 information in the context of the 192 then Member States of the United Nations. These two annexes are reproduced on the next two pages.

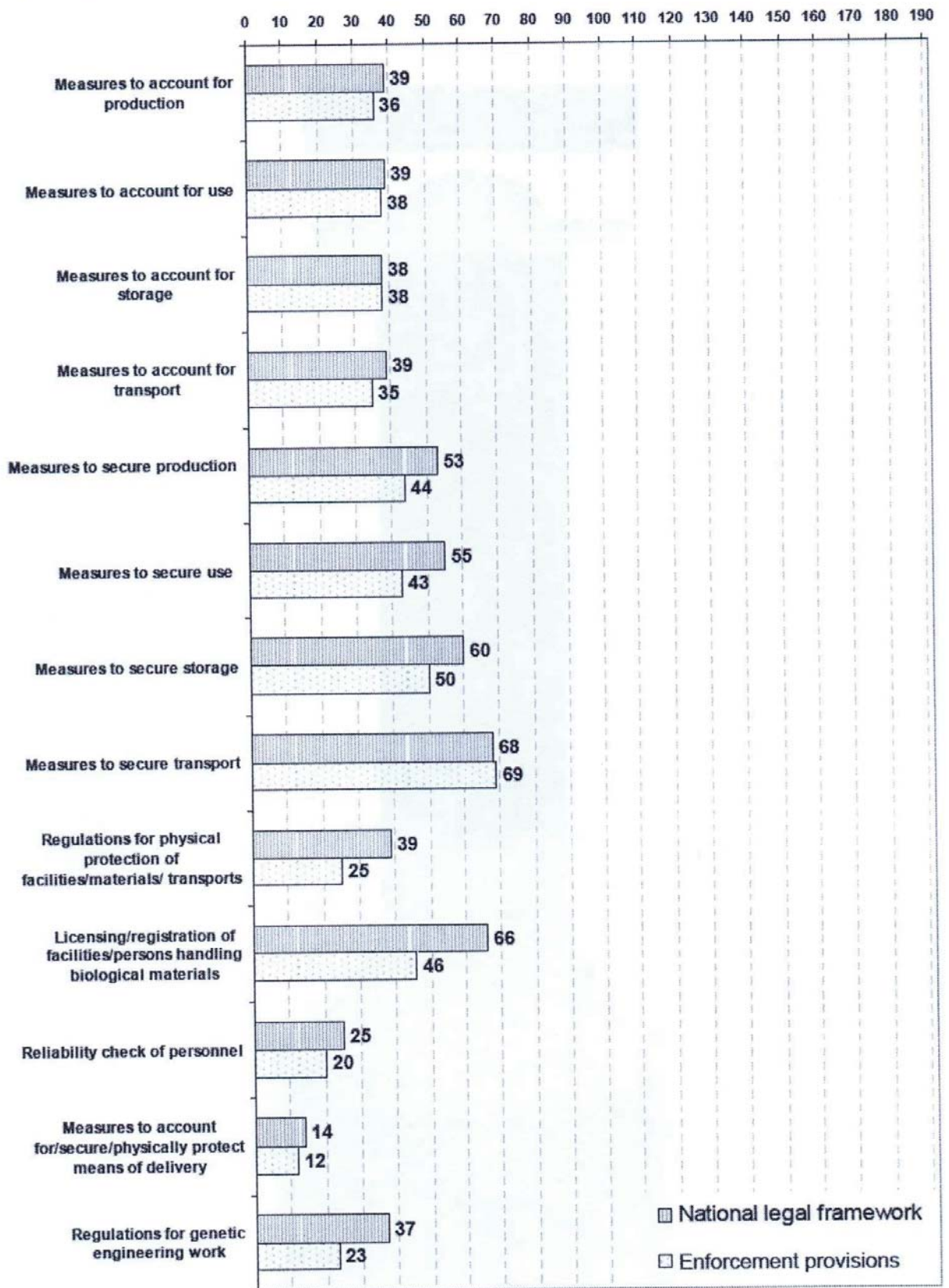
Annex XIII.A

Progress of implementation as reflected in the matrices of Member States: comparative information for 2006 and 2008 for the 127 States that reported by 2006 — paragraph 3 (a) and (b) — biological weapons and related materials



Annex XIII.B

Current assessment of implementation for 192 Member States — paragraph 3 (a) and (b) — biological weapons and related materials



44. Interestingly, the 2008 report by the 1540 Committee expresses considerable approval for the Implementation Support Unit in Annex XVII on the sharing of experience on the implementation of SCR 1540(2004):

*11. While many States have tabled papers on improving the standards for biological accountancy, security and physical protection in the context of the Biological and Toxin Weapons Convention process, traditionally most guidance and standards from international organizations were aimed at preventing the spread of animal plant and human diseases through international trade or preventing States from using such measures as barriers to legitimate trade, leaving other matters of human, animal, and plant health to national authorities. However, several key international organizations have begun to develop guidance on topics relevant to the implementation of paragraph 3 (a) and (b) of resolution 1540 (2004). **Perhaps most importantly, the creation of the Implementation Support Unit** for the Biological and Toxin Weapons Convention already has contributed to the identification of possible practices of interest by publishing citations for a vast number of laws, decrees and regulations on biological materials in dozens of countries, among its online tools. [Emphasis added].*

45. The overall conclusion drawn in the 2008 report is that:

The new reports submitted by a number of States since 2006 and the additional information received from other States, or otherwise identified from official governmental sources, have enabled the Committee to present a more complete picture of the measures already in place or planned in the near future. Thus, it has been possible to demonstrate a qualitative improvement in progress towards achieving full implementation of the resolution.

Notwithstanding that progress, the Committee concludes that Member States need to do far more than they have already done to implement resolution 1540 (2004). Consequently, achieving the goals of the resolution requires further attention by the Security Council and more intensive action, particularly on capacity-building and sharing lessons learned. Among other recommendations, the Committee believes that, consistent with Security Council resolution 1810 (2008), it should strengthen its clearing-house role for channelling assistance to States in need; increase tailored dialogue with and among States to identify assistance needs and assistance projects to meet them; and promote awareness of, make better use of and consider options for developing existing financial mechanisms in order to build capacity to implement resolution 1540 (2004). To those ends, it should also work more closely with global and regional intergovernmental organizations and arrangements, within and outside the United Nations system, in fostering the sharing of experience, creating forums for discussion and developing innovative mechanisms to achieve implementation of the resolution.

46. A further comprehensive review was carried out by the 1540 Committee in 2009. It was, however, specified¹¹¹ that *The final outcome of the review should not constitute an update of the report of the Committee on compliance, presented in July 2008, but rather be of a*

¹¹¹ United Nations Security Council, Letter dated 27 March 2009 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council, S/2009/170, 1 April 2009.

complementary nature. The subsequent report¹¹² of the 2009 comprehensive review included the following observations:

*26. In addition, the comprehensive review acknowledged the significant number of measures that States have taken to implement resolution 1540 (2004) obligations, but identified some areas in which States have adopted fewer measures, such as **biological weapons**, means of delivery, national control lists, and access to related materials and financing of prohibited or illicit proliferation activities. [Emphasis added]*

and

29. It was also recognized that in the framework of its activities the Committee should continue to raise awareness about the multilateral treaties whose aim is to prevent the proliferation of or eliminate weapons of mass destruction so as to contribute to their universality.

47. It is also to be noted that on 20 April 2011, the Security Council adopted Resolution 1977 (2011)¹¹³ that includes in its operative paragraphs:

2. Decides to extend the mandate of the 1540 Committee for a period of 10 years until 25 April 2021;

3. Decides that the 1540 Committee will conduct a comprehensive review on the status of implementation of resolution 1540 (2004), both after five years and prior to the renewal of its mandate, including, if necessary, recommendations on adjustments to the mandate, and will submit to the Security Council a report on the conclusions of those reviews, and decides that, accordingly, the first review should be held before December 2016;

In regard to collaboration with international, regional and sub-regional organisations, the resolution states:

18. Calls upon relevant international, regional and subregional organizations to designate and provide the 1540 Committee by 31 August 2011 with a point of contact or coordinator for the implementation of resolution 1540 (2004); and encourages them to enhance cooperation and information sharing with the 1540 Committee on technical assistance and all other issues of relevance for the implementation of resolution 1540 (2004);

It would thus be appropriate for the States Parties to the BTWC to agree that the Implementation Support Unit should provide the 1540 Committee with a point of contact or coordinator. This needs to be made explicit in the revised mandate for the Implementation Support Unit.

¹¹² United Nations Security Council, *Letter dated 29 January 2010 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council, S/2010/52*, 1 February 2010.

¹¹³ United Nations Security Council, *Resolution 1977 (2011) Adopted by the Security Council at its 6518th meeting, on 20 April 2011, S/RES/1977(2011)*, 20 April 2011.

48. The 1540 Committee has prepared, as of June 2011, matrices for 179 of the Member States of the United Nations which following approval by the Committee in November and December 2010 are available at <http://www.un.org/sc/1540/1540matrix.shtml>. This in *OP 2 - Biological Weapons (BW)* requests States to answer the question:

Does national legislation exist which prohibits persons or entities to engage in one of the following activities? Can violators be penalized?

in regard to some 14 activities:

- 1 *manufacture/produce*
- 2 *acquire*
- 3 *possess*
- 4 *stockpile/store*
- 5 *develop*
- 6 *transport*
- 7 *transfer*
- 8 *use*
- 9 *participate as an accomplice in above-mentioned activities*
- 10 *assist in above-mentioned activities*
- 11 *finance above-mentioned activities*
- 12 *above-mentioned. activities related to means of delivery*
- 13 *involvement of non-State actors in above-mentioned. activities*
- 14 *Other*

49. In addition, the matrix in *OP 3 (a) and (b) - Account for/Secure/Physically protect BW including Related Materials* requests States to answer the question:

Are any of the following measures, procedures or legislation in place to account for, secure or otherwise protect BW and Related Materials? Can violators be penalized ?

in regard to some 17 categories;

- 1 *Measures to account for production*
- 2 *Measures to account for use*
- 3 *Measures to account for storage*
- 4 *Measures to account for transport*
- 5 *Other measures for accounting*
- 6 *Measures to secure production*
- 7 *Measures to secure use*
- 8 *Measures to secure storage*
- 9 *Measures to secure transport*
- 10 *Other measures for securing*
- 11 *Regulations for physical protection of facilities/materials/ transports*
- 12 *Licensing/registration of facilities/persons handling biological materials*
- 13 *Reliability check of personnel*
- 14 *Measures to account for/secure/ physically protect means of delivery*
- 15 *Regulations for genetic engineering work*
- 16 *Other legislation/ regulations related to safety and security of biological materials*

50. The matrix in OP 3 (c) and (d) and related matters from OP 6 and OP 10 - Controls of BW including Related Materials requests States to answer the question:

Which of the following legislation, procedures, measures, agencies exist to control border crossings, export/import and other transfers of BW and Related Materials? Can violators be penalized?

in regard to some 26 categories:

- 1 Border control
- 2 Technical support of border control measures
- 3 Control of brokering, trading in, negotiating, otherwise assisting in sale of goods and technology
- 4 Enforcement agencies/authorities
- 5 Export control legislation in place
- 6 Licensing provisions
- 7 Individual licensing
- 8 General licensing
- 9 Exceptions from licensing
- 10 Licensing of deemed export/visa
- 11 National licensing authority
- 12 Interagency review for licenses
- 13 Control lists
- 14 Updating of lists
- 15 Inclusion of technologies
- 16 Inclusion of means of delivery
- 17 End-user controls
- 18 Catch all clause
- 19 Intangible transfers
- 20 Transit control
- 21 Trans-shipment control
- 22 Re-export control
- 23 Control of providing funds
- 24 Control of providing transport services
- 25 Control of importation
- 26 Extraterritorial applicability
- 27 Other

These matrices provide a valuable resource that can be drawn upon by the States Parties to the BTWC in promoting the implementation of Article IV of the Convention. It is also evident that there would be considerable benefits to the States Parties to the BTWC in regard to both the implementation of Article IV and of Article III through, as already noted earlier, encouraging the Implementation Support Unit to work closely with the 1540 Committee.

51. The States Parties to the BTWC at the Seventh Review Conference need to apply the same rigorous understanding of their own undertakings under Article IV in order therefore to address the requirements to *take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipment and means of delivery*. The requirements of SCR 1540 for all States to *adopt and*

*enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or **biological weapons and their means of delivery**, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them [Emphasis added] should be reflected as regards biological weapons, their means of delivery, and related materials, in particular for terrorist purposes, in the Article IV section of the *Final Declaration* of the Seventh Review Conference.*

Chemical Weapons Convention (CWC) Action Plan on National Implementation and follow-up

52. A continuing development since the Sixth Review Conference has seen further efforts made by the States Parties to the Chemical Weapons Convention following up their Action Plan on national implementation measures undertaken following their First Review Conference in 2003. At that Review Conference the States Parties agreed¹¹⁴:

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

*(h) agreed to develop, at its next regular session, **a plan of action** based on a recommendation from the Council regarding the implementation of Article VII obligations, **with the objective of fostering the full and effective implementation of the Convention** by all States Parties. [Emphasis added] (RC-1/5, para.7.83).*

53. Bradford Review Conference Paper No. 13¹¹⁵ described the action being taken by the OPCW and a further update was published¹¹⁶ in the *CBW Conventions Bulletin* of September/December 2005. The situation then could be summarised as follows:

¹¹⁴ Organisation for the Prohibition of Chemical Weapons (OPCW), Report of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference) 28 April – 9 May 2003, RC-1/5, 9 May 2003. Available at <http://www.opcw.org>.

¹¹⁵ Scott Spence, *Achieving Effective Action on Universality and National Implementation: The CWC Experience*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 13, April 2005. Available at <http://www.brad.ac.uk/acad/sbtwc>

¹¹⁶ Santiago Oñate, Ralf Trapp and Lisa Tabassi, Decision on the Follow-up to the OPCW Action Plan on Article VII: Ensuring the Effective Implementation of the Chemical Weapons Convention, *CBW Conventions Bulletin*, Issue No 69 + 70, September/December 2005, pp. 5-10. Available at <http://www.sussex.ac.uk/Units/spru/hsp/pdfbulletin.html>

Status at	Number of States Parties	Number (and percentage) of States Parties that have submitted national implementation	Legislation covers areas key to the enforcement of the CWC
May 1997	87	0 (0%)	Not available
December 1997	103	24 (23%)	Not available
November 1998	120	40 (33%)	Not available
July 1999	125	43 (34%)	Not available
May 2000	133	48 (36%)	Not available
May 2001	143	53 (38%)	Not available
October 2002	145	70 (48%)	39 (27%)
October 2003	154	94 (61%)	51 (33%)
November 2004	166	96 (58%)	52 (31%)
November 2005	174	106 (61%)	59 (34%)

This shows that in 2005 even after the Action Plan, although almost two thirds of the States Parties to the CWC had submitted information on their national implementation to the OPCW, only about one third of the States Parties had succeeded in adopting legislation that covered the areas key to the enforcement of the CWC.

54. The CWC Action Plan on national implementation was followed up with the Conference of the States Parties in November 2005 making a decision¹¹⁷:

Reaffirming the importance and urgency of States Parties fulfilling their obligations under Article VII;

Hereby:

1. Stresses that it is imperative for States Parties that have yet to fulfil their obligations under Article VII to do so, in accordance with their constitutional processes, without delay;

55. The follow-up was extended for a further year at the next Conference of the States Parties¹¹⁸ in December 2006 and at the Conference of the States Parties in November 2007 making a decision¹¹⁹:

Reaffirming the importance and urgency of States Parties fulfilling their obligations under Article VII in accordance with their constitutional processes;

Hereby:

¹¹⁷ Organisation for the Prohibition of Chemical Weapons (OPCW), Conference of the States Parties, Tenth Session, *Decision: Follow-Up to the Plan of Action Regarding the Implementation of Article VII Obligations*, C-10/DEC.16, 11 November 2005. Available at <http://www.opcw.org>.

¹¹⁸ Organisation for the Prohibition of Chemical Weapons (OPCW), Conference of the States Parties, Eleventh Session, *Decision: Sustaining Follow-Up to the Plan of Action Regarding the Implementation of Article VII Obligations*, C-11/DEC.4, 6 December 2006. Available at <http://www.opcw.org>.

¹¹⁹ Organisation for the Prohibition of Chemical Weapons (OPCW), Conference of the States Parties, Twelfth Session, *Decision: Regarding the Implementation of Article VII Obligations*, C-12/DEC.9, 9 November 2007. Available at <http://www.opcw.org>.

1. **Stresses** that it is imperative that further efforts be made by all the States Parties referred to in subparagraphs 2(a) and (b) of C-10/DEC.16 to fulfil the obligations under Article VII, ...

56. Stronger language was adopted at the Conference of the States Parties in December 2008¹²⁰:

Strongly reaffirming the obligation of each State Party to adopt the necessary measures to implement its obligations under the Convention in accordance with its constitutional processes and **also reaffirming** that the full national implementation of the obligations under the Convention is essential for the realisation of the object and purpose of the Convention;

57. Similar language was adopted in the decision¹²¹ taken by the Conference of the States Parties in December 2009 which also included language:

Recognising that further progress is required, as there remains a sizeable number of States Parties that have yet to complete implementation of their Article VII obligations, and **recognising as well** that a number of these States Parties require assistance and technical support, including some that are encountering difficulties in the process of implementing Article VII;

58. The progress that has been made since 2005 in the implementation of Article VII of the Chemical Weapons Convention is summarised in the table:

Status at	Number of States Parties	Number (and percentage) of States Parties that have submitted national implementation	Legislation covers areas key to the enforcement of the CWC
November 2005	174	106 (61%)	59 (34%)
November 2006	181	112 (62%)	72 (40%)
August 2007	182	120 (66%)	77 (42%)
September 2008	182	126 (68%)	77 (42%)
August 2009	188	128 (68%)	86 (46%)
July 2010	188	135 (72%)	87 (46%)

An Action Plan for BTWC National Implementation

59. It is thus evident from the CWC experience that there is a compelling argument for a sustained Action Plan for the national implementation of the BTWC and that similar language might with advantage be adopted at the Seventh Review Conference that:

¹²⁰ Organisation for the Prohibition of Chemical Weapons (OPCW), Conference of the States Parties, Thirteenth Session, *Decision on the Implementation of Article VII Obligations*, C-13/DEC.7, 5 December 2008. Available at <http://www.opcw.org>.

¹²¹ Organisation for the Prohibition of Chemical Weapons (OPCW), Conference of the States Parties, Fourteenth Session, *Decision on National Implementation Measures of Article VII Obligations*, C-14/DEC.12, 4 December 2009. Available at <http://www.opcw.org>.

a. **Strongly reaffirms** the obligation of each State Party to adopt the necessary measures to implement its obligations under the Convention in accordance with its constitutional processes.

b. **Reaffirms** that the full national implementation of the obligations under the Convention is essential for the realisation of the object and purpose of the Convention.

c. **Recognises** that further progress is required, as there remains a sizeable number of States Parties that have yet to complete implementation of their Article IV obligations.

d. **Recognises** that a number of these States Parties require assistance and technical support.

60. It is essential that legislation adopted under Article IV of the BTWC encompasses the **full** scope of the prohibitions contained in the Convention. It is recommended that this should extend to the control and monitoring of relevant dual-use materials and technologies.

61. At the Seventh Review Conference of the BTWC, it is recommended that there should be consideration as to whether to adopt an action plan. The CWC Action Plan as originally adopted in October 2003 is reproduced as an Annex to this chapter as it illustrates the sort of points that should be included in drawing up a comparable plan for the BTWC. The BTWC States Parties might decide to adopt different terminology as it is likely that the resources provided by the OPCW to support the CWC Article VII national implementation action plan will not be available. It is suggested that an achievement timeline which sets an interim target for two thirds of the States Parties to the BTWC to have adopted national implementation legislation encompassing the full scope of the prohibitions contained in the BTWC by the time of the Eighth Review Conference would be an effective and desirable outcome. It would be greatly aided by one or more States Parties undertaking to provide resources to facilitate the adoption of legislation by States Parties as well as to monitor and report to the States Parties annually on progress towards this target. For example, a parallel approach to the provision of the necessary resources to that which has been taken by the EU Joint Action could be adopted by the States Parties to the BTWC. In any event, an annual progress report would be appropriate at future annual Meetings of the States Parties at which agreement could be reached on additional action should that be necessary.

Issues for the Seventh Review Conference

62. The principal Article IV issue for the States Parties to consider at the Seventh Review Conference will be how best to strongly encourage all States Parties to enact appropriate national legislation. The need to address this should have been given an added impetus by the consideration at the Review Conference of the Final Report¹²² of the annual Meeting of States Parties in 2007 and the Final Report¹²³ of the annual Meeting of States Parties in 2008

¹²² United Nations, Meeting 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, 10-14 December 2007, *Report of the 2007 Meeting of States Parties*, BWC/MSP/2007/5, 7 January 2008. Available at <http://www.opbw.org>

¹²³ United Nations, Meeting 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, 2008

as well as by the continuing requirements of Security Council Resolution 1540 (2004)¹²⁴ and Resolution 1977 (2011)¹²⁵.

63. As there continues to be concern about the dangers of terrorist attack and other criminal activity, and the G-8 Foreign Ministers at their meeting in March 2011 agreed¹²⁶ that:

The possible misapplication of technological developments in the area of life sciences and the risk posed by development or use of a biological or toxin weapon by States or non-state-actors are major issues for the international community. In this regard, we emphasize that strengthening of the BTWC regime plays a principal role in diminishing the threat of proliferation and acquisition of dangerous biological agents, deliberate misuse of life sciences and biotechnologies for development of biological and toxin weapons.

it can be expected that the States Parties will be keen to adopt stronger language in their *Final Declaration* at the Seventh Review Conference urging all States Parties to adopt any necessary national measures, including penal legislation.

64. National implementation measures under Article IV should also include biosecurity regulations and codes of conduct for those engaged in the life sciences. The Conference could usefully build these expressions of national implementation even more firmly into the BTWC treaty regime by endorsing the principal findings of the 2008 Meeting of States Parties and writing them into the cumulative text of its *Final Declaration* as extended understandings of the implications of Article IV.

65. In order for the Conference to endorse the principal findings of the 2007 and 2008 Meetings of States Parties, and to show that it adopts them as its own, it is recommended that the propositions they contain be agreed by the Conference in the present tense but otherwise left almost unchanged from the texts of the reports of the respective Meetings of States Parties. For example, in regard to national implementation, the 2007 Meeting of States Parties *agreed on the fundamental importance of effective national measures in implementing the obligations of the Convention*. There would be great value in the Review Conference adopting this finding as its own. The same is true of other findings from the 2007 and 2008 Meetings of States Parties. It is therefore recommended that the principal findings be adopted by the Conference as they stand. The inclusion of the relevant paragraphs in the Article IV section of the *Final Declaration* would have a wider significance. It would show that the Seventh Review Conference had succeeded in integrating two bodies of text – one inherited from the cumulative *Final Declaration* text of the Sixth Review Conference and the other from the intersessional work programme of 2007-2010. The Conference would thereby have achieved, at least in this area of the BTWC, the successful confluence of two important streams of development flowing towards the further evolution of the treaty regime.

Meeting, Geneva, 1-5 December 2008, *Report of the Meeting of States Parties*, BWC/MSP/2008/5, 12 December 2008. Available at <http://www.opbw.org>

¹²⁴ United Nations, *Resolution 1540 (2004) Adopted by the Security Council at its 4956th meeting, on 28 April 2004*, S/RES/1540 (2004), 28 April 2004.

¹²⁵ United Nations Security Council, *Resolution 1977 (2011) Adopted by the Security Council at its 6518th meeting, on 20 April 2011*, S/RES/1977(2011), 20 April 2011.

¹²⁶ G8, Meeting of Foreign Ministers, 14-15 March 2011, *Statement on the 7th Review Conference for the Biological and Toxin Weapons Convention*. Available at <http://www.g20-g8.com/g8-g20/g8/english/for-the-press/news-releases/meeting-of-foreign-ministers-14-15-march-2011.1049.html>

66. As addressed in the chapter¹²⁷ on *Article IV: National Implementation: Education, Outreach and Codes of Conduct* in these *Key Points for the Seventh Review Conference*, it is also recommended that the States Parties in considering the value of education and outreach to aid the in-depth implementation of the Convention should incorporate the substance of the language relating to outreach and implementation in the eighth operative paragraph of Security Council resolution 1540 (2004) which states:

To develop appropriate ways to work with and inform industry and the public regarding their obligations under such laws;

into the Article IV section of the *Final Declaration* of the Seventh Review Conference by making the following point which is extended slightly so as to include academia as well as industry:

The Conference recognizing the benefits of promoting effective national implementation of Article IV of the Convention calls upon all States Parties to develop appropriate ways to work with and inform industry, academia and the public regarding their obligations under such laws.

Points for the *Final Document*

67. It is recommended that in respect of national implementation the Seventh Review Conference in its *Final Document* would be similar to that adopted at the Sixth Review Conference but with stronger encouragement of States Parties to enact national measures and with a clearer recognition of the requirements of Security Council Resolution 1540(2004) and Resolution 1977 (2011) together with a recognition of the value of the Implementation Support Unit working closely with the 1540 Committee. Consideration is given here to both the Article by Article *Final Declaration* and then to the *Decisions and Recommendations* section (*Part III* of the *Final Document*).

Article IV in the Article by Article *Final Declaration*

68. The language to be adopted by the Seventh Review Conference in its *Final Declaration* might be similar to that adopted at the Sixth Review Conference but with stronger encouragement of States Parties to enact national measures and inclusion of an achievement timeline by making the following points:

- a. To reaffirm the commitment of States Parties to take the necessary national measures under this Article.
- b. To reaffirm that the enactment and implementation of necessary national measures under this Article would strengthen the effectiveness of the Convention.
- c. To agree an Action Plan for National Implementation (see *Part III: Decisions and Recommendations*) and to agree an interim target for two thirds of the States Parties to

¹²⁷ Malcolm R. Dando & Simon Whitby, *Article IV: National Implementation: Education, Outreach and Codes of Conduct*, in Graham S. Pearson, Nicholas A. Sims & Malcolm R. Dando, *Key Points for the Seventh Review Conference*, University of Bradford, Department of Peace Studies, September 2011.

the BTWC to have adopted effective national implementation legislation by the time of the Eighth Review Conference.

d. To call upon States Parties to adopt, in accordance with their constitutional processes, legislative, administrative, judicial and other measures, including penal legislation, designed to:

(i) enhance domestic implementation of the Convention and ensure the prohibition and prevention of the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipments and means of delivery as specified in Article I of the Convention;

(ii) apply within their territory, under their jurisdiction or under their control anywhere and apply, if constitutionally possible and in conformity with international law, to actions taken anywhere by natural or legal persons possessing their nationality;

(iii) ensure the safety and security of microbial or other biological agents or toxins in laboratories, facilities, and during transportation, to prevent unauthorized access to and removal of such agents or toxins.

e. To remind States Parties to provide appropriate information on any such measures they have taken, as well as any other useful information on their implementation, to the Implementation Support Unit within the United Nations Office for Disarmament Affairs.

f. To reaffirm the commitment of States Parties to take the necessary national measures to strengthen methods and capacities for surveillance and detection of outbreaks of disease at the national, regional and international levels.

g. To recognize that effective national implementation requires the inclusion in medical, scientific and military educational materials and programmes of information on the Convention and the 1925 Geneva Protocol.

h. To recognize that effective national implementation requires the development of training and education programmes for all those granted access to biological agents and toxins relevant to the Convention and for those with the knowledge or capacity to modify such agents and toxins, in order to raise awareness of the risks, as well as of the obligations of States Parties under the Convention.

i. To recognize that effective national implementation requires the development of appropriate ways to work with and inform industry, academia and the public regarding their obligations under such laws.

j. To call upon States Parties to take the necessary measures to promote awareness amongst relevant professionals of the need to report activities conducted within their territory or under their jurisdiction or under their control that could constitute a violation of the Convention or related national criminal law.

k. To recognize the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and to call upon States Parties to support and encourage their development, promulgation and adoption.

l. To urge States Parties with relevant experience in legal and administrative measures for the implementation of the provisions of the Convention, to provide assistance on request to other States Parties, and to encourage such initiatives on a regional basis.

m. To note that United Nations Security Council Resolution 1540 and Resolution 1977 affirm support for the multilateral treaties whose aim is to eliminate or prevent proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability and to note that information provided to the United Nations by States in accordance with Resolution 1540 and Resolution 1977 may provide a useful resource for States Parties in fulfilling their obligations under this Article.

n. To call upon all States Parties to designate a national focal point for coordinating national implementation of the Convention and communicating with other States Parties and relevant international organizations.

o. To reaffirm that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the Convention.

69. In addition, the following points arising from the 2007 Meeting of States Parties should also be included in so far as they may not already have been made in the preceding points:

p. To agree on the fundamental importance of effective national measures in implementing the obligations of the Convention.

q. To recognize the value of ensuring that national implementation measures:

(i) penalize and prevent activities that breach any of the prohibitions of the Convention, and are sufficient for prosecuting prohibited activities;

(ii) prohibit assisting, encouraging or inducing others to breach any of the prohibitions of the Convention;

(iii) are not limited to enacting relevant laws, but also strengthen their national capacities, including the development of necessary human and technological resources;

r. To agree on the value of moving from adjacency to synergy, with their governments taking the lead by promoting cooperation and coordination among domestic agencies; of clearly defining the roles and responsibilities of each; and of raising awareness of the Convention among all relevant stakeholders, including policy makers, the scientific community, industry, academia, media and the public in general, and improving dialogue and communication among them.

s. To agree on the value of ensuring effective enforcement of their legislative and regulatory measures, including through building capacity to collect evidence, to

develop early-warning systems, to coordinate between relevant agencies, to train law enforcement personnel, and to provide enforcement agencies with the necessary scientific and technological support.

t. To agree on the importance of regular national reviews of the adopted measures, including by ensuring the continued relevance of their national measures in light of scientific and technological developments; by updating lists of agents and equipment relevant to safety, security and transfer regimes; and by implementing additional measures as required.

u. To recognize that adequate resources are necessary for pursuing both effective national implementation measures and regional and sub-regional cooperation, and in this context called on States Parties in a position to do so to provide technical assistance and support to States Parties requesting it, and, in this context, to agree on the value of the Implementation Support Unit, and of making full use of resources and expertise available from other States Parties and relevant international and regional organizations.

70. To these points should also be added the following arising from the 2008 Meeting of States Parties in so far as they may not already have been made in the preceding points:

v. To affirm the common understanding that in the context of the Convention, biosafety refers to principles, technologies, practices and measures implemented to prevent the accidental release of, or unintentional exposure to, biological agents and toxins, and biosecurity refers to the protection, control and accountability measures implemented to prevent the loss, theft, misuse, diversion or intentional release of biological agents and toxins and related resources as well as unauthorized access to, retention or transfer of such material.

w. To agree on the value of:

(i) national authorities defining and implementing biosafety and biosecurity concepts in accordance with relevant national laws, regulations and policies, consistent with the provisions of the Convention and taking advantage of relevant guidance and standards, such as those produced by the FAO, OIE and WHO;

(ii) national governments taking the leading role, including by nominating a lead agency (or focal point), specifying mandates for participating departments or agencies, ensuring effective enforcement and regular review of relevant measures, and integrating such measures into relevant existing arrangements at the national, regional and international level;

(iii) national governments, supported by other relevant organisations as appropriate, using tools such as: accreditation, certification, audit or licensing for facilities, organizations or individuals; requirements for staff members to have appropriate training in biosafety and biosecurity; mechanisms to check qualifications, expertise and training of individuals; national criteria for relevant activities; and national lists of relevant agents, equipment and other resources.

x. To recognize the value of developing national frameworks to prohibit and prevent the possibility of biological agents or toxins being used as weapons, including measures to oversee relevant people, materials, knowledge and information, in the private and public sectors and throughout the scientific life cycle.

y. To recognize the need to ensure that such oversight measures are proportional to risk, do not cause unnecessary burdens, are practical and usable and do not unduly restrict permitted biological activities, and thus to agree on the importance of involving national stakeholders in all stages of the design and implementation of oversight frameworks.

z. To recognize the importance of ensuring that all those working in the biological sciences are aware of their obligations under the Convention and relevant national legislation and guidelines, have a clear understanding of the content, purpose and foreseeable social, environmental, health and security consequences of their activities, and are encouraged to take an active role in addressing the threats posed by the potential misuse of biological agents and toxins as weapons, including for bioterrorism.

aa. To reaffirm the value of education and awareness programmes in:

(i) explaining the risks associated with the potential misuse of the biological sciences and biotechnology;

(ii) covering the moral and ethical obligations incumbent on those using the biological sciences;

(iii) providing guidance on the types of activities which could be contrary to the aims of the Convention and relevant national laws and regulations and international law;

(iv) being supported by accessible teaching materials, train-the-trainer programmes, seminars, workshops, publications, and audio-visual materials;

bb. To reaffirm that codes of conduct can complement national legislative, regulatory and oversight frameworks and help guide science so that it is not misused for prohibited purposes and to recognise the need to further develop strategies to encourage national stakeholders to develop, adopt and promulgate codes of conduct.

Decisions and Recommendations section of the Final Document

71. The section addressing the Implementation Support Unit in the *Decisions and Recommendations* section (*Part III of the Final Document*) should include specific mention of liaising as appropriate with the 1540 Committee in the context of the comprehensive implementation of the BTWC by including the following point:

a. to promote the comprehensive implementation of the Convention by liaising as appropriate with the 1540 Committee.

72. A similar specific mention should also be made to liaising as appropriate with the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons in regard to national implementation:

b. to promote the effective national implementation of the Convention by liaising as appropriate with the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons.

73. In addition, the *Decisions and Recommendations* section should include a section headed *Action Plan for National Implementation* that would make the following points:

Action Plan for National Implementation

a. to record that the States Parties agreed on an Action Plan on National Implementation with the goal of achieving the enactment and effective implementation of legislative and other measures in accordance with the obligations of Article IV, including penal legislation, by all States Parties without further delay;

b. to record that the States Parties agreed an interim target for the Action Plan that two thirds of the States Parties to the BTWC should have adopted effective national implementation legislation by the time of the Eighth Review Conference.

74. Elements within such an Action Plan should include the following:

c. each State Party to provide the Implementation Support Unit, not later than [15 April 2012], with detailed information on the measures it has taken to implement its IV obligations

d. each State Party that requires assistance of any kind in meeting its national implementation obligations to inform the Implementation Support Unit of its needs and point of contact not later than [15 April 2012];

e. each State Party that is able to provide assistance of any kind towards national implementation in other States Parties to inform the Implementation Support Unit of the assistance available and its point of contact no later than [15 April 2012];

f. each State Party to keep the Implementation Support Unit informed on its efforts to meet national obligations under Article IV and, if applicable, to assist other States Parties;

g. the Implementation Support Unit to compile and analyse official information available to it on measures taken by each State Party pursuant to Article IV, including any relevant clarifications received from States Parties, and to promptly distribute the analysis to all States Parties;

h. the Implementation Support Unit to compile and disseminate to all States Parties information on assistance needed and assistance provided;

i. the Implementation Support Unit to maintain close contacts with national points of contact, as well as international and non-governmental organizations that already provide assistance to States in meeting their Article IV obligations;

j. the Implementation Support Unit to periodically update information on the progress of States Parties in meeting their Article IV obligations, maintain lists of points of contact, facilitate communication among States Parties needing and providing assistance, and coordinate outreach activities;

k. the Implementation Support Unit to provide an annual report to all States Parties on activities undertaken under the action plan and including an analysis of the progress made towards full and effective implementation of Article IV.

ANNEX

OPCW Plan of Action Regarding the Implementation of Article VII Obligations

OPCW Conference of the States Parties

C-8/DEC.16
24 October 2003

DECISION

PLAN OF ACTION REGARDING THE IMPLEMENTATION OF ARTICLE VII OBLIGATIONS

The Conference of the States Parties,

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

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

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

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

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

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

Having received the recommendation by the Council on the Plan of Action on national implementation measures (EC-M-23/DEC.2, dated 21 October 2003), C-8/DEC.16

Hereby:

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

1. **Requests** the Technical Secretariat (hereinafter “the Secretariat”) to intensify its work with those States Parties that have difficulties in adopting the measures required under Article VII, by further identifying, analysing, and addressing those difficulties;
2. **Further requests** the Secretariat to submit to the Thirty-Sixth Session of the Council a report covering, *inter alia*, problems that have been identified, requirements of States Parties for support, the capabilities of the OPCW (that is, both of the Secretariat and of the States Parties) to provide implementation support, and any recommendations relevant to the implementation of the plan of action;
3. **Requests** States Parties seeking assistance of any kind in meeting their national implementation obligations and that have not yet informed the Secretariat of what assistance they require, to do so preferably before 1 March 2004;

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

4. **Requests** the Secretariat, within the parameters set by the OPCW Programme and Budget, to offer sustained technical support to States Parties that request it for the establishment and effective functioning of National Authorities, the enactment of national implementing legislation, and the adoption of any administrative measures required in accordance with Article VII;
5. **Welcomes** voluntary contributions from States Parties towards the implementation of this plan of action, and **requests** the Secretariat to implement the plan of action within the resources approved for the OPCW Programme and Budget, together with any voluntary contributions received for national implementation, and in a cost-effective manner;
6. **Encourages** States Parties to lend advice, upon request, to other States Parties in drafting and adopting national measures necessary to implement the Convention, *inter alia* to ensure that the laws reflect the comprehensive nature of the Convention by covering all activities that are to be prohibited or required in accordance with the Convention, and that involve the use of any toxic chemicals and their precursors; to cover the provision of annual declarations on past and anticipated activities; to ensure the implementation of the provisions related to transfers of scheduled chemicals; and to cover the annual submission of information on national protective programmes in accordance with paragraph 4 of Article X;
7. **Requests** States Parties able to provide assistance of any kind towards national implementation in other States Parties to inform the Secretariat, preferably before 1 March 2004, of what they can offer;
8. **Requests** the Secretariat to further develop and improve its implementation support programme, including by mobilising States Parties’ efforts so as to provide, upon request and within the limits on available resources, technical assistance and technical evaluations to States Parties in the implementation of the provisions of the Convention, in the areas

identified in the section of the report of the First Review Conference on national implementation measures (subparagraph 7.74 to 7.83 of RC-1/5);

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

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

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

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

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

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

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

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

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

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

15. **Urges** States Parties that have not yet done so to review their existing regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of the Convention;

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

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

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

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

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

ARTICLE IV: NATIONAL IMPLEMENTATION: EDUCATION, OUTREACH AND CODES OF CONDUCT

by Simon Whitby, Cathy Bollaert & Malcolm R. Dando

Consideration of Article IV at the Sixth Review Conference

1. Article IV of the Convention states that:

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

2. It is important to note that this Article requires States Parties to take any necessary measure “to prohibit and prevent”. The requirement of prevention was reflected in paragraphs 14 and 15 of the Final Declaration¹²⁸ of the Sixth Review Conference in 2006 in regard to Article IV. These stated that:

14. The Conference urges the inclusion in medical, scientific and military educational materials and programmes of information on the Convention and the 1925 Geneva Protocol. The Conference urges States Parties to promote the development of training and education programmes for those granted access to biological agents and toxins relevant to the Convention and for those with the knowledge or capacity to modify such agents and toxins, in order to raise awareness of the risks, as well as of the obligations of States Parties under the Convention.

15. The Conference encourages States Parties to take necessary measures to promote awareness amongst relevant professionals of the need to report activities conducted within their territory or under their jurisdiction or under their control that could constitute a violation of the Convention or related national criminal law. In this context, the Conference recognises the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and calls upon States Parties to support and encourage their development, promulgation and adoption.

3. Although the intersessional programme carried out between 2003 and 2005 had included the topics of:

(i) the adoption of necessary national measures to implement the prohibitions set forth in the Convention, including the enactment of penal legislation; and

(v) the content, promulgation, and adoption of codes of conduct for scientists.

the *Final Document* of the Sixth Review Conference simply noted the following in the *Part III: Decisions and Recommendations* section:

¹²⁸ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

2. *The Conference notes that the Meetings of States Parties and Meetings of Experts functioned as an important forum for exchange of national experiences and in-depth deliberations among States Parties. The Meetings of the States Parties engendered greater common understanding on steps to be taken to further strengthen the implementation of the Convention.*

3. *The Conference notes the contribution by the WHO, FAO, OIE and other relevant international organizations, as well as scientific and academic institutions and non-governmental organizations, to the Meetings of States Parties and Meetings of Experts.*

4. *The Conference endorses the consensus outcome documents from the Meetings of States Parties (BWC/MSP/2003/4, BWC/MSP/2004/3 and BWC/MSP/2005/3).*

4. It should also be noted that the *Part III: Decisions and Recommendations* section of the Final Document of the Sixth Review Conference included the following topic for consideration in 2008:

(iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

5. The language agreed in paragraph 14 of the *Final Declaration* of the Sixth Review Conference reflected that of the *Final Declaration* of the Fourth Review Conference in 1996 in which the language agreed for Article IV had included:

3. *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.*

6. It is thus evident that the States Parties have long recognised the importance of education about the prohibitions embodied in the Convention even though there has been little evidence that the prohibitions embodied in the Convention have been included in educational programmes.

Developments since the Sixth Review Conference

7. As noted above, at the Sixth Review Conference¹²⁹ the States Parties agreed that there should be a series of annual Meetings of States Parties prepared by Meetings of Experts during the intersessional period from 2007 to 2010 and that a topic to be considered in 2008 was:

(iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

A second topic was also to be considered in 2008:

(iii) National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.

2008 Meeting of States Parties

8. The substantive paragraphs in the report¹³⁰ of the Meeting of States Parties in 2008 stated that:

19. With respect to both topics of the Meeting, States Parties recognised the need for proportional measures, for carefully assessing risks, for balancing security concerns against the need to avoid hampering the peaceful development of biological science and technology, and for taking national and local circumstances into account.

9. It then went on, after some paragraphs addressing biosafety and biosecurity, to state that:

25. Having considered the oversight of science, States Parties recognised the value of developing national frameworks to prohibit and prevent the possibility of biological agents or toxins being used as weapons, including measures to oversee relevant people, materials, knowledge and information, in the private and public sectors and throughout the scientific life cycle. Recognising the need to ensure that such measures are proportional to risk, do not cause unnecessary burdens, are practical and usable and do not unduly restrict permitted biological activities, States Parties agreed on the importance of involving national stakeholders in all stages of the design and implementation of oversight frameworks. States Parties also noted the value of harmonizing, where possible and appropriate, national, regional and international oversight efforts.

26. States Parties recognised the importance of ensuring that those working in the biological sciences are aware of their obligations under the Convention and relevant national legislation and guidelines, have a clear understanding of the content, purpose and foreseeable social, environmental, health and security

¹²⁹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

¹³⁰ Meeting 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, *Report of the Meeting of States Parties*, BWC/MSP/2008/5, 12 December 2008.

consequences of their activities, and are encouraged to take an active role in addressing the threats posed by potential misuse of biological agents and toxins as weapons, including bioterrorism. States Parties noted that formal requirements for seminars, modules or courses, including possible mandatory components, in relevant scientific and engineering training programmes and continuing professional education could assist in raising awareness and in implementing the Convention.

27. States Parties agreed on the value of education and awareness programmes:

(i) Explaining the risks associated with the potential misuse of the biological sciences and biotechnology;

(ii) Covering the moral and ethical obligations incumbent on those using the biological sciences;

(iii) Providing guidance on the types of activities which could be contrary to the aims of the Convention and relevant national laws and regulations and international law;

(iv) Being supported by accessible teaching materials, train-the-trainer programmes, seminars, workshops, publications, and audio-visual materials;

(v) Addressing leading scientists and those with responsibility for oversight of research or for evaluation of projects or publications at a senior level, as well as future generations of scientists, with the aim of building a culture of responsibility;

(vi) Being integrated into existing efforts at the international, regional and national levels.

28. Having considered codes of conduct, States Parties agreed that such codes can complement national legislative, regulatory and oversight frameworks and help guide science so that it is not misused for prohibited purposes. States Parties recognised the need to further develop strategies to encourage national stakeholders to voluntarily develop, adopt and promulgate codes of conduct in line with the common understandings reached by the 2005 Meeting of States Parties and taking into account discussions at the 2008 Meeting of Experts.

29. States Parties noted the importance of balancing "top-down" government or institutional controls with "bottom-up" oversight by scientific establishments and scientists themselves. Within the framework of oversight, States Parties recognised the value of being informed about advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention and the necessity of strengthening ties with the scientific community. States Parties welcomed the important contributions made to their work by the scientific community and academia, including national and international academies of science and professional associations, as well as industry-led initiatives to address recent developments in science and technology, and encouraged greater cooperation between scientific bodies in various States Parties.

10. It is particularly to be noted that in paragraph 26 the:

*States Parties noted that **formal requirements** for seminars, modules or courses, including possible **mandatory components**, in relevant scientific and engineering training programmes and continuing professional education could assist **in raising awareness and in implementing the Convention**. [Emphasis added].*

There is no doubt that the effective national implementation of the Convention is dependent on all those engaged in the life sciences being aware of the national legislation and regulations relating to the Convention. The value of education and awareness programmes shown in paragraph 27 is welcomed.

Education, Outreach, Codes of Conduct and the BTWC

11. During the intersessional process between the Fifth and Sixth Review Conferences, Australia had reported¹³¹ at the Meeting of Experts in 2005 that:

Amongst the Australian scientific community, there is a low level of awareness of the risk of the misuse of the biological sciences to assist in the development of biological or chemical weapons. Many scientists working in ‘dual-use’ areas simply do not consider the possibility that their work could inadvertently assist in a biological or chemical weapons programme.

At the same meeting, the University of Bradford had reported¹³² work carried out with the University of Exeter in which interactive seminars had been held to determine what those engaged in carrying out *practical* work in the life sciences knew regarding the ‘dual use’ potential of their work, particularly in regard to the results and techniques generated through experimental work. By May 2005 a total of 25 seminars had been held: 12 in England (excluding Greater London), 6 in Greater London, 3 in Scotland, 2 in Wales, 1 in Northern Ireland and 1 in Germany. Analysis of these seminars had led to the conclusion that:

*There is **little evidence** from our seminars that participants:*

- a. regarded bioterrorism or bioweapons as a substantial threat;*
- b. considered that developments in life sciences research contributed to bio-threats;*
- c. were aware of the current debates and concerns about dual-use research;
or*
- d. were familiar with the BTWC.*

¹³¹ Australia, *Raising Awareness: Approaches and Opportunities for Outreach*, BWC/MSP/2005/MX/WP. 29, 21 June 2005. Available at www.opbw.org.

¹³² Dando, M.R. and Rappert, B., *Codes of Conduct for the Life Sciences: Some Thoughts from UK Academia*. Briefing Paper No 16 (Second Series), Department of Peace Studies, University of Bradford, May 2005. Available at: www.brad.ac.uk/acad/sbtwc.

12. In the following year, 2006, work was reported¹³³ to the Sixth Review Conference on further seminars carried out in the UK and in Finland, Germany, Netherlands, South Africa and the United States. It was found that although recent international attention had been given to the problem of the potential misuse of the life sciences, the initial findings reported in May 2005 had been essentially replicated in the later seminars in the UK, and in the other countries (Finland, Germany, Netherlands, South Africa and the US). It was noted that:

a fundamental conclusion from this study therefore is that in depth implementation of the BTWC within States Parties requires a significant effort on education and outreach for such implementation to be effective. To achieve this, a simple declaration as at previous Review Conferences about the importance of education will be insufficient and States Parties will need to take concerted action to ensure increased educational provision and outreach.

13. Our subsequent experience of carrying out seminars in a further 10 different countries (Argentina, Australia, India, Israel, Japan, Kenya, Sweden, Switzerland, Uganda, Ukraine) in 2007 and 2008 with three thousand life scientists in over 90 different departments has confirmed and consolidated these findings¹³⁴⁻¹³⁵. Indeed, in the later work, the seminars have been used more as an awareness-raising mechanism rather than a means of investigative research. It is thus evident that awareness-raising and education have a key role in achieving the effective implementation of the Convention.

14. We next examine the education gap and consider how best this may be filled – and thereby improve the implementation of the Convention. A number of recent University of Bradford initiatives – the Bradford Biosecurity Educational Module resource, the Train-the-Trainer programme and the country specific National Series – are then outlined. Building blocks for awareness-raising, education, and training are then addressed. Consideration is then given to biosafety and biosecurity competence standards. Finally the contributions of codes of conduct are considered.

The Education Gap

15. These findings showing the lack of biosecurity awareness of those engaged in the life sciences requires explanation. Physicists have long been aware of the dangers of the misuse of their science and have played important roles, for example, in the Pugwash Conferences on Science and World Affairs which have since 1957 brought together influential policy officials, scientists and public figures to seek ways of eliminating nuclear weapons and reducing the threat of war. Chemists were also influential in helping to bring the negotiations in the 1980s of the Chemical Weapons Convention (CWC) to a successful conclusion, and the International Union of Pure and Applied Chemistry (IUPAC) has contributed major

¹³³ Rappert, B., Chevrier, M.I. and Dando, M.R., *In-depth Implementation of the BTWC: Education and Outreach*. Review Conference Paper No. 18, Department of Peace Studies, University of Bradford, November 2006. Available at: <http://www.brad.ac.uk/acad/sbtwc>.

¹³⁴ Rappert, B. and Chandre Gould (eds), *Biosecurity: Origins, Transformations and Practices*, New Security Challenges, 2009, Palgrave, Basingstoke.

¹³⁵ Giulio Mancini and James Revill, *Fostering the Biosecurity Norm: Biosecurity Education for the Next Generation of Life Scientists*, Landau Network-Centro Volta, Como, Italy, November 2008. Available at: <http://www.centrovolta.it/landau/2008/11/20/FosteringTheBiosecurityNormBiosecurityEducationForTheNextGenerationOfLifeScientists.aspx>

reviews of relevant science and technology to the first two Review Conferences of the CWC.

16. It is consequently not unreasonable to ask why practising life scientists are so unaware of the BTWC and the problem of dual-use despite the increasing attention being given to these issues, for example, by the U.S. National Academies. One possible explanation is that life scientists are unaware of biosecurity issues because they do not feature in their university education. In order to investigate this we carried out¹³⁶, in co-operation with the Landau Network-Centro Volta in Italy, an internet survey on the extent of biosecurity education in life science degree courses in Europe. Using a sample of 142 courses from 57 universities in 29 countries speaking 25 different languages, we looked for evidence of biosecurity modules, bioethics modules and biosafety modules as well as for references to biosecurity, the BTWC, biological weapons and/or arms control, dual use and codes of conduct.

17. The results¹³⁷ were surprising:

This research suggested that only 3 out of 57 Universities identified in the survey currently offered some form of specific biosecurity module and in all cases this was optional for students.

On the other hand:

There is evidence of a considerable number of bioethics modules and nearly half of the degree programmes surveyed evidenced some form of bioethical focussed module. In terms of biosafety modules ... roughly one fifth of life science degrees in the sample contained a specific dedicated biosafety module although several of these specific modules were optional.

So we found a reasonable number of biosafety modules, a large, and we suspect, increasing number of bioethics modules, and virtually no biosecurity modules.

18. We sought to investigate in more detail by looking for any kind of reference to biosecurity issues in the course material¹³⁸. Again the picture was bleak:

Exactly what constitutes a reference varies; however, based on the quantitative data from the investigation, we found a total of 37 life science degree courses out of our sample of 142 where there was clear evidence of a reference to biosecurity. Only a minority of the degree courses in the study - a total of 22 out of 142 - made a

¹³⁶ Giulio Mancini and James Revill, *Fostering the Biosecurity Norm: Biosecurity Education for the Next Generation of Life Scientists*, Landau Network-Centro Volta, Como, Italy, November 2008. Available at:

<http://www.centrovolta.it/landau/2008/11/20/FosteringTheBiosecurityNormBiosecurityEducationForTheNextGenerationOfLifeScientists.aspx>

¹³⁷ Giulio Mancini and James Revill, *Fostering the Biosecurity Norm: Biosecurity Education for the Next Generation of Life Scientists*, Landau Network-Centro Volta, Como, Italy, November 2008. Available at: <http://www.centrovolta.it/landau/2008/11/20/FosteringTheBiosecurityNormBiosecurityEducationForTheNextGenerationOfLifeScientists.aspx>

¹³⁸ Giulio Mancini and James Revill, *Fostering the Biosecurity Norm: Biosecurity Education for the Next Generation of Life Scientists*, Landau Network-Centro Volta, Como, Italy, November 2008. Available at: <http://www.centrovolta.it/landau/2008/11/20/FosteringTheBiosecurityNormBiosecurityEducationForTheNextGenerationOfLifeScientists.aspx>

reference to the BTWC, BW and/or arms control and a similar number, 29 degree courses, exhibited some reference to the dual -use issue.

19. When we carried out a similar survey in Japan in 2009 of 197 life science degree courses in 62 Universities we found¹³⁹ a comparable outcome with only 3 specific biosecurity modules. In Japan we took the investigation a stage further by sending out a questionnaire to lecturers asking why biosecurity and dual-use was not being taught. Clearly some lecturers did not see these subjects as relevant to their courses, but others certainly did. Where people thought the topics relevant but did not teach them the reasons cited were a lack of expertise and access to necessary resources and a lack of space on a very crowded timetable in the teaching of modern life sciences. Similar results were found in surveys in Israel¹⁴⁰ (in a comprehensive survey of 35 courses in 6 research universities), and in the Asia-Pacific Region¹⁴¹ (Australia, China, India, Indonesia, Malaysia, New Zealand, Philippines, South Korea, Singapore, Thailand and Taiwan).

Correcting the Deficiency

20. It is evident that it will be a massive task to correct this deficiency in the education and awareness levels of life scientists and that this is one requiring action and leadership by the States Parties at the Seventh Review Conference. In the meantime there is a potential role for civil society in providing models of what might be done to close the gap in the most effective way in a short time frame. The University of Bradford has over the past few years been developing a Dual-Use Biosecurity Educational Module resource¹⁴². A report¹⁴³ in December 2008 by the US National Science Advisory Board for Biosecurity (NSABB) on a *Strategic Plan for Outreach and Education on Dual Use Research Issues* has considered what needs to be done in some detail. In their view, developing such a strategic plan requires:

First and foremost, the target audience must be identified and assessed as to their level of understanding of the issues since this will guide educational strategies.

It goes on to add that:

Messages should be tailored to specific target audiences. Key points must be identified and specifically crafted to effectively convey the nature and importance of the information while simultaneously addressing the unique concerns of different

¹³⁹ M. Minehata & Shinomiya. M, *Biosecurity Education: Enhancing Ethics, Securing Life and Promoting Science: Dual-Use Education in Life-Science Degree Courses at Universities in Japan*, Survey Report, 2009.

¹⁴⁰ Minehata, M., & Friedman, D. (2009), *Biosecurity education in Israeli research universities: Survey report*. Research report for the Wellcome Trust project on building a sustainable capacity in dual-use bioethics, Tel Aviv, The Institute for National Security Studies. Available at: http://www.brad.ac.uk/acad/sbtwc/dube/publications/Israel_BioSecReport_Final.pdf.

¹⁴¹ Minehata, M. (2010), *An investigation of Biosecurity Education for Life Scientists in the Asia Pacific region*. Research monograph for the Wellcome Trust project on building a sustainable capacity in dual-use bioethics, University of Bradford and University of Exeter. Available at: <http://www.internationalbiosafety.org/English/Biosafety-Studies.asp>.

¹⁴² English and other language versions of the Biosecurity Education Module resource are available at <http://www.brad.ac.uk/bioethics/EducationalModuleResource/>

¹⁴³ *Fostering the Biosecurity Norm: Biosecurity Education for the Next Generation of Life Scientists*. Strategic Plan for Outreach and Education On Dual Use Research Issues, Report of the National Science Advisory Board for Biosecurity (NSABB) 10 December 2008.

stakeholder groups.

And because there are so many different possible methods of communication:

it is important to select those methods that will most effectively reach the intended audiences.

21. When we applied a similar method of analysis to our work, it was evident that our intended target audience – university-level lecturers and students – did not have a high level of awareness of biosecurity and dual-use issues. Furthermore, given the prevalence of the use of the internet in universities, it was clear providing information on the web was by far the most efficient and effective way forward. However, given the different pressures on the timetable in different universities, we recognised that a one-size-fits-all module was inappropriate and decided to design a Biosecurity Educational Module resource¹⁴⁴ that could be used by individual lecturers around the world to draw upon so that they could fit relevant parts into their own courses.

22. Our thinking was also influenced by the developing consensus about education of life scientists that developed at the 2008 Meeting of the States Parties¹⁴⁵ which considered:

(iv) Oversight, education, awareness raising and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention;

23. The report¹⁴⁶ of this Meeting of States Parties stated that:

26. States Parties recognised the importance of ensuring that those working in the biological sciences are aware of their obligations under the Convention and relevant national legislation and guidelines, have a clear understanding of the content, purpose and foreseeable social, environmental, health and security consequences of their activities, and are encouraged to take an active role in addressing the threats posed by potential misuse of biological agents and toxins as weapons, including bioterrorism.

This paragraph then continued by saying, significantly, that:

States Parties noted that formal requirements for seminars, modules or courses, including possible mandatory components, in relevant scientific and engineering training programmes and continuing professional education could assist in raising awareness and in implementing the Convention.

24. In the next paragraph *the States Parties agreed on the value of education and awareness*

¹⁴⁴ English and other language versions of the Biosecurity Education Module resource are available at <http://www.brad.ac.uk/bioethics/EducationalModuleResource/>

¹⁴⁵ Meeting 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, *Report of the Meeting of States Parties*, BWC/MSP/2008/5, 12 December 2008. Available at; <http://www.opbw.org>

¹⁴⁶ Meeting 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, *Report of the Meeting of States Parties*, BWC/MSP/2008/5, 12 December 2008. Available at; <http://www.opbw.org>

programmes that would address the following:

- (i) Explaining the risks associated with the potential misuse of the biological sciences and biotechnology;
- (ii) Covering the moral and ethical obligations incumbent on those using the biological sciences;
- (iii) Providing guidance on the types of activities which could be contrary to the aims of the Convention and relevant national laws and regulations and international law;
- (iv) Being supported by accessible teaching materials, train-the-trainer programmes, seminars, workshop, publications, and audio-visual materials;
- (v) Addressing leading scientists and those with responsibility for oversight of research or for evaluation of projects or publications at a senior level, as well as future generations of scientists, with the aim of building a culture of responsibility;
- (vi) Being integrated into existing efforts at the international, regional and national levels.

25. In addition to developing and implementing the Biosecurity Education Module resource, Bradford has also developed an Online Train-the-Trainer course in Applied Dual-Use Biosecurity Education. These are both described in the following sections:

Bradford Biosecurity Educational Module Resource

Aims and Objectives

26. The purpose for the Biosecurity Education Module resource is to address as many of the ideas outlined above as possible based on the concept of having an integrated web of prevention¹⁴⁷ that together would persuade anyone thinking of breaking the BTWC prohibition that the costs would far outweigh the benefits. In work carried out in 2009 under British Council Funding with colleagues at Japan's National Defence Medical College and the Landau Network Centro Volta in Italy on designing and testing the Biosecurity Education Module resource it became clear that any such module needed to start with material that could be readily understood by life scientists.

Resource Composition

27. The Biosecurity Education Module resource consists of 21 lectures, each consisting of 20 PowerPoint slides and notes for the lecturer, and with direct internet links to the references used. Each lecture also includes suggested essay questions and the module has an introduction to all the material for lecturers and a small number of Briefing Papers cover material that would be less familiar to life scientists. Several lectures are also duplicated with material in the second set being more scientifically orientated.

28. The Biosecurity Education Module resource¹⁴⁸ has been designed in five parts:

A	Introduction and Overview	Lecture 1
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¹⁴⁷ Pearson, Graham S. (1998). *The Vital Importance of the Web of Deterrence*, Background Paper, Division of Peace Studies, University of Bradford, UK. Available at: <http://www.brad.ac.uk/acad/sbtwc/other/bw-info.htm>

¹⁴⁸ English and other language versions of the Biosecurity Education Module resource are available at <http://www.brad.ac.uk/bioethics/EducationalModuleResource/>

B	The Threat of Biological Warfare and Biological Terrorism and the International Prohibition Regime	Lectures 2-10
C	The Dual-Use Dilemma and the Responsibilities of Scientists	Lectures 11-18
D	National Implementation of the BTWC	Lectures 19-20
E	Building an Effective Web of Prevention	Lecture 21

29. Part A gives a brief overview of the whole of the module resource in order to orientate the user. Part B then sets out the misuse of modern biology after the discovery of the causes of infectious diseases in the late 19th Century by scientists such as Pasteur and Koch. This history is largely unknown amongst life scientists and forms a basis for the consideration of the possible misuse of future advances. This part ends by briefly reviewing how the international community has dealt with the threat of the proliferation of biological weapons through the 1925 Geneva Protocol, the 1975 BTWC and the 1997 Chemical Weapons Convention, given that there is an overlap between the BTWC and CWC in the area of mid-spectrum agents such as toxins and bioregulators. In this part we have also introduced modern accounts of the traditional agents such as anthrax, smallpox and botulinum toxin in order to better engage scientists in the issue of biosecurity.

30. Part B consists of Lectures 2 – 10 as follows:

2. Biological weapons from Antiquity to World War 1
3. Biological weapons from WW1 to WW11
4. Biological weapons during the Cold War
5. The impact of biological weapons agents
6. Assimilation of biological weapons in State Programmes
7. International legal agreements
8. Strengthening the BTWC 1980-2008
9. The 2003-2005 Intersessional Process
10. The 2007-2010 Intersessional Process.

These lectures begin with a consideration of the history of biological warfare and end with the recent annual BTWC meetings in which scientists have become increasingly involved – at least at the level of national academics and industrial leaders.

31. This then sets the scene for Part C in which lectures 11 to 18 address:

11. Bioethics methodology
12. Obligations derived from the BTWC
13. The growth of dual-use bioethics
14. Dual-Use: The US National Academy of Sciences Fink Report¹⁴⁹
15. Dual-Use examples
16. The US National Academy of Sciences Lemon-Relman Report¹⁵⁰

¹⁴⁹ The 2004 Report of the US National Academies *Committee on Research Standards and Practices to Prevent the Destructive Application of Biotechnology* entitled *Biotechnology Research in an Age of Terrorism* is usually referred to as the Fink Report as the Committee was chaired by Gerald R. Fink. It contains seven recommendations to ensure responsible oversight for biotechnology research with potential bioterrorism applications. National Research Council *Biotechnology Research in an Age of Terrorism*, (2004). Washington DC: The National Academies Press. Available at: http://www.nap.edu/catalog.php?record_id=10827

17. Weapons targeted at the nervous system
18. Regulation of the life sciences.

Although our studies strongly indicate that there is little biosecurity or dual-use content in university life science bioethics courses today, it is our recommendation that this is the best place where these issues could be addressed. Life scientists are becoming familiar with the ethical problems that new research brings up, and teaching of bioethics is growing in universities. Our view is that biosecurity and dual-use issues are best presented to life scientists in this context of the legal, social and ethical implications of research – a point that was made in the report of the 2008 Meeting of States Parties: see item (ii) reproduced in paragraph 17 above. Consequently, Part C of the module starts with a review of standard bioethical analyses that students are likely to have encountered before introducing the growing literature on dual-use bioethics. The section then leads on to a consideration of the key US National Academies Fink Report and the subsequent Lemon-Relman Report, which began the closer examination of the dual-use problem from within the scientific community. Lecture 15 examines classic dual-use experiments such as the mousepox experiment and Lecture 17 examines concerns over the misuse of advances in neuroscience so as to illustrate the contention by Lemon-Relman that the dual-use problem is far wider than just microbiology. Lecture 18 concludes Part C by reviewing the various papers that have recently discussed the regulation of the security implications of the life sciences.

32. Parts D and E of the module with lectures 19 and 20, and 21 respectively continue this theme on national and international regulation:

Part D

19. International Regulation of Biotechnology
20. National Implementing Legislation

Part E

21. The Web of Prevention.

33. The Bradford Biosecurity Education Module resource was launched at the 2009 Meeting of States Parties.¹⁵¹ Subsequently, it has been translated into a number of different languages including English, Japanese, French, Romanian-Moldovan and Russian (courtesy of the Government of Canada who facilitated its translation). Polish, Spanish, Georgian and Urdu versions are currently in preparation.

34. Whilst the Biosecurity Education Module resource is a stand-alone resource, in order to enhance its capabilities and build greater capacity and expertise in biosecurity, the online

¹⁵⁰ In 2006 the US National Academies published a report which followed on from the report of the Fink Committee. This report was produced by a committee chaired by Stanley Lemon and David Relman. Hence, it is referred to as the Lemon-Relman report. It adds significantly to the understanding of the threats and possible preventative responses developed in the Fink report. National Research Council, *Globalization, Biosecurity, and the Future of the Life Sciences*. 2006. Washington, DC: The National Academy Press. Available at: http://www.nap.edu/catalog.php?record_id=11567

¹⁵¹ Adil Ayub and Simon Whitby, *Building Capacity in Dual-Use Bioethics*, Peace Studies News, Issue 48, Summer 2010, p. 2-4. Available at: http://www.brad.ac.uk/ssis/media/SSIS/Documents/Peace_Studies_News_Autumn_2010.pdf

Train-the-Trainer module was launched in September 2010. In addition to this, a National Series is currently being developed that creates a country specific course consisting of the core components of the Biosecurity Education Module resource that is focussed on the required content and learning outcomes in the educational contexts of the specific country.¹⁵²

35. The next section gives an overview of the Train-the-Trainer course in Applied Dual-Use Biosecurity Education and reviews the results it has achieved within the first year since its launch. The subsequent section addresses the country specific National Series.

Online Train-the-Trainer Course

36. There are a number of easily achievable and affordable methods of building a worldwide sustainable capacity and competency in dual-use bioethics and biosecurity education amongst life scientists. Whilst the freely available Biosecurity Education Module resource is a good example of this, one of the most efficient and effective ways of doing this is through the development of online train-the-trainer modules. To this end, the University of Bradford currently offers Train-the-Trainer (T-t-T) courses in Applied Dual-Use Biosecurity Education¹⁵³ both as a 30 credit Masters-level module and a 6-week certificated course.

37. The courses were launched in September 2010 and have thus far attracted and engaged a range of participants from professionals including members of State Party delegations and those engaged in the life and associated sciences. Thus far, the participants have come from a range of countries including Egypt, Indonesia, Jordan, Kenya, Morocco, Nigeria, Pakistan, Philippines, Qatar, Russian Federation, Uganda, United Arab Emirates and Yemen.

38. The training is delivered online using an interactive virtual learning e-platform, called Elluminate¹⁵⁴, where course participants can participate in real-time face-to-face lectures and explore issues of relevance to dual-use biosecurity and address concerns and dilemmas that result from activities in the life and associated sciences. As it is delivered entirely online using a range of information communication technologies (ICT), participant costs are significantly reduced as travel, accommodation and visa expenses are avoided. This makes the course flexible and easily accessible to those with heavy work schedules and with limited resources. To illustrate its versatility, in the space of 12 weeks (the duration of the module) one participant, a professor in biotechnology, accessed the course from seven different countries!

39. With the objective of building capacity and competency in dual-use biosecurity the course aims to:

- Develop awareness and understanding of a range of dual-use conundrums and dilemmas that arise due to the impact of science and technology on society;
- Develop awareness and understanding of the ethical, legal and social relevance of

¹⁵² A webpage for the country specific National Series will soon be available at:
<http://www.brad.ac.uk/bioethics/>

¹⁵³ See the University of Bradford's *Applied Dual-Use Biosecurity Education Masters Level 30 Credit* teaching modules at: <http://www.brad.ac.uk/bioethics/TraintheTrainer/30CreditBiosecurityModule/>

¹⁵⁴ Elluminate is a java based web conferencing / learning programme developed by Elluminate Inc. primarily for educational purposes. It provides a virtual classroom in which virtual lectures, seminars and meetings can be facilitated. For further information regarding Elluminate refer to the following website:
<http://www.blackboard.com/Platforms/Collaborate/Overview.aspx>

dual-use biosecurity;

- Develop knowledge of approaches to the responsible conduct of research and other work and be able to provide justification for decisions or recommendations regarding dual-use technologies;
- Facilitate further research into 'dual-use' biosecurity issues and develop policies and practices that will enhance responsible conduct of research and other work to prevent the misuse of knowledge generated by life and associated sciences; and
- Develop competency and capacity in training others in responsible conduct of research and other work of relevance to dual-use biosecurity.

40. The acquired competency is measured against the learning outcomes set by the course module descriptor which include the following:

1. Knowledge & Understanding

With reference to dual-use biosecurity, on successful completion of this module you will be able to:

- Critically evaluate and analyse the **ethical** and **social** responsibilities of life and associated scientists with reference to the responsible conduct of research and other work.
- Critically evaluate and analyse the **legal** responsibilities of life and associated scientists with reference to international legal prohibitions and national laws and guidelines.

2. Discipline Skills

On successful completion of this module you will be able to:

- Organise and synthesise ideas and questions relevant to responsible conduct of research and other work in specific dual-use issues affecting humans, animals and plants.
- Contribute to the development and implementation of relevant country-specific and institutional mechanisms, guidelines, regulations and legislation.
- Integrate responsible conduct of life and associated science research and other work relating to dual-use biosecurity issues and concerns into your training.

3. Personal Transferable Skills

On successful completion of this module you will be able to:

- Evaluate and integrate data from a variety of sources and express these ideas clearly both verbally and in writing
- Communicate effectively in an online environment with your colleagues and students using a range of media
- Collaborate effectively with colleagues on group tasks and assessments
- Support the learning of colleagues through peer reviews and assessments
- Make effective use of communication and information technologies.

41. In seeking to achieve these learning outcomes, the course comprises both online lectures and online seminars. These have been designed to address the themes identified as being of central importance to the development of an informed appreciation of dual-use biosecurity so as to cover a range of issues of relevance including an understanding of:

1. Key concepts in the discourse on dual-use biosecurity and bioethics, and the use of concepts in responsible conduct of research in resolving conundrums and dilemmas.
2. Discussion and exercises associated with the processes underlying arriving at an understanding of approaches and deliberations which assist in the decision making process.
3. Relevant dual-use biosecurity and bioethics topics/scenarios drawn from human, animal and plant science.

42. In addition, during the course, participants are encouraged to work together in online groups with colleagues from different countries to show how they might address the bioethical dilemmas in the given real-life scenario. In doing so, participants engage in a case study approach applied in seminar scenarios which are based on real-life expert-level scenarios including *inter alia* the cases of Thomas Butler¹⁵⁵, Mousepox¹⁵⁶, Spanish Flu and Synthetic Polio Virus¹⁵⁷. These scenarios usefully allow life scientists to develop an informed appreciation of a range of dual-use dilemmas. Moreover, participants are encouraged to bring their own personal ideas and experiences to the course in order to contextualise their knowledge and understanding in ways that will help meet the ethical challenges thrown up by dual-use concerns.

43. To complete the course, participants are required to undergo an assessment for which the Biosecurity Education Module resource forms an integral part. Participants are asked to show how they might utilise the information in the Biosecurity Education Module resource through its assimilation in the teaching of others in their own professional context.

44. Forming the first component of the assessment (50%) is a 4000 word reflective applied written individual assignment for the 30 credit module and a 2000 word reflective applied written individual assignment for the 6-week certificated course. This is aimed at stimulating

¹⁵⁵ In 2002, Thomas Butler, a researcher at Texas Tech and former director of their Division for Infectious Diseases, managed to transfer specimens from more than 60 Tanzanian bubonic plague victims to the US without obtaining an essential regulatory permission for the purpose. A few months later, he reported that 30 vials of plague bacteria were missing from his lab. Eventually, he claimed he had inadvertently destroyed the cultures himself. Along with the allegations that he has mishandled the plague samples, prosecutors accused him of defrauding his university of clinical trial fees and cheating on his taxes. He was convicted on 47 out of 69 accounts facing up to 240 years in prison and millions of dollars in fines. After the appeal, he was eventually sentenced to 2 years in jail and a fine of more than USD 50,000. For further information see: The Sunshine Project, *The Thomas Butler Case: Some Unreported Information and Reasons for the Department of Justice's Prosecution*. 28 October 2003. Available at: <http://www.sunshine-project.org/publications/pr/pr281003.html>

¹⁵⁶ The mousepox experiment relates to an experiment in which the findings were published on a super virulent strain of mousepox. For further information see: Selgelid, M and Weir, L *The Mousepox Experience*, *EMBO Reports*, vol.11, no.1, 2010.

¹⁵⁷ Spanish Flu and Synthetic Polio Virus refer to experiments in which these viruses were re-synthesised. For further information see: Connor, S., *Fears of Bioterrorism as Scientists Create Deadly Polio Virus*, *The Independent* 12 July 2002. Available at: <http://www.independent.co.uk/news/science/fears-of-bioterrorism-as-scientists-create-deadly-polio-virus-648038.html> and also The Sunshine Project, *Lethal Virus from 1918 Genetically Reconstructed: US Army Scientists Create 'Spanish Flu' Virus in Laboratory – Medical Benefit Questionable*, News Release 9 Oct 2003. Available at: <http://www.sunshine-project.org/publications/pr/pr091003.html>

reflection and developing awareness of dual-use concerns in the participants' respective institutions, associations and countries.

45. In addition to the delivery of an online group work presentations which comprises 25% of the assessment, participants taking the 30 credit module are required to write a 2000 word report on how they would address the dual-use dilemma they have been presented with. In doing so, they should be able to offer defence of the decisions they make in this regard. Similarly, the report constitutes 25% of the overall assessment.

46. Having completed and passed the assessment, participants of the accredited module are awarded with 30 UK Masters-Level credits as well as a Certificate of Continuing Education. Participants in the 6-week course are issued with a Certificate of Completion.

Achievable and Effective Outcomes

Building a Biosecurity-Competent Network

47. Whilst the lectures and seminars are delivered using Elluminate, participants also engage with the subject area an online platform known as NING¹⁵⁸ through which social networks can be created. This has become a significant tool for facilitating the building of a sustainable capability in dual-use bioethics and biosecurity. One of the reasons for this is that it provides a platform through which to build and establish a growing network of biosecurity competent members. As participants join the course they are invited to be members of the NING biosecurity network. In joining the network, participants are effectively able to 'meet' and exchange communications with each other. This is facilitated through a variety of tools that NING provides for enhanced learning. For example, it allows members to post discussions and videos on relevant topics on the online platform, and disseminate information such as the latest publications or events taking place in the field of biosecurity. Moreover, as this is an expanding network of practitioners from numerous different countries, it provides a novel means for the dissemination of research on the subject. In doing so, it is contributing to achieving a much needed cultural change in life science education and practice.

Proof of Sustainability: Train-the-Trainer Participants

48. An empirical analysis of the online Train-the-Trainer module in Applied Dual-Use Biosecurity Education as outlined below shows how effective the course has been. Within the first year of delivery more than 30 more participants have been trained. As knowledge about and the credibility of the course are gaining momentum, the number of applicants is growing to the point where there were 94 applicants for the September 2011 online course. Most of the participants who have already undergone the training have been funded through bursaries made available from the United States Department of State *BioEngagement Programme* (BEP). In addition, the *BioEngagement Programme* have committed to funding a further 30 participants for the second year of the programme.

49. Over and above the participation of these life and associated scientists on the course, the training has already achieved the following outcomes:

¹⁵⁸ For further information about NING refer to the NING website available online at: <http://www.ning.com/>

- Course participants who previously had no knowledge or appreciation of dual-use concerns are integrating the training into their own teaching and University curriculum.
- Course participants who have organised and facilitated workshops amongst their biosafety professional associations and within their national public health structures;
- One of the course participants in Pakistan was directly responsible for writing the national guidelines for the development of a code of conduct for life scientists in Pakistan.¹⁵⁹
- The Chairman of the National Biological Weapons and Toxins Committee in Kenya, who was an early course participant, is in the process of developing an educational hub in Kenya through which dual-use biosecurity education can be disseminated in East Africa.

As course participants are learning about the significance of dual-use concerns and its implications as well as the versatility of online education, the demand for further training and education in the field is rapidly growing.

50. In summary, by utilising cutting edge information communication technologies in Dual-Use Biosecurity Education, life scientists can usefully engage in discussions about the concept of biosecurity and about the way in which this term relates to but is different from the concept of laboratory biosecurity. Engagement on the issue of ‘biosecurity’ can facilitate the development of a broader informed appreciation how the term biosecurity can be used to relate to a threat spectrum that ranges from natural outbreaks and accidental outbreaks of disease, through to deliberate outbreaks. It can be pointed out that natural outbreaks of disease are addressed by public-health measures, and accidental outbreaks of disease by ‘biosafety’ – in other words by addressing seriously issues around good laboratory practice.

51. Thus biosafety and laboratory biosecurity can be viewed by life scientists as a component part of biosecurity, whilst at the same time the point can be made that the term has a much wider meaning related to the concept of a web of prevention centred on the prohibition of the misuse of the life sciences embodied in Article I of the BTWC. Thus biosecurity can be addressed as being the objective of the whole range of policies, including those that relate to issues such as *inter alia* biosafety, laboratory biosecurity, bio-defence, export controls, regulation of biotechnology, and national implementation of the Biological and Toxin Weapons Convention, all of which make a vital contribution to minimising the possibility that the life sciences might be used for hostile purposes. Within that range of policies there is a clear role for practising life scientists in being aware that the materials, technologies and knowledge they produce may be misused; and a role for practicing life scientists in contributing their expertise to the development and maintenance of preventative policies.

Next Steps – Country Specific National Series

¹⁵⁹ National Focal Point for the Biological and Toxin Weapons Convention, Inter–Agency Working Group on Regulation of Biosciences & Technology. *National Guidelines for the Development of a Code of Conduct for Life Scientists*. 2010. Disarmament Division, Ministry of Foreign Affairs, Government of Pakistan.

52. In 2011 the Bradford Disarmament Research Centre has launched a new project to develop a Country Specific National Series. The Country Specific National Series reflects the structure of the Biosecurity Education Module resource but the themes, addressed reflect content and learning outcomes for educational contexts of specific countries. The main objective of this project is to provide a user-friendly educational resource which can be utilised for the immediate introduction of short educational programmes for higher education. By providing detailed teaching guidelines (MS Word) and teaching material (Power Point) for a facilitator (who need not necessarily be an expert on biosecurity issues), the Country Specific National Series facilitates the implementation of an active learning approach for biosecurity education programmes.

53. The Country Specific National Series has been developed in order to further improve the utility of the existing Biosecurity Education Module resource and the Train the Trainer (T-t-T) programme as these three projects are mutually complementary in the process to promote biosecurity education and building capacity in dual-use biosecurity. The Biosecurity Education Module resource provides freely available and openly accessible teaching material; the Train the Trainer course is designed to create experts who can teach and implement the Biosecurity Education Module resource into their own education programmes within their own research/academic institutions; and the Country Specific National Series facilitates immediate introduction of education programme, by providing detailed country-specific teaching guidelines and material based on Biosecurity Education Module resource.

Building Blocks for Awareness-Raising, Education, and Training

Harmonising Biosafety (Biorisk Management) and Dual-Use Biosecurity Awareness-Raising, Education and Training

54. In order to promote *safety and security with the respect to human pathogens and toxins* Canada enacted national domestic legislation known as the *Human Pathogens and Toxins Act* in 2009¹⁶⁰. This states that *The Purpose of the Act* is to “*establish a safety and security regime to protect the health and safety of the public against the risks posed by human pathogens and toxins.*” Although the training requirements specified in the Act have yet to be developed, the Act includes a stipulation that Biosafety Officers require *Qualifications*. It is understood that next year, in 2012, the Canadian Biosafety Standards and Guidelines (CBSG) will specify the requirement (*The Standard*) for trained staff and guidance (*The Guidelines*) as to what this actually means will be set out. The CBSG will replace Canada’s current *Laboratory Biosafety Guidelines*¹⁶¹ and will become the new biosafety standard in Canada. Until this time the requirement for trained staff is currently included in the *Laboratory Biosafety Guidelines for Canada*. However, in recognition of requirements for qualifications and training, in order to meet the biosafety and biosecurity challenges of the 21st century, Canada’s Public Health Agency (PHAC) is involved in the development and dissemination of hybrid applied biosafety and dual-use biosecurity training material that addresses both the biosafety and biorisk management, as well as dual-use biosecurity concerns that necessarily address a range of issues both within the laboratory and beyond the laboratory door. In this regard **national implementation legislation** is regarded as a foundation upon which the

¹⁶⁰ The Human Pathogens and Toxin Act. Canada. Available at: <http://lois-laws.justice.gc.ca/eng/acts/H-5.67/page-1.html>

¹⁶¹ Laboratory Biosafety Guidelines (3rd ed.). 2004. Public Health Agency, Canada. Available at: <http://www.phac-aspc.gc.ca/lab-bio/res/blk-acb/lbg-ldmbl-eng.php>

development of national training provision should be built. Importantly, the Canadian awareness-raising, education and training initiative can be regarded as a model of best practice for the training of biosafety professionals in the area of biosecurity since it acknowledges that professionals require an understanding of dual-use biosecurity issues of concern as well as thorough grounding in biosafety and biorisk management.

Biosafety and Biosecurity Competency Standards and Awareness-Raising, Education and Training

55. Professional Competence in Biosafety emerged in 2008 from Biosafety Professional Competence Task Group meetings convened by the European Biosafety Association (EBSA) in 2008. According to the European Committee for Standardization (CEN), the Laboratory Biorisk Management Standard (CWA [CEN Workshop Agreement] 15793:2008¹⁶²):

...recognizes a key role for the biosafety professional in a laboratory biosafety and biosecurity management programme. While the Laboratory biorisk Management Standard defines the role of the BSP in general terms, the...Laboratory Standard defines the role profile, the tasks and the competency requirements for the BSP, developing a curriculum to train the BSP and setting a framework for establishing training programmes as well as certifying biosafety professionals.

56. The development of biosafety standards in Europe (such as the CEN Workshop Agreement 15793:2008) and their possible future harmonisation with complementary dual-use biosecurity awareness-raising, education and training programmes; as well as harmonisation of complementary competency standards could further facilitate the building of a sustainable capability in awareness and education of dual-use biosecurity issues of concern. For example, extending the culture of responsible conduct amongst life and associated scientists and subsequent change in life science culture and practice may be brought about through the identification, articulation and formalisation of both Biosafety and Dual-Use Biosecurity Training and through the development of Professional Competency Standards. Standards for awareness-raising, education and training, and standards for competency may be formally approved and endorsed by professional associations. We see a potentially significant role for the creation, development and ongoing support for a Biosafety and Biosecurity education provision as well as a Professional Competency Standards Register and Network through the rapid establishment of networks in different countries and regions with international professional associations such as the International Federation of Biosafety Associations (IFBA) and its many affiliated international regional and national associations facilitating outreach to an extended network of practitioners. However, qualifications and complementary competency standards must be underpinned by education initiatives that address issues across the biosafety and dual-use biosecurity spectrum. Awareness-raising, education and training might both facilitate the consideration by life scientists of the dual-use value of their work, and facilitate the consideration of its possible ethical, legal and social implications. Professional competency in this area could be usefully developed and subsequently endorsed by professional associations.

Social Responsibility as Building Blocks for Awareness-Raising, Education and Training

¹⁶² CWA 15793:2008 is a Laboratory Biorisk Management Standard developed by the European Committee for Standardisation (CEN) in a CEN Workshop Agreement entitled CWA 15793:2008. It was published in February 2008. More information is available on the CEN website where the document can also be downloaded: <http://www.cen.eu/CEN/sectors/technicalcommitteesworkshops/workshops/Pages/ws31.aspx>

57. A further, although voluntary, mechanism exists in the form of the ISO 26000:2010 Guidance Standard on Social Responsibility¹⁶³ that may serve as a building block for increasing provision in awareness-raising, education and training. Launched in November 2010, the standard is an important development with the potential to impact upon businesses including those operating in the area of life science, and biotechnology and pharmaceutical industry. It is evident that:

ISO 26000:2010 is intended to assist organizations in contributing to sustainable development. It is intended to encourage them to go beyond legal compliance, recognizing that compliance with law is a fundamental duty of any organization and an essential part of their social responsibility. It is intended to promote common understanding in the field of social responsibility, and to complement other instruments and initiatives for social responsibility, not to replace them.

In applying ISO 26000:2010, it is advisable that an organization take into consideration societal, environmental, legal, cultural, political and organizational diversity, as well as differences in economic conditions, while being consistent with international norms of behaviour.

According to a report¹⁶⁴ by Rebecca Bowens of Sustainable Report Assurances (SGS) the Standard *provides guidance on the underlying principles of social responsibility, the core subjects and issues pertaining to social responsibility, and on ways to integrate socially responsible behaviour into existing organisational strategies, systems, practices and processes.*

58. In its comprehensive coverage of issues relating to business behaviour, the Standard sets out a series of principles for determining socially responsibility. The principles include:

accountability, transparency, ethical behaviour, respect for stakeholder interests, respect for the rule of law and international norms of behaviour, and respect for human rights."¹⁶⁵

The principles can inform an organisation's understanding of social responsibility and assist in the determination of its impact across a range of issues and the standard can be used to inform ways in which social responsibility can be put into practice throughout an organisation¹⁶⁶.

¹⁶³ ISO (International Organization for Standardization), *ISO 26000 – Social responsibility*. See; http://www.iso.org/iso/social_responsibility

¹⁶⁴ Rebecca Bowens, *Understanding the ISO 26000 Social Responsibility Standard and How it Relates to and Can be Assessed Alongside Other Standards, A discussion about social responsibility issues and how they can be managed within a business for the benefit of society today and in the future*, Sustainability Report Assurance, January 2011, SGS. Available at: <http://www.sgs.com/white-paper-library/iso-26000-information-request.htm>

¹⁶⁵ Rebecca Bowens, *Understanding the ISO 26000 Social Responsibility Standard and How it Relates to and Can be Assessed Alongside Other Standards, A discussion about social responsibility issues and how they can be managed within a business for the benefit of society today and in the future*, Sustainability Report Assurance, January 2011, SGS, page 4. Available at: <http://www.sgs.com/white-paper-library/iso-26000-information-request.htm>

¹⁶⁶ Rebecca Bowens, *Understanding the ISO 26000 Social Responsibility Standard and How it Relates to and Can be Assessed Alongside Other Standards, A discussion about social responsibility issues and how they can be managed within a business for the benefit of society today and in the future*, Sustainability Report Assurance,

59. Many benefits can be gained from business organisations being able to demonstrate socially responsible behaviour to a range of stakeholders including, governments, society, and local communities. Bowens usefully highlights four such benefits.

1. A competitive advantage over companies that have not been assessed against the Standard and are therefore unable to prove the extent of their socially responsible behaviours,

2. Improved relationships with stakeholders, customers and suppliers who view the organisation more positively as a result of its dedication to behave in a socially responsible manner,

3. Increased staff morale and the ability to attract and keep qualified professionals,

4. Enhanced perceptions of the organisation within the financial community.

Informed by ISO 26000, recognition amongst life and associated science industry of the value of providing awareness-raising, education and training for personnel that meets the biosafety and biosecurity challenges of the 21st century could – to the considerable benefit of industry – underscore socially responsible business practice.

Codes of Conduct

60. The annual Meeting of States Parties in 2005 was to consider:

the content, promulgation, and adoption of codes of conduct for scientists

The report¹⁶⁷ of this meeting in its substantive paragraphs recognised that:

(a) while the primary responsibility for implementing the Convention rests with States Parties, codes of conduct, voluntarily adopted, for scientists in the fields relevant to the Convention can support the object and purpose of the Convention by making a significant and effective contribution, in conjunction with other measures including national legislation, to combating the present and future threats posed by biological and toxin weapons, as well as by raising awareness of the Convention, and by helping relevant actors to fulfil their legal, regulatory and professional obligations and ethical principles;

Consequently they recognised that codes of conduct *can support the object and purpose of the Convention* and would also contribute *by raising awareness of the Convention*.

61. In addition, they agreed:

January 2011, SGS, page 5, V Steps Towards Social Responsibility. Available at: <http://www.sgs.com/white-paper-library/iso-26000-information-request.htm>

¹⁶⁷ Meeting 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, *Report of the Meeting of States Parties*, BWC/MSP/2005/3, 14 December 2005.

22. On the promulgation of codes of conduct, recognising that codes of conduct will be most effective if they, and the principles underlying them, are widely known and understood, the State Parties agreed on the value of continuous efforts on promulgation through appropriate channels.

62. It was evident, therefore, that the States Parties in 2005 envisaged that the development and implementation of codes of conduct would be a means by which the Convention would be better known and understood by scientists as well as a means of helping to guide their biosecurity behaviour. The States Parties underlined the importance they attached to codes of conduct by returning to the issue again in their Meeting in 2008 at which one of the two topics considered was:

(iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

In the substantive paragraphs in the report¹⁶⁸ of that Meeting of States Parties they recognised:

28. Having considered codes of conduct, States Parties agreed that such codes can complement national legislative, regulatory and oversight frameworks and help guide science so that it is not misused for prohibited purposes. States Parties recognised the need to further develop strategies to encourage national stakeholders to voluntarily develop, adopt and promulgate codes of conduct in line with the common understandings reached by the 2005 Meeting of States Parties and taking into account discussions at the 2008 Meeting of Experts.

It is thus clear that the States Parties have continued to attach importance to the understandings reached at the Meeting of States Parties in 2005 and the view that development and implementation of codes will enhance awareness of the Convention.

63. International and national scientific organisations have also contributed to the effort to develop wide-ranging biosecurity codes of conduct as demonstrated by the InterAcademy Panel *Statement on Biosecurity*¹⁶⁹ and its formulation of a set of principles for such codes of conduct. Additionally, academic researchers have addressed how effective codes could be developed¹⁷⁰.

64. Unfortunately, the net result of these efforts has been that very few, if any, appropriate codes of conduct have been developed over the last six years to provide adequate guidance to those engaged in the life sciences as to their wide responsibilities under the Convention¹⁷¹.

¹⁶⁸ Meeting 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, *Report of the Meeting of States Parties*, BWC/MSP/2008/5, 12 December 2008.

¹⁶⁹ The InterAcademy Panel on International Issues. *IAP Statement on Biosecurity*. 07 November 2005. Available at: <http://www.interacademies.net/File.aspx?id=5401>

¹⁷⁰ See, for example, Atlas, R. M. and Somerville, M. *Life Sciences or Death Sciences: Tipping the Balance towards Life with Ethics, Codes and Laws*, pp 15-33 in B.Rappert and C. McLeish, *A Web of Prevention: Biological Weapons, Life Sciences and the Governance of Research*. 2007, Earthscan, London.

¹⁷¹ Dando, M.R. and Whitby, S. , *Dual Use Research, Biosecurity, and the Responsible Conduct of Research*, Office of Research Integrity Newsletter, 19, (2), March 2011, available at <http://ori.hhs.gov>.

There may be a number of reasons for this failure to develop and implement codes of conduct for life scientists, but one major factor is likely to be the demonstrable lack of awareness and education about the Convention amongst life scientists. Rather than codes of conduct being a means of developing awareness, it is now clear that to engage life scientists in the development and implementation of appropriate codes of conduct they **first** need to be made aware and become better educated about their responsibilities under the Convention. In short, awareness-raising and education have to be in place before life scientists will turn their attention to codes of conduct and oversight systems more generally. It is thus to awareness-raising and education that States Parties must direct their attention if progress in strengthening the Convention is to be made amongst those engaged in the life sciences.

Issues for the Seventh Review Conference

65. In looking forward to the Seventh Review Conference in December 2011, the consensus about the value of awareness-raising and education that was agreed¹⁷² at the 2008 Meeting of States Parties is greatly welcomed.

66. In a paper¹⁷³ published in 2010, it was pointed out

how the World Health Organization's (WHO) revised International Health Regulations (IHR[2005]), the Biological Weapons Convention (BWC), and the United Nations Security Council Resolution (UNSCR) 1540 overlap in their requirements with regard to biosafety and biosecurity in order to improve the understanding of practitioners and policymakers and maximize the use of national resources employed to comply with internationally-mandated requirements. The broad range of goals of these international instruments, which are linked by the common thread of biosafety and biosecurity, highlight their significance as essential pillars of international health security and cross-cutting elements of biological nonproliferation.

This paper then went on to note that:

In this context, the common understandings reached at the 2008 BWC Meeting of States Parties are highly relevant: "recognizing that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of BTW [biological and toxin weapons] and are appropriate means of implementing the BWC, States Parties agreed on the value of...international cooperation on biosafety and biosecurity at the bilateral, regional and international levels," and also that "pursuing biosafety and biosecurity measures could also contribute to the fulfillment [by States Parties] of other respective international obligations and agreements, such as the revised IHR of the WHO, and relevant codes of OIE [the International Organization for Animal Health],... [and] UNSCR [United Nations Security Council Resolution] 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention."

¹⁷² Meeting 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, *Report of the Meeting of States Parties*, BWC/MSP/2005/3, 14 December 2005.

¹⁷³ Lela Bakanidze, Paata Imnadze, and Dana Perkins, (2010) *Biosafety and biosecurity as essential pillars of international health security and cross-cutting elements of biological nonproliferation*, BMC (BioMedCentral) Public Health 2010, 10 (Suppl 1):S12.

While the understandings and agreements reached during the intersessional process are not legally-binding, they are nevertheless politically-binding for all States Parties. States Parties have the opportunity to report under the CBM E (Declaration of legislation, regulations, and other measures) the relevant laws, regulations, or other measures related to the national biosafety and biosecurity framework. Additionally, the CBM D (Active promotion of contacts) also offers an opportunity for States Parties to promote relevant educational and training activities in these areas.

67. This consensus about the value of awareness-raising and education has been reinforced by the background documentation submitted¹⁷⁴ at the Preparatory Committee meeting by Australia, Japan and Switzerland on behalf of the JACKSNNZ states¹⁷⁵, and Sweden entitled *Possible approaches to education and awareness-raising among life scientists*. This sets out a number of considerations that all States Parties to the BTWC are urged to agree in the framework of the Seventh Review Conference. These considerations are:

(a) that the frequent lack of awareness of aspects related to biosecurity and the obligations of the Convention among life scientists has to be addressed more urgently, strategically, and comprehensively;

(b) that these efforts could serve, inter alia, as a basis for individual educational and awareness-raising activities by the States Parties on their national level as well as cooperation at an international level;

(c) that such activities could, inter alia, lead to the sustainable introduction of specific educational modules and activities related to security aspects of the Convention, also for example as part of an ongoing awareness-raising program;

*(d) that the **stakeholders** for such awareness-raising activities and intersessional programmes on dual-use education should involve, inter alia, relevant Government Ministries, Industry, Research Institutions, Academia and relevant Scientific Societies in all stages of the design and implementation of oversight frameworks. The **form and nature** of such activities should clearly be developed and implemented by each State Party based on its national rules, regulations and as a complement to its existing outreach activities (i.e. ‘no one size fits all’)*

(e) that effective, non-mandatory awareness-raising activities could be developed and implemented, at low cost, containing various concrete measures, including

(i) explaining the risks associated with the potential misuse of the biological sciences and biotechnology;

(ii) covering the moral and ethical obligations of the Convention incumbent on those using the biological sciences;

¹⁷⁴ Australia, Japan and Switzerland on behalf of the “JACKSNNZ”, and Sweden, *Possible approaches to education and awareness-raising among life scientists*, BWC/CONF.VII/PC/INF.4, 15 April 2011. Available at <http://www.opbw.org>

¹⁷⁵ Japan, Australia, Canada, Republic of Korea, Switzerland, Norway and New Zealand.

(iii) providing guidance on the types of activities which could be contrary to the aims of the Convention and relevant national laws and regulations and international law;

(iv) supporting accessible teaching materials, train-the-trainer programmes, seminars, workshops, publications, and audio-visual materials;

(v) addressing leading scientists and those with responsibility for oversight of research or for evaluation of projects or publications at a senior level, as well as future generations of scientists, with the aim of building a culture of responsibility;

(vi) integrating the efforts into existing efforts at the international, regional and national levels;

(f) that activities in dual-use education and relevant regulations should not cause unnecessary burdens and do not unduly restrict permitted biological activities. Scientists and all the other stakeholders could prevent the possible misuse of biological science by creating a culture of responsibility and security through biosecurity and bio-ethics education.

(g) that States Parties should inform on their awareness-raising activities on dual-use education in a more explicit manner. (It is recognized that reports on these activities by States Parties could already be included in CBMs under 'Other Measures' in CBM Measure E the 'Declaration of legislation, regulations and other measures' as measures undertaken to ensure effective national implementation of the BWC.) With the publication of this information, inter alia in CBM returns, those States Parties which are at a more advanced stage in the implementation of their dual-use awareness-raising and education activities would be able to identify, and offer appropriate cooperation to, States Parties at a less advanced stage in such activities.

(h) that the intersessional period between the Seventh and the Eighth Review Conference should be used for further exchanges and developments of the topic among States Parties as well as States Parties in collaboration with international organisations and non-governmental organisations.

68. The emphasis in the first point (i) that *the frequent lack of awareness of aspects related to biosecurity and the obligations of the Convention among life scientists has to be addressed **more urgently, strategically, and comprehensively*** [emphasis added] is very much endorsed. It is evident that **more** needs to be agreed by the States Parties at the Seventh Review Conference than the encouraging words agreed at the Sixth Review Conference that;

14. *The Conference urges the inclusion in medical, scientific and military educational materials and programmes of information on the Convention and the 1925 Geneva Protocol. The Conference urges States Parties to promote the development of training and education programmes for those granted access to biological agents and toxins relevant to the Convention and for those with the knowledge or capacity to modify such agents and toxins, in order to raise awareness of the risks, as well as of the obligations of States Parties under the Convention.*

15. *The Conference encourages States Parties to take necessary measures to promote awareness amongst relevant professionals of the need to report activities conducted within their territory or under their jurisdiction or under their control that could constitute a violation of the Convention or related national criminal law. In this*

context, the Conference recognises the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and calls upon States Parties to support and encourage their development, promulgation and adoption.

69. The work carried out since the Sixth Review Conference has demonstrated that the effective implementation of the Convention amongst all those engaged in the life sciences requires the States Parties to take top-down action – relying on bottom-up efforts will simply be ineffective in remedying the present abysmal level of awareness and education of life scientists around the world. There is thus a requirement for the States Parties to agree to take action to implement effective education of and outreach to all those engaged in the life sciences so that they are aware of their national and international obligations not to misuse the life sciences.

70. Once the States Parties have agreed to take action to implement effective education of and outreach to all those engaged in the life sciences, then further steps should be taken so that the other States Parties are aware of what has been done. Thus, the States Parties could agree to submit annual reports that explicitly address their awareness-raising and dual-use education activities as *Other Measures* undertaken to ensure effective national implementation of the BTWC submitted under *CBM E Declaration of legislation, regulations and other measures*.

71. In addition, the States Parties could agree at the Seventh Review Conference that *CBM D Active Promotion of Contacts* should be used by States Parties to submit information on relevant educational and training activities being carried out in their countries, providing points of contact for applicants wishing to apply to participate in such activities.

72. A further point relates to biosecurity competency standards. The States Parties at the Seventh Review Conference should recognise the importance of adopting international and national biosecurity standards and should agree to work together with other international organisations such as the WHO, OIE, FAO and the 1540 Committee to agree international biosecurity standards and to harmonise these with national biosecurity standards.

Points for the *Final Document*

73. Consideration is given here to both the Article by Article *Final Declaration* and then to the *Decisions and Recommendations* section (Part III of the Final Document).

Article IV in the Article by Article *Final Declaration*

74. It is recommended that language be adopted by the Seventh Review Conference for its section relating to education, outreach and codes of conduct within Article IV in its *Final Declaration* that is stronger and more effective than that in the *Final Declaration* of the Sixth Review Conference. This should make the following points:

1. The States Parties to agree that the implementation of the Convention requires that effective action be taken to ensure the education and awareness of all those engaged in the life sciences.
2. The States Parties to take steps nationally to ensure that those engaged in the life sciences are educated in the risks associated with such materials and are aware of their

responsibilities to ensure that such materials are not misused.

3. The States Parties to agree that they will provide annual reports on the steps they have taken nationally to improve education and outreach as a part of their submissions under *CBM E Declaration of legislation, regulations and other measures*.

4. The States Parties to agree that they will provide information on relevant educational and training activities being carried out in their countries, providing points of contact for applicants wishing to apply to participate in such activities, as a part of their submissions under *CBM D Active Promotion of Contacts*.

5. The States Parties to recognise that effective national implementation of the Convention will be promoted by the development and adoption of international and national biosecurity standards and agree to work together with the WHO, OIE, FAO and the 1540 Committee to agree and implement such standards.

Decisions and Recommendations Section of the Final Document

75. The assumption is made that the Seventh Review Conference will follow the precedent of the Sixth Review Conference and have a *Part III: Decisions and Recommendations* section in the *Final Document*. It is recommended that the section entitled *Confidence-Building Measures* in *Part III: Decisions and Recommendations* should include two decisions arising from the issues considered here in relation to the Education, Outreach and Codes of Conduct aspects of Article IV. These are:

a. *CBM E Declaration of legislation, regulations and other measures*. To include the provision of an annual report on the steps they have taken nationally to improve education and outreach.

b. *CBM D Active Promotion of Contacts*. To include the provision of information on relevant educational and training activities being carried out in their countries, including points of contact for applicants wishing to apply to participate in such activities.

ARTICLE V: CONSULTATION AND COOPERATION

by Graham S Pearson & Nicholas A. Sims

Consideration of Article V at the Sixth Review Conference

1. Article V of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*¹⁷⁶ stated in the section on Article V that:

20. *The Conference reaffirms that:*

(i) this article provides an appropriate framework for States Parties to consult and cooperate with one another to resolve any problem and to make any request for clarification which may have arisen in relation to the objective of, or in the application of, the provisions of, the Convention;

(ii) any State Party which identifies such a problem should, as a rule, use this framework to address and resolve it;

(iii) States Parties should provide a specific, timely response to any compliance concern alleging a breach of their obligations under the Convention.

21. *The Conference reaffirms that the consultation procedures agreed at the Second and Third Review Conferences remain valid to be used by States Parties for consultation and cooperation pursuant to this Article. The Conference reaffirms that such consultation and cooperation may also be undertaken bilaterally and multilaterally, or through other appropriate international procedures within the framework of the United Nations and in accordance with its Charter.*

22. *The Conference stresses the need for all States Parties to deal effectively with compliance issues. In this connection, the States Parties had agreed to provide a specific, timely response to any compliance concern alleging a breach of their obligations under the Convention. Such responses should be submitted in accordance with the procedures agreed upon by the Second Review Conference and further developed by the Third Review Conference. The Conference reiterates its request that information on such efforts be provided to the Review Conferences.*

¹⁷⁶ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

23. *The Conference emphasises the importance of the exchange of information among States Parties through the confidence-building measures (CBMs) agreed at the Second and Third Review Conferences. The Conference welcomes the exchange of information carried out under these measures, and notes that this has contributed to enhancing transparency and building confidence.*

24. *The Conference notes that only a limited number of States Parties make an annual CBM submission. The Conference recognises the urgent need to increase the number of States Parties participating in CBMs. In this regard, the Conference also recognises the technical difficulties experienced by some States Parties in completing full and timely declarations. In order to update the mechanism of transmission of information, the Conference has agreed on several measures. [See Part III: Decisions and Recommendations]*

25. *The Conference reaffirms that the data submitted in the framework of the annual exchange of information should be provided to the United Nations Department for Disarmament Affairs and promptly forwarded by it to all States Parties according to existing modalities. The information supplied by a State Party must not be further circulated or made available without the express permission of that State Party.*

Developments since the Sixth Review Conference

3. The principal developments since the Sixth Review Conference have been:
 - a. The continued submission by some States Parties of the annual politically-binding Confidence Building Measures agreed at the Second Review Conference and extended at the Third Review Conference and the discussion since the Sixth Review Conference as to how best the CBM regime might be enhanced..
 - b. The discussion during the preparations for the Seventh Review Conference of how best the question of compliance and verification might be addressed.

The Confidence-Building Measure regime is addressed in the next chapter entitled *Article V: Confidence-Building Measures*.

Compliance Concerns and Consultation Procedures

4. Article V of the Convention contains an obligation to consult and to cooperate. The scope of the obligation is intentionally drawn very wide – *in solving any problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention* – so as to extend to **any** aspect of the Convention which may give rise to problems. It thus ranges over the entire BTWC and that comprehensiveness of scope is one of the strengths of this Article. Another is the discretion it leaves to the States Parties over how to implement their obligation.

5. Although this is not explicitly stated, Article V has been understood as relying on either bilateral or multilateral diplomacy for its activation. It is thus convenient to examine its bilateral and multilateral modes of operation separately.

Bilateral mode

6. In its bilateral mode, Article V enables one State Party to make a diplomatic démarche directly to another, as of right, provided the question that is the subject of the démarche is related to the BTWC. It does not, however, say what constitutes a satisfactory answer. The questioned State Party may consider itself to have fulfilled its obligation under Article V by giving an answer; the questioning State Party may still want a fuller or more convincing answer and therefore regard its activation of Article V as unfinished business. The extent of the obligation then becomes an issue in itself, over and above the original subject matter of the question. Previous Review Conferences have tried to address this problem by exhorting States Parties to cooperate fully and promptly with any request. It is hard to see what the Seventh Review Conference can do beyond reaffirming that exhortation to offer a specific, timely response to any compliance concern.

7. It would be undesirable to try to constrain States Parties into too narrow a bilateral procedure. Writing about Article V in its bilateral mode, Jonathan Tucker recently recommended¹⁷⁷ that *The consultative mechanism should be kept as flexible as possible, because if it is too rigid, states will be less inclined to use it.*

8. Individual States Parties will continue to decide for themselves when and how to make a démarche under Article V and whether they regard the answer received as satisfactory. Under the BTWC they may, if dissatisfied, move on to invocation of Article VI, if they claim to have found a breach of the Convention, or to the multilateral mode of Article V if they prefer to press for fuller consultation and cooperation within the collectivity of the BTWC States Parties.

Multilateral mode

9. In its multilateral mode, Article V has been the subject of extended understandings and agreements on procedure through the politically-binding commitments recorded, by consensus, in the final declarations of successive Review Conferences. Ever since the First Review Conference¹⁷⁸ in 1980 when the Article V section of the *Final Declaration* stated:

The Conference considers that the flexibility of the provisions concerning consultations and cooperation on any problems which may arise in relation to the objective, or in the application of the provisions of, the Convention, enables interested States Parties to use various international procedures which would make it possible to ensure effectively and adequately the implementation of the Convention provisions taking into account the concern expressed by the Conference participants to this effect.

These procedures include, inter alia, the right of any State Party subsequently to request that a consultative meeting open to all States Parties be convened at expert level.

¹⁷⁷ Jonathan B. Tucker, *Strengthening Consultative Mechanisms under Article V to Address BWC Compliance Concerns*, Harvard Sussex Program Occasional Papers, No.1, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Occ-papers.html>

¹⁷⁸ United Nations, 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, 3 - 21 March 1980, *Final Document*, BWC/CONF.I/10, 21 March 1980. Available at <http://www.opbw.org>

There has been agreement on one specific contingency mechanism for handling compliance concerns, the Formal Consultative Meeting held at expert level and open to all States Parties.

10. Provisions for the operation of this contingency mechanism were elaborated at the Second Review Conference¹⁷⁹ when the States Parties agreed:

The Conference, taking into account views expressed concerning the need to strengthen the implementation of the provisions of Article V, has agreed:

- *that a consultative meeting shall be promptly convened when requested by a State Party,*
- *that a consultative meeting may consider any problems which may arise in relation to the objective of, or in the application of the provisions of the Convention, suggest ways and means for further clarifying, inter alia, with assistance of technical experts, any matter considered ambiguous or unresolved, as well as initiate appropriate international procedures within the framework of the United Nations and in accordance with its Charters,*
- *that the consultative meeting, or any State Party, may request specialised assistance in solving any problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention, through, inter alia, appropriate international procedures within the framework of the United Nations and in accordance with its Charter,*
- *the Conference considers that States Parties shall co-operate with the consultative meeting in its consideration of any problems which may arise in relation to the objectives of, or in the application of the provisions of the Convention, and in clarifying ambiguous and unresolved matters, as well as co-operate in appropriate international procedures within the framework of the United Nations and in accordance with its Charter.*

11. This procedure was used in 1997 at the request of Cuba. Because this is the only occasion on which it has been invoked, experience is limited and the Seventh Review Conference should reaffirm the provisions agreed earlier and the procedures and practices followed in 1997. A summary of what happened in 1997 is provided in an **Annex attached to this chapter**. The States Parties could with advantage emphasise even more strongly the obligation on States Parties to cooperate with any enquiries the Formal Consultative Meeting may set in train and the possible involvement of Specialised Agencies and other international organisations in providing technical expertise to assist those enquiries.

12. However, the Formal Consultative Meeting is only one application of Article V in its multilateral mode. Its 1980 origin lies in the identification of this contingency mechanism as *an appropriate international procedure within the framework of the United Nations and in accordance with its Charter*, a formulation which leaves open the identification of additional procedures within that provision of Article V. It is now 31 years since the First Review

¹⁷⁹ United Nations, Second 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, 8 - 26 September 1986, *Final Document*, BWC/CONF.II/13, 30 September 1986. Available at <http://www.opbw.org>

Conference in 1980 and it is time more procedures under that provision were added to the one singled out by the First Review Conference.

13. It is open to the Seventh Review Conference to identify and commend other *appropriate international procedures within the framework of the United Nations and in accordance with its Charter* for States Parties to use in applying Article V in its multilateral mode.

14. A suggestion has recently been made¹⁸⁰ that voluntary *consultative visits* would help to allay compliance concerns. Such visits would be carried out in the amicable spirit of consultation and cooperation prescribed in the first part of Article IX of the Chemical Weapons Convention, where the emphasis is laid on clarification of situations giving rise to anxiety and resolution of ambiguities and suspicions. The first part of Article IX of the Chemical Weapons Convention states:

1. States Parties shall consult and cooperate, directly among themselves, or through the Organization or other appropriate international procedures, including procedures within the framework of the United Nations and in accordance with its Charter, on any matter which may be raised relating to the object and purpose, or the implementation of the provisions, of this Convention.

2. Without prejudice to the right of any State Party to request a challenge inspection, States Parties should, whenever possible, first make every effort to clarify and resolve, through exchange of information and consultations among themselves, any matter which may cause doubt about compliance with this Convention, or which gives rise to concerns about a related matter which may be considered ambiguous. A State Party which receives a request from another State Party for clarification of any matter which the requesting State Party believes causes such a doubt or concern shall provide the requesting State Party as soon as possible, but in any case not later than 10 days after the request, with information sufficient to answer the doubt or concern raised along with an explanation of how the information provided resolves the matter. Nothing in this Convention shall affect the right of any two or more States Parties to arrange by mutual consent for inspections or any other procedures among themselves to clarify and resolve any matter which may cause doubt about compliance or gives rise to a concern about a related matter which may be considered ambiguous. Such arrangements shall not affect the rights and obligations of any State Party under other provisions of this Convention.

15. It has also been suggested¹⁸¹ that the Review Conference should *examine a possible role for the BWC Implementation Support Unit in helping member states carry out consultations under Article V...[the ISU] could play a facilitating or mediating role in consultative activities under Article V when specifically requested to do so.* Although Tucker listed these possibilities as developments of Article V in its bilateral mode, they could with advantage be used for both the bilateral and multilateral modes according to the circumstances of their eventual invocation.

¹⁸⁰ Jonathan B. Tucker, *Strengthening Consultative Mechanisms under Article V to Address BWC Compliance Concerns*, Harvard Sussex Program Occasional Papers, No.1, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Occ-papers.html>

¹⁸¹ Jonathan B. Tucker, *Strengthening Consultative Mechanisms under Article V to Address BWC Compliance Concerns*, Harvard Sussex Program Occasional Papers, No.1, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Occ-papers.html>

16. The European Union has pointed out a further possible application of Article V. In the Working Paper¹⁸² in preparation for the Seventh Review Conference which it presented to the Preparatory Committee on 13 April 2011 (paragraph 8) it stated:

The EU attaches a lot of importance to the provision for consultation and cooperation under Article V, which stipulates that the States Parties can consult each other in relation to the objective of, or in the application of the provisions of the Convention. Although the BTWC does not specifically foresee formal consultations on CBMs they could take place under the auspices of Article V.

The CBMs grew out of an extended understanding of the cooperation provisions of Article V in the 1980s and have been covered by, or closely linked to, the Article V section of the *Final Declaration* of successive Review Conferences since their creation by the Second Review Conference in 1986. The Confidence-Building Measure regime is addressed in the next chapter entitled *Article V: Confidence-Building Measures*.

17. This European Union paper is also significant as it states that *States Parties can consult each other in relation to the objective of, or in the application of the provisions of the Convention* and thus that consultations under Article V need not be confined to the handling of particular compliance concerns as they arise, even though that has been its principal focus to date and the most frequent subject of proposals for developing its use. It would be perfectly correct for the States Parties also to use Article V for consultation over CBMs, or over developing greater transparency across the subject-matter of the Convention and effectiveness in its operation more generally, since these initiatives all arise in response to perceived problems in the working of the BTWC over which they should consult one another. Such use of Article V could include, for example, the creation of a new working group to examine possible compliance measures, reporting arrangements and accountability frameworks, and other means of strengthening confidence in the Convention, without preconceptions or preconditions. The next sections of this chapter consider proposals along these lines that have been put forward in papers^{183,184} and discussed in workshops, held in preparation for the Seventh Review Conference, such as that at Montreux¹⁸⁵ in April 2011.

An Accountability Framework

18. The BTWC States Parties exist in a treaty relationship, accountable to one another as well as beyond, to the wider international community, for their actions. They strengthen the treaty when they regularly demonstrate their compliance with BTWC obligations, as a matter of good practice, not waiting for raised voices of concern or accusation. This good practice

¹⁸² Hungary on behalf of the European Union, *Preparation for the Seventh 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*, Preparatory Committee, 13 – 15 April 2011, BWC/CONF.VII/PC/INF.2. Available at <http://www.opbw.org>

¹⁸³ Nicholas A. Sims, *An Accountability Framework for the BTWC*, University of Bradford Review Conference Paper No. 23, June 2010. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

¹⁸⁴ Graham S. Pearson, *A 2020 Vision for the Biological and Toxin Weapons Convention*, University of Bradford Review Conference Paper No. 29, March 2011. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

¹⁸⁵ Graham S. Pearson, *Developing Practical Proposals for the BWC Seventh Review Conference in 2011*, Special HSP Report from Montreux, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Reports%20from%20Geneva.html>

could best be organised within an Accountability Framework¹⁸⁶. Such a framework would leave each State Party free to decide how it demonstrates its own compliance, within a framework built around the Articles of the treaty; but there must in addition be an opportunity for them to consider one another's reports systematically, and to request and provide clarifications in a forum devoted to collective scrutiny. This forum could most conveniently be provided by accountability sessions at the Annual Meeting, an idea originally proposed by Canada in 2005. It could build on the practice of reviewing compliance through national reports, first requested in 1979, but make systematic what has hitherto been a patchy process with few reports submitted and wholly devoid of collective scrutiny at the first six Review Conferences. It should be well within the capabilities of the States Parties to develop such an Accountability Framework for the BTWC which would include safeguards to ensure that any problems with such an approach encountered under other multilateral arrangements are not replicated for the BTWC.

19. Accountability and collective scrutiny ought to give additional life to the treaty as an ongoing enterprise. Carefully prepared sessions organised over a four-year cycle should promote a developing sense of common purpose and shared experience within the BWC, as well as helping to allay doubts and resolve uncertainties over compliance.

20. They could also help defuse a potentially disruptive controversy over Article X. This relates to whether a specific mechanism is needed – as Cuba on behalf of the Non-Aligned Movement (NAM) has urged since 2009 – to promote international cooperation in the peaceful uses of microbiology. The Accountability Framework would provide an opportunity which could be used to demonstrate how much States Parties are already doing to implement Article X, with clarifications offered as necessary. It would then be much easier to consider calmly whether any new arrangements relating to Article X are appropriate.

21. The concept of an Accountability Framework was addressed in Bradford Review Conference Paper No. 20¹⁸⁷ which recommended that the *Final Document* of the Seventh Review Conference should include a section entitled *Accountability Framework* in *Part III. Decisions and Recommendations* that makes the following points:

Accountability Framework

a. The States Parties noting their Solemn Declaration in which they have reaffirmed

(iv) Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time;

recognise that an Accountability Framework would greatly enhance confidence in compliance with the Convention by all States Parties.

¹⁸⁶ Nicholas A. Sims, *An Accountability Framework for the BTWC*, University of Bradford Review Conference Paper No. 23, June 2010. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

¹⁸⁷ Nicholas A. Sims, *An Accountability Framework for the BTWC*, University of Bradford Review Conference Paper No. 23, June 2010. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

b. Within this framework, information provided by States Parties regarding their compliance with all provisions of the Convention shall be considered by the Annual Meeting of States Parties in an accountability session or sessions at which clarification of information provided may be sought and supplied as necessary.

c. This consideration during the intersessional period prior to the next Review Conference shall be applied to approximately one quarter of the States Parties each year according to a schedule to be prepared by the ISU and approved by the President of the Seventh Review Conference, and such States Parties shall be invited to submit information regarding their compliance with all provisions of the Convention prior to their consideration at the Annual Meeting.

Towards Effective Compliance Measures

22. The workshop, held in preparation for the Seventh Review Conference, at Montreux¹⁸⁸ in April 2011, focused on consideration of six areas of action for a successful Seventh Review Conference: the Intersessional Process, the Confidence-Building Measures, science and technology, the Implementation Support Unit, international cooperation and assistance, and compliance and verification. These areas together with that of universalisation of the Convention had emerged from previous workshops such as that in Wilton Park in September 2010 and Beijing in November 2010 as being areas on which there was broad agreement that action needed to be taken even though what that action should be was not agreed.

23. It was evident at Montreux that there was consensus that compliance needed to be addressed at the Seventh Review Conference and that this might best be achieved by establishing a Compliance Working Group and that would report to the Annual Meetings of States Parties during the intersessional period from 2011 to 2016. Such a Working Group would need to need to have a conceptual discussion about enhanced mechanisms to enable each State Party to demonstrate compliance with the Convention, and also to improve confidence that other States Parties are in compliance with the Convention. It would be important for such a Compliance Working Group to review the significant changes in the world since the 1990s and to recognize the changing international security environment with the rapid advances in the life sciences and the globalization of the biotechnology sector. The working group would be the place to consider the various ideas that have been put forward such as taking a look ahead to 2020 and to identify and examine what sort of mechanism should be in place in 2020¹⁸⁹ to build confidence in compliance and thereby strengthen the effectiveness and improve the implementation of the Convention. It would also be the place to consider the ideas as to whether a piecemeal approach might be followed in which different elements of compliance monitoring might be evaluated experimentally by States Parties¹⁹⁰. At a later stage when States Parties were comfortable with the various elements that had been evaluated in this way, then an overarching legally-binding agreement might be agreed.

¹⁸⁸ Graham S. Pearson, *Developing Practical Proposals for the BWC Seventh Review Conference in 2011*, Special HSP Report from Montreux, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Reports%20from%20Geneva.html>

¹⁸⁹ Graham S. Pearson, *A 2020 Vision for the Biological and Toxin Weapons Convention*, University of Bradford Review Conference Paper No. 29, March 2011. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

¹⁹⁰ Richard Lennane, *Verification for the BTWC: if not the protocol, then what?*, Disarmament Forum, 2011, pp. 39-50. Available at http://www.unidir.org/bdd/fiche-periodique.php?ref_periodique=1020-7287-2011-1-en

24. It is therefore recommended that the *Final Document* of the Seventh Review Conference should include in its section on the *Intersessional Programme* in *Part III. Decisions and Recommendations* the following points:

a. A Compliance Working Group would be established open to all States Parties to consider how confidence in compliance with the Convention could be enhanced recognizing the changing international security environment with the rapid advances in the life sciences and the globalization of the biotechnology sector.

b. The Compliance Working Group would report annually to the Meeting of States Parties who would provide guidance to the Working Group on their further deliberations.

c. The Eighth Review Conference would consider the outcome of the Compliance Working Group and what further action should be taken.

25. It is important to emphasize that this Compliance Working Group would have **no** preconditions but simply require the participants from the States Parties to consider collectively how best to achieve the objective of strengthening the effectiveness and improving the implementation of the Convention taking into account all the developments over the past twenty years.

Issues for the Seventh Review Conference

26. The Seventh Review Conference should reaffirm that this Article provides an appropriate framework for States Parties to consult and cooperate with one another to resolve any problem and to seek clarification in regard to any aspect relating to the Convention. This ability to consult and cooperate should be recognized as extending to consultative visits and any other procedures that the States Parties concerned may judge appropriate for the particular circumstances. It would be helpful if the Review Conference were to identify this and other procedures which might be utilized should the States Parties concerned judge them appropriate.

27. In regard to effectiveness of the Confidence-Building Measures regime, considered in the following chapter, the Review Conference should adopt more concrete language for the CBMs in which the amendments to the existing CBMs should be agreed and a Working Group on Confidence Building Measures established.

28. The Review Conference should also agree that the States Parties should make submissions demonstrating their compliance with the Convention and that these submissions should be considered in a programme of accountability sessions at the annual Meeting of States Parties that will cover all States Parties during the intersessional period between the seventh and eighth Review Conferences.

29. The Review Conference should also agree to establish a Compliance Working Group to consider how confidence in compliance with the Convention could be enhanced that would report to the annual Meeting of States Parties during the intersessional period between the seventh and eighth Review Conferences.

Points for the *Final Document*

30. Consideration is given here to both the Article by Article *Final Declaration* and then to the *Decisions and Recommendations* section (*Part III* of the *Final Document*).

Article V in the Article by Article *Final Declaration*

31. It is recommended that language be adopted by the Seventh Review Conference for its section on Article V in its *Final Declaration* that is developed from that in the *Final Declaration* of the Sixth Review Conference. This should make the following points:

a. To reaffirm that this Article provides an appropriate framework for States Parties to consult and cooperate with one another to resolve any problem and to make any request for clarification which may have arisen in relation to the objective of, or in the application of, the provisions of, the Convention.

b. To reaffirm that any State Party which identifies such a problem should, as a rule, use this framework to address and resolve it.

c. To stress the need for all States Parties to deal effectively with compliance issues and to note that all States Parties have agreed to provide a specific, timely response to any compliance concern alleging a breach of their obligations under the Convention.

d. To reaffirm that the consultation procedures agreed at the Second and Third Review Conferences remain valid to be used by States Parties for consultation and cooperation pursuant to this Article.

e. To encourage States Parties to cooperate fully with any enquiries authorized under these agreed procedures, and to make full use of Specialized Agencies and other international organisations with technical expertise to assist such enquiries.

f. To reaffirm that such consultation and cooperation may also be undertaken bilaterally and multilaterally, or through other appropriate international procedures within the framework of the United Nations and in accordance with its Charter.

g. To note the right of any two or more States Parties to arrange by mutual consent for inspections or any other procedures among themselves to clarify and resolve any matter which may cause doubt about compliance or gives rise to a concern about a related matter which may be considered ambiguous.

h. To recognise that consultation visits and other appropriate international procedures, agreed by the States Parties engaged in consultation and cooperation whether bilaterally or multilaterally, may be assisted or facilitated as appropriate by the Implementation Support Unit at the request of the States Parties.

i. To reiterate the request of the Conference that information on such consultation and cooperation efforts be provided to the Review Conferences.

32. As detailed in the next chapter on *Article V: CBMs*, it is recommended that language should be adopted by the Seventh Review Conference in regard to the Confidence-Building

Measure regime that makes the following points in the Article V section of the *Final Declaration*:

- a. To note the comprehensive attention given to the Confidence-Building Measure regime at the Seventh Review Conference and to welcome the amendments agreed to the Confidence-Building Measures [See *Part III: Decisions and Recommendations*].
- b. To emphasise the importance of the exchange of information among States Parties through the politically binding confidence-building measures (CBMs) agreed at the Second and Third Review Conferences and amended at the Seventh Review Conference.
- c. To welcome the exchange of information carried out under these measures, and to note that this has contributed to enhancing transparency and building confidence.
- d. To note that only a limited number of States Parties make an annual CBM submission and to recognise the urgent need to increase the number of States Parties participating in CBMs.
- e. To reaffirm that the data submitted in the framework of the annual exchange of information should be provided to the United Nations Office for Disarmament Affairs and promptly forwarded by it to all States Parties according to existing modalities.
- f. To agree that a working group reporting to the annual Meeting of States Parties throughout the intersessional process should be established to examine further how the effectiveness of, and the participation in, the CBM regime might be enhanced.

33. In addition, the language to be adopted by the Seventh Review Conference for its section on Article V in its *Final Declaration* should include points relating to an accountability framework and to a working group on compliance by making the following points:

- a. To recall their Solemn Declaration setting out their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability and to agree that an Accountability Framework would greatly enhance confidence in compliance with the Convention by all the States Parties.
- b. To agree to submit reports on their compliance with all provisions of the Convention for consideration in accountability sessions during the intersessional period [See *Part III: Decisions and Recommendations*].
- c. Recognizing that the Convention would be strengthened through actions to strengthen the effectiveness and improve the implementation of the Convention, to agree to establish a Compliance Working Group open to all States Parties to meet during the intersessional period [See *Part III: Decisions and Recommendations*].

Decisions and Recommendations Section of the Final Document

34. The assumption is made that the Seventh Review Conference will follow the precedent of the Sixth Review Conference and have a *Part III: Decisions and Recommendations* section in the *Final Document*. Three sets of decisions in *Part III: Decisions and Recommendations* arise from the issues considered here and likely to be considered by the Review Conference in relation to Article V.

35. First, it is assumed that Part III will, as at the Sixth Review Conference, include a section entitled *Confidence-Building Measures*. As recommended in the next chapter on *Article V: CBMs*, it is recommended that this section should make the following points:

Confidence-Building Measures

a. To note that the review of Article V of the Convention has shown the need to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein.

b. To decide that the Confidence-Building Measures shall be amended as detailed in Annex A. [Annex A would provide a detailed listing of the amendments indicated in paragraphs 22 to 46 in the next chapter on *Article V: Confidence-Building Measures*].

c. To decide further that a Working Group on Confidence-Building Measures shall be established to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein. The Working Group shall consider whether additional types of information or alternative means would increase transparency and build confidence. The Working Group shall report throughout the intersessional process to the annual Meeting of States Parties which shall decide on any further amendments to the CBM process.

d. To decide that the ISU shall give professional support to the implementation of these decisions by providing necessary services as required by States Parties individually and collectively

(i) for the effective operation of the CBMs already agreed, and their associated modalities, including but not limited to the following tasks decided by the Sixth Review Conference and now reaffirmed:

1. The Implementation Support Unit (ISU) within the United Nations Office for Disarmament Affairs, with the assistance of interested States Parties, shall develop an electronic format of the existing CBM forms.

2. Once completed, the electronic forms shall, with the consent of the State Party submitting them, be posted on a secure Internet site and made available for the use of States Parties, to be developed under the auspices of the ISU.

3. States Parties are invited to submit forms using the electronic format. States Parties that wish to submit completed paper forms instead of electronic forms may do so. The ISU shall insert the submitted hard copy data in the secure Internet site with the consent of

the State Party providing this data in order to make it electronically available to all States Parties.

4. The ISU shall centralize requests and offers of assistance regarding the submission of CBMs.

5. The ISU shall regularly inform States Parties about CBM returns and provide statistics on the level of participation at the annual meetings of States Parties.

6. States Parties shall designate a national point of contact in charge of preparing the submission of CBMs, the contact details of which shall be sent to the ISU.

7. The ISU shall circulate to points of contact a notice informing States Parties of the deadline for submitting information under the information exchange procedure (15 April) at least three months prior to this deadline.

(ii) for the new Working Group on CBMs which is to be established by decision [35c] above, including action on any decisions arising out of its recommendations to the annual Meeting of States Parties throughout the intersessional process;

(iii) for consequential changes and any other aspects of the CBM regime as they arise over the intersessional period, under the supervision of [the President of the Seventh Review Conference] [the President of the Seventh Review Conference assisted by the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee].

e. To agree that the CBM regime merits further attention at the Eighth Review Conference.

36. Second, it is also recommended that the *Part III: Decisions and Recommendations* should include a section headed *Accountability Framework* that makes the following points:

Accountability Framework

a. The States Parties noting their Solemn Declaration in which they have reaffirmed

(iv) Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time;

recognise that an Accountability Framework would greatly enhance confidence in compliance with the Convention by all States Parties.

b. Within this framework, information provided by States Parties regarding their compliance with all provisions of the Convention shall be considered by the Annual Meeting of States Parties in an accountability session or sessions at which clarification of information provided may be sought and supplied as necessary.

c. This consideration during the intersessional period prior to the next Review Conference shall be applied to approximately one quarter of the States Parties each year according to a schedule to be prepared by the ISU and approved by the President of the Seventh Review Conference, and such States Parties shall be invited to submit information regarding their compliance with all provisions of the Convention prior to their consideration at the Annual Meeting.

37. It is also recommended that the *Final Document* of the Seventh Review Conference should include in its section on the *Intersessional Programme in Part III. Decisions and Recommendations* the following points:

a. A Compliance Working Group would be established open to all States Parties to consider how confidence in compliance with the Convention could be enhanced recognizing the changing international security environment with the rapid advances in the life sciences and the globalization of the biotechnology sector.

b. The Compliance Working Group would report annually to the Meeting of States Parties who would provide guidance to the Working Group on their further deliberations.

c. The Eighth Review Conference would consider the outcome of the Compliance Working Group and what further action should be taken.

ANNEX:

THE INVOKING BY CUBA IN 1997 OF THE ARTICLE V PROCEDURES

1. The invoking by Cuba of the procedures for the implementation of Article V¹⁹¹ followed the sending by Cuba on 28 April 1997 of a Note verbale to the Secretary-General of the United Nations (circulated as UN General Assembly A/52/128, 29 April 1997) which described the appearance in Cuba of an insect pest, *Thrips palmi karny*. Cuba reported its investigation and analysis which had led Cuba to conclude that the appearance of *Thrips palmi* on 18 December 1996 was related to the observation on 21 October 1996 by the Cuban pilots of a Cuban aircraft of the dropping of an unknown substance from an aircraft operated by the United States State Department which was making an authorised overflight of Cuba whilst flying from Cocoa Beach, Florida to Colombia via Grand Cayman. This aircraft is one used by the State Department to destroy drug crops in the struggle against drug trafficking. The Note verbale concluded by saying "*There is reliable evidence that Cuba has once again been the target of biological aggression.*" The United States Department of State on 6 May 1997 issued a statement that "*the United States categorically denies the outrageous charges made by the Cuban Government regarding the alleged discharge of the Thrips palmi insect over Cuba to damage agriculture there.*" The statement also alleged that the accusations made by Cuba were "*deliberate disinformation*".

2. On 30 June 1997, Cuba submitted a request to the Russian Federation, as co-depositary of the BTWC, for the holding of a consultative meeting under the provisions adopted at the Second Review Conference in 1986 and reaffirmed and elaborated at the Third Review Conference to "*consider any problems in relation to the objective of, or in the application of the provisions of, the Convention.*" Consequently an informal consultative meeting was held in Geneva on 31 July 1997 to discuss the arrangements for the formal consultative meeting. A Note issued by the depositaries on 8 August 1997 informed States Parties to the BTWC that the formal consultative meeting would be held in Geneva on 25 August 1997 and that the UK would chair this meeting as the UK had held the presidency of the last Review Conference in November/December 1996. It also stated that the substantive meeting would have one substantive item: the concerns raised by Cuba in its request for the convening of the consultative meeting, which were available in papers circulated by Cuba as UN documents A/52/158 and A/52/213.

3. 74 States Parties, over half of the States Parties, to the BTWC and 3 Signatory States attended the formal consultative meeting held in Geneva on 25 - 27 August 1997. Statements were made by both Cuba and the United States. The report of the formal consultative meeting (BWC/CONS/1, 29 August 1997) records that "*States Parties welcomed the fact that the delegations of Cuba and the United States had sought to clarify their positions with respect to the concerns raised by the Government of Cuba. States Parties noted that the consultation was fully in conformity with the conclusions of the final document of the Third Review Conference relevant to the application of Article V of the Convention.*" It was, however, clear that there was not consensus on whether, in the time available for the meeting, "*all matters considered ambiguous or unresolved arising from the request of the Government of Cuba*" had been fully resolved. It was therefore agreed that States Parties

¹⁹¹ An account of the Cuban allegation and the procedures followed under Article V of the Convention is provided in Graham S. Pearson, *Cuban Allegation of BW Attack*, ASA Newsletter No 97-5, 17 October 1997, pp. 1, 12-13 and Graham S. Pearson, *Cuban Allegation of BW Attack: The Final Report*, ASA Newsletter No 98-2, 30 April 1998, p. 28.

who wished to do so should provide to the Chairman by 27 September 1997 (ie one month later) *"a submission containing their observations, including from national technical experts, on the information provided to the meeting by the Governments of Cuba and the United States."* The Chairman and Vice Chairmen (from Brazil, Canada, the Islamic Republic of Iran, the Netherlands, Nigeria and the Russian Federation) agreed to consult on the basis of the information supplied at the 25 - 27 August meeting and in the light of any further observations (received by 27 September 1997) in order *"to clarify and resolve any outstanding issues related to the concerns raised by Cuba."* The Chairman would then report in writing by 31 December 1997 to all States Parties on the outcome of these consultations.

4. Some 12 additional observations were received by the Chairman from, in order of their receipt, New Zealand (1 page), Canada (4), Cuba (19), China (3), Japan (1), Australia (2), Germany (2), Denmark (2), Netherlands (2), Vietnam (2), Hungary (1) and the Democratic People's Republic of Korea (2). The Chairman's report issued on 15 December 1997 by Ambassador Ian Soutar of the UK outlined the process which had been followed and stated that 12 observations and comments had been received, that these were annexed to the report, and that following a meeting on 7 October 1997 with the Vice Chairmen, copies had been provided to Cuba and the USA to enquire whether, in their view, the further submissions had assisted in clarifying or resolving the concerns raised by Cuba. Subsequent replies were received from the USA and from Cuba which were also annexed to the report.

5. The report states that a further meeting of the Bureau (the Chairman and Vice-Chairmen) was convened on 27 November 1997 during which the Chairman invited any reactions from the technical experts of the Bureau members to the information contained in the submissions received earlier. The report noted that *"some members of the Bureau stated that further examination of the evidence in their capitals had confirmed their view that there was no causal link between the overflight of the US aircraft and the insect infestation in Cuba. Other members of the Bureau stated that the technical complexity of the issue and the lack of further detailed information made it impossible to draw any definitive conclusions."*

6. The report then concluded that *"due inter alia to the technical complexity of the subject and the passage of time, it has not proved possible to reach a definitive conclusion with regard to the concerns raised by the Government of Cuba."*

7. It went on to emphasise that *"there had been general agreement throughout the process that the requirements of Article V of the Convention and of the consultative process established by the Third Review Conference have been fulfilled in an impartial and transparent manner."* Furthermore, *"the Bureau agreed that the experience of conducting this process and consultation had shown the importance of establishing as soon as possible an effective Protocol to strengthen the Convention which is being negotiated in the Ad Hoc Group."*

8. Although the consultative procedure worked well, it is to be regretted that although the report of the formal consultative meeting (BWC/CONS/1, 29 August 1997) was issued, there was no similar issue of the final report thus leaving the resolution of the allegation somewhat in limbo from the point of view of States not party to the BTWC and of the public at large. It would be beneficial if the final report were to be issued as a formal UN document as BWC/CONS/2 so that the record is complete.

ARTICLE V: CONFIDENCE-BUILDING MEASURES

by Filippa Lentzos

Consideration of Article V: Confidence-Building Measures at the Sixth Review Conference

1. Article V of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*¹⁹² in respect of Confidence Building Measures stated in the section on Article V that:

23. The Conference emphasises the importance of the exchange of information among States Parties through the confidence-building measures (CBMs) agreed at the Second and Third Review Conferences. The Conference welcomes the exchange of information carried out under these measures, and notes that this has contributed to enhancing transparency and building confidence.

24. The Conference notes that only a limited number of States Parties make an annual CBM submission. The Conference recognises the urgent need to increase the number of States Parties participating in CBMs. In this regard, the Conference also recognises the technical difficulties experienced by some States Parties in completing full and timely declarations. In order to update the mechanism of transmission of information, the Conference has agreed on several measures. [See Part III: Decisions and Recommendations]

25. The Conference reaffirms that the data submitted in the framework of the annual exchange of information should be provided to the United Nations Department for Disarmament Affairs and promptly forwarded by it to all States Parties according to existing modalities. The information supplied by a State Party must not be further circulated or made available without the express permission of that State Party.

3. In addition, the Sixth Review Conference included the following in *Part III: Decisions and Recommendations*:

¹⁹² United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

Confidence-building Measures

8. The Conference notes that the review of Article V of the Convention has shown the need for enhancing participation of States Parties in the confidence-building measures (CBM) process. The Conference therefore decides that:

- (i) The Implementation Support Unit (ISU) within the United Nations Department for Disarmament Affairs, with the assistance of interested States Parties, shall develop an electronic format of the existing CBM forms.
- (ii) Once completed, the electronic forms shall, with the consent of the State Party submitting them, be posted on a secure Internet site and made available for the use of States Parties, to be developed under the auspices of the ISU. The information thus supplied by a State Party must not be circulated further without the express permission of that State Party.
- (iii) States Parties are invited to submit forms using the electronic format. States Parties that wish to submit completed paper forms instead of electronic forms may do so. The ISU shall insert the submitted hard copy data in the secure Internet site with the consent of the State Party providing this data in order to make it electronically available to all States Parties.
- (iv) The ISU shall centralize requests and offers of assistance regarding the submission of CBMs.
- (v) The ISU shall regularly inform States Parties about CBM returns and provide statistics on the level of participation at the annual meetings of States Parties.
- (vi) States Parties shall designate a national point of contact in charge of preparing the submission of CBMs, the contact details of which shall be sent to the ISU.
- (vii) The ISU shall circulate to points of contact a notice informing States Parties of the deadline for submitting information under the information exchange procedure (15 April) at least three months prior to this deadline.

9. Furthermore, the Conference reviewed the implementation of the CBMs during its session and agrees that the issue merits further and comprehensive attention at the Seventh Review Conference.

as well as including in the section on the Implementation Support Unit, the assignment to the ISU of the following tasks relating to Confidence-Building measures:

B. Confidence Building Measures:

- (i) Receiving and distributing confidence-building measures (CBMs) to/from States Parties;
- (ii) Sending information notices to States Parties regarding their annual submissions;
- (iii) Compiling and distributing data on CBMs and informing on participation at each Meeting of States Parties;
- (iv) Developing and maintaining a secure website on CBMs to be accessible only to States Parties;

(v) *Serving as an information exchange point for assistance related to preparation of CBMs;*

(vi) *Facilitating activities to promote participation in the CBM process, as agreed by the States Parties.*

4. It is thus evident that the Sixth Review Conference agreed that topic of CBMs *merits further and comprehensive attention* at the Seventh Review Conference in 2011. This recognizes that although the existing CBMs were agreed at the Second Review Conference in 1986 and extended at the Third Review Conference in 1991, they have not been subsequently amended or extended.

Developments since the Sixth Review Conference

Implementation Support Unit Annual Reports

5. Since the Sixth Review Conference, the Implementation Support Unit has provided information on the submission of CBMs as part of their annual report to the States Parties. Thus, in 2007 the ISU reported¹⁹³ that:

14. In accordance with the decision of the Sixth Review Conference, responsibility for processing the CBMs was transferred to the ISU from the Weapons of Mass Destruction Branch of the Office for Disarmament Affairs in New York. The ISU prepared electronic (Adobe PDF format) versions of the CBM forms and made them available on its website. Sixty-one states (38% of States Parties) submitted information in 2007, the highest number to participate since the CBMs were introduced in 1987. Of these, 17 submitted their CBM on or before the deadline of 15 April 2007. Annex II (English only) lists the submissions and includes a breakdown of submission by each of the CBM forms, along with charts and other information.

15. The Head of the ISU wrote to all States Parties on 27 June 2007 to inform them that the restricted area of the ISU website was operational, and that CBM submissions would be published there on 16 July 2007, unless a State Party requested otherwise. The letter also informed States Parties that CBMs would no longer be produced and distributed in hard copy. Four States Parties initially requested that their CBM not be published on the website; one of these subsequently withdrew its request. The submissions of 58 States Parties are therefore currently available in the restricted area.

6. The following year, in November 2008, the Implementation Support Unit reported¹⁹⁴ on CBMs that:

¹⁹³ United Nations, Meeting 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, 10 - 14 December 2007, *Report of the Implementation Support Unit*, BWC/MSP/2007/3, 4 December 2007. Available at <http://www.opbw.org>

¹⁹⁴ United Nations, Meeting 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, 1 - 5 December 2008, *2008 Report of the Implementation Support Unit*, BWC/MSP/2008/3, 28 November 2008. Available at <http://www.opbw.org>

18. *In accordance with the decision of the Sixth Review Conference, the ISU is responsible for compiling and distributing CBMs. The ISU maintains electronic (Adobe PDF format) versions of the CBM forms in all official languages and has made them available on its website. The Unit, with the assistance of interested States Parties, continues to develop the electronic format of the existing CBM forms, and is currently reviewing possibilities for developing an online collaborative tool for completing CBMs over the Internet.*

19. *As of 1 November 2008, 60 states (37 per cent of States Parties) had submitted CBMs to cover the calendar year 2007, down slightly from the total of 65 last year. Of these, 27 submitted their CBM on or before the deadline of 15 April 2008. Four States Parties submitted CBMs for the first time: Azerbaijan, Bahrain, Indonesia and Kazakhstan. Thirteen States Parties which submitted CBMs in 2007 have not yet done so in 2008. Annex II (English only) lists the submissions and includes a breakdown of submission by each of the CBM forms, along with charts and other information.*

7. Then, a year later, in November 2009, the Implementation Support Unit reported¹⁹⁵ on CBMs that:

18. *In accordance with the decision of the Sixth Review Conference, the ISU is responsible for compiling and distributing CBMs. The ISU maintains electronic (Adobe PDF format) versions of the CBM forms in all official languages and has made them available on its website. The Unit, with the assistance of interested States Parties, continues to develop the electronic format of the existing CBM forms, and is currently reviewing possibilities for developing an online collaborative tool for completing CBMs over the Internet.*

19. *As of 1 November 2009, 62 states (38 per cent of States Parties) had submitted CBMs to cover the calendar year 2008, the same number as submitted for the previous year. Of these, 36 submitted their CBM on or before the deadline of 15 April 2009. One State Party, Gambia, submitted a CBM for the first time. Nine States Parties which submitted CBMs in 2008 have not yet done so in 2009. Annex III (English only) lists the submissions and includes a breakdown of submission by each of the CBM forms, along with charts and other information.*

8. And, in November 2010, the Implementation Support Unit reported¹⁹⁶ on CBMs that:

19. *In accordance with the decision of the Sixth Review Conference, the ISU is responsible for compiling and distributing CBMs. The ISU maintains electronic (Adobe PDF format) versions of the CBM forms in all official languages and has made them available on its website. The Unit, with the assistance of interested States Parties, continues to develop the electronic format of the existing CBM forms, and is*

¹⁹⁵ United Nations, Meeting 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, 7 - 11 December 2009, *2009 Report of the Implementation Support Unit*, BWC/MSP/2009/2, 10 November 2009. Available at <http://www.opbw.org>

¹⁹⁶ United Nations, Meeting 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, 6 - 10 December 2010, *2010 Report of the Implementation Support Unit*, BWC/MSP/2010/2, 23 November 2010. Available at <http://www.opbw.org>

currently reviewing possibilities for developing an online collaborative tool for completing CBMs over the Internet.

20. As of 15 November 2010, 70 states (42.9 per cent of States Parties) had submitted CBMs to cover the calendar year 2009. Of these, 45 submitted their CBM on or before the deadline of 15 April 2010. Six States Parties submitted CBMs for the first time: Albania, Kenya, Philippines, the former Yugoslav Republic of Macedonia, the United Arab Emirates, and Yemen. Five States Parties which submitted CBMs in 2009 have not yet done so in 2010. Annex III (English only) lists the submissions and includes a breakdown of submission by each of the CBM forms, along with charts and other information.

9. These Implementation Support Unit reports have shown an increase in the number of States Parties that have submitted their annual CBMs from 65 in 2007 to 72 in 2010 (two more than the number reported in November 2010). As of 22 June 2011, 53 have been submitted in 2011. The number of States Parties who make their CBM submissions available to all on the ISU website has also increased from 10 in 2007 to 15 in 2010 and 15 thus far in 2011.

Reviewing the Confidence-Building Measure Regime

10. Since the Third Review Conference in 1991 when the present CBM regime was agreed, there have been a number of proposals to enhance the CBM regime made by States Parties and also by NGOs and others. These proposals have usefully been summarised¹⁹⁷ in a July 2009 compendium and are also detailed in Appendix B of an August 2010 report.¹⁹⁸

11. In 2001, a proposal¹⁹⁹ was made by South Africa for consideration at the Fifth Review Conference that the modalities for CBM A should be extended to include facilities for working with Group 4 animal pathogens and that a new CBM H should be added for declaration of plant inoculant and biocontrol agent production facilities. However, this was not taken further as there was no *Final Declaration* with an Article by Article review of the Convention at that Review Conference. A further proposal was made in 2004 in a paper²⁰⁰ submitted by France to the Meeting of Experts in 2004, which proposed laboratory networks as a confidence-building measure in addressing allegations of the use of CBRN terrorist agents. Then at the Sixth Review Conference in 2006, a number of papers were submitted.

¹⁹⁷ Filippa Lentzos and R. Alexander Hamilton, *Compendium of Proposals to Improve the CBM Mechanism*, July 2009, BIOS Centre, London School of Economics. Available at http://www2.lse.ac.uk/BIOS/research/biosecurity/projects/Biological_Weapons_Convention.aspx

¹⁹⁸ Filippa Lentzos and R. Alexander Hamilton, *Preparing for a comprehensive review of the CBM mechanism at the Seventh BWC Review Conference*, August 2010. Available at http://www2.lse.ac.uk/BIOS/research/biosecurity/projects/Biological_Weapons_Convention.aspx

¹⁹⁹ South Africa, 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, *Strengthening Confidence-Building Measures – Working paper by South Africa*, BWC/CONF.V/COW/WP.1, 16 November 2001. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰⁰ France, Meeting of Experts 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, *Confidence-building Measures in Addressing Allegations of Use of CBRN Terrorist Agents: Laboratory Networks*, BWC/MSP/2004/MX/WP.55, 28 July 2004. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

Canada at the Preparatory Committee²⁰¹ and at the Review Conference itself²⁰² proposed an Accountability Framework, which in regard to Confidence-Building Measures made suggestions to foster increased transparency and help demonstrate compliance with the Convention. France, on behalf of the EU, submitted proposals²⁰³ to enhance the CBM process which were in two categories: technical improvements and political incentives. A group of Latin American states (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru and Uruguay) submitted proposals²⁰⁴ to improve the CBMs and reduce areas of ambiguity through greater transparency. Switzerland, in conjunction with the JACKSNNZ group of States Parties, submitted a proposal²⁰⁵ for several possible improvements of the CBMs. Switzerland in a second paper²⁰⁶ submitted a proposal for the modification of the format of the CBM forms. South Africa proposed²⁰⁷ a number of issues that should be determined so as to ensure that CBMs strengthen the Convention. The outcome of the consideration of CBMs at the Sixth Review Conference, as noted in paragraphs 2 and 3 above, focussed on the need to increase the number of States Parties participating in the confidence-building measures and agreed what actions should be taken by the Implementation Support Unit.

12. Subsequent to the Sixth Review Conference, Switzerland has submitted further working papers on the CBM process. The first two were at the Meeting of Experts²⁰⁸ and at the

²⁰¹ Canada, Preparatory Committee of the Sixth 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, *Towards the Sixth BTWC Review Conference: An Accountability Framework*, BWC/CONF.VI/PC/INF.1, 10 April 2006. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰² Canada, The Sixth 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, *Accountability Framework*, BWC/CONF.VI/WP.1, 20 October 2006. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰³ France on behalf of the EU, The Sixth 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, *Enhancement of the Confidence-Building Measure (CBM) Process*, BWC/CONF.VI/WP.4, 20 October 2006. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰⁴ Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru and Uruguay, The Sixth 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, *Confidence-Building Measures*, BWC/CONF.VI/WP.12, 20 October 2006. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰⁵ Switzerland, The Sixth 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, *Actions to Improve Confidence-Building Measures*, BWC/CONF.VI/WP.14, 15 November 2006. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰⁶ Switzerland, The Sixth 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, *Proposal for the Modification of the Format of Confidence-Building Measures Forms*, BWC/CONF.VI/WP.37, 8 December 2006. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰⁷ South Africa, The Sixth 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, *Confidence-Building Measures*, BWC/CONF.VI/WP.21, 20 November 2006. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²⁰⁸ Switzerland, Meeting of Experts 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, *National Data Collection Processes for CBM Submissions*, BWC/MSP/2007/MX/WP.10, 15 August 2007. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

Meeting of States Parties²⁰⁹ respectively in 2007 and described a Swiss Government study carried out by experts at the LSE and at VERTIC on national data collection processes for CBMs based on a survey of 10 States Parties that have consistently submitted returns since 1986. Two further papers were submitted in 2008 at the Meeting of Experts²¹⁰ and at the Meeting of States Parties²¹¹ respectively. The papers described another Swiss study on CBMs, again carried out by experts at the LSE, which considered the kind of information that builds confidence. The two studies were part of efforts to prepare well in advance for the consideration of CBMs at the Seventh Review Conference, as it was recognised that at the Sixth Review Conference in 2006 it had been very difficult to agree on solutions regarding CBMs in an already packed agenda.

13. Various proposals regarding the CBM process have also been made by NGOs and others at various meetings, such as the Pugwash workshops held in Geneva prior to the annual Meeting of States Parties. These proposals by groups such as BIOS, London School of Economics; the Canadian Centre for Treaty Compliance, Carleton University; the Research Group for Biological Arms Control, University of Hamburg; and VERTIC are usefully summarised in the July 2009 compendium²¹² already mentioned.

Proposals to improve the CBM regime

14. Since the Sixth Review Conference in 2006, there have been a number of events that have focussed particularly on how to improve the CBM regime. In December 2007, the Geneva Forum in association with the Government of Switzerland held a meeting to address “*Building Confidence in the BWC: The Way Forward*” during the Meeting of States Parties. The subsequent year saw two events during the December 2008 Meeting of States Parties: the first again by the Geneva Forum and the Government of Switzerland on “Preparing the ground for the CBM content debate” and the second by UNIDIR and the Government of France on “*Universalization of CBMs in the BWC.*” The European Union, during the December 2009 Meeting of States Parties, had an event launching the “*Guide to Participating in the CBMs of the BWC*” and followed this up with a one day workshop during the August 2010 Meeting of Experts. Its aim was to contribute to the promotion of openness and transparency of the BWC by encouraging States to submit their annual CBMs. At that same Meeting of Experts, the Geneva Forum, in conjunction with the Governments of Switzerland, Norway and Germany, held an event on “*Opportunities to Enhance the BWC Confidence Building Measures.*”

²⁰⁹ Switzerland, Meeting 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, *National Data Collection Processes for CBM Submissions*, BWC/MSP/2007/WP.11, 7 January 2008. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²¹⁰ Switzerland, Meeting of Experts 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, *National Data Collection Processes for CBM Submissions*, BWC/MSP/2008/MX/WP.5, 30 July 2008. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²¹¹ Switzerland, Meeting 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, *Preparing the Ground for the CBM Content Debate: What Information Builds Confidence?*, BWC/MSP/2008/WP.6, 9 December 2008. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

²¹² Filippa Lentzos and R. Alexander Hamilton, *Compendium of Proposals to Improve the CBM Mechanism*, July 2009, BIOS Centre, London School of Economics. Available at http://www2.lse.ac.uk/BIOS/research/biosecurity/projects/Biological_Weapons_Convention.aspx

15. These recent events were one of the outcomes of an informal roundtable discussion during the December 2008 Meeting of States Parties between a small number of like-minded States and civil society actors about strategies for continued work on CBMs in the lead-up to the Seventh Review Conference in 2011. One of the key areas identified at the roundtable where further work would be particularly useful was the development of a dialogue on how best to revise the current forms, which should obtain as many perspectives as possible. It was felt that this should be a multilateral endeavour and that it would be helpful to convene a meeting of experts outside of the BTWC intersessional process specifically for this purpose. To this end, the Geneva Forum in collaboration with the BIOS Centre of the London School of Economics, together with the Governments of Switzerland, Norway and Germany, hosted a series of three workshops to examine options and proposals to revise the CBM mechanism. The first of these was held in Jongny-sur-Vevey, Switzerland on 22-23 August 2009, the second in Geneva on 12 December 2009, and the third in Berlin on 26-27 April 2010. The event at the 2010 Meeting of Experts launched the report from these three workshops.

16. The workshops brought together a range of experts from governments, intergovernmental organisations, civil society and academia to address key questions on: (1) the objectives of the CBM mechanism and the extent to which these have been achieved in practice; (2) the CBMs in relation to other compliance assessment mechanisms; (3) the format and content of the existing CBM forms, and (4) the effectiveness of the CBM collation and submission process. Throughout these workshops, the aim was to find solutions with the potential to increase both the quantity and the quality of CBM declarations.

17. All involved agreed that CBMs are an important element in the implementation of the Convention. Consequently, rather than proposing an overhaul of the CBM mechanism, the workshops identified proposals aimed at fine-tuning the mechanism so that it would more effectively capture the information desired by States Parties to build confidence in the implementation of the Convention by other States Parties. Attention was paid throughout to the pragmatic questions: What information builds confidence? And, how can CBMs be improved to better communicate this information?

18. Following the workshops, a Bradford Review Conference Paper No. 24²¹³ in October 2010 outlined a set of proposals for the Seventh Review Conference to adopt to improve the CBM regime. Internationally, discussion of proposed changes to the CBMs continued in an e-mail platform to which more than 70 experts from a wide range of States Parties, including from civil society, subscribed. The results of the workshops and the ongoing discussion were presented in the margins of the 2010 Meeting of Experts and Meeting of States Parties in Geneva. There have also been discussions at the meetings held in Beijing²¹⁴ in November 2010 and in Montreux²¹⁵ in April 2011 looking ahead to the Seventh Review Conference. As a result of all this consideration of the CBM mechanism it is becoming evident that there is broad agreement that the improvement of the CBM process should take part in two stages:

²¹³ Filippa Lentzos, *Improving the BTWC Confidence-Building Measures Regime*, Bradford Review Conference Paper No. 24, October 2010. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

²¹⁴ Graham S. Pearson, *Preparing for the BWC Seventh Review Conference in 2011*, Special HSP Report from Beijing, December 2010. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Reports%20from%20Geneva.html>

²¹⁵ Graham S. Pearson, *Developing Practical Proposals for the BWC Seventh Review Conference in 2011*, Special HSP Report from Montreux, May 2011. Available at <http://www.sussex.ac.uk/Units/spru/hsp/Reports%20from%20Geneva.html>

- a. First, a number of changes to the existing CBMs should be agreed at the Seventh Review Conference itself in order to increase the number of annual submissions and improve their quality.
- b. Second, consideration should be given to how the CBM mechanism might be further developed. Such consideration could usefully be achieved through a standing working group on CBMs that meets during the next intersessional period and reports to the annual Meeting of States Parties.

Such a standing working group on CBMs should consider whether the current CBMs provide the necessary level of transparency today and whether additional types of information or alternative means in the future would provide additional transparency and build confidence.

19. A draft working paper²¹⁶ prepared by Norway, Switzerland and Germany detailing the proposed changes to the existing CBMs was circulated during the Preparatory Committee meeting in April 2011.

20. It is evident that many proposals have been put forward by the various papers and events since the Sixth Review Conference. This chapter draws on these proposals and the outcome of these workshops²¹⁷ to outline a set of proposals for the Seventh Review Conference to adopt to improve the CBM regime. As these would be *decisions* of the Seventh Review Conference, they would fall naturally into *Part III: Decisions and Recommendations* of the *Final Document*.

Issues for the Seventh Review Conference

21. It is recommended that the Seventh Review Conference should adopt the following amendments to the existing CBM regime.

CBM Form A

22. Form A, part 1. Exchange of data on research centres and laboratories. Declarations under this form should cover *all* facilities that fulfill the requirements set out for maximum containment (BSL4) for handling human and/or animal pathogens classified as Risk Group 4 microorganisms. To ensure that *all* BSL4 centres and facilities are included, the form should be amended to clarify that **all** such facilities are to be declared – and that the form is *not* limited to research activities. The Form A, part 1 should accordingly be modified so as to read as follows with modifications shown in bold:

CONFIDENCE-BUILDING MEASURE A:

Part 1: Exchange of data on ~~research~~ centres and laboratories

At the Third Review Conference it was agreed that States Parties continue to

²¹⁶ Norway, Switzerland, Germany, *Review and update of the Confidence Building Measures*, Geneva, 15 April 2011. Available at the Think Zone for the Seventh Review Conference at unog.ch/bwc

²¹⁷ Filippa Lentzos and R. Alexander Hamilton, *Preparing for a comprehensive review of the CBM mechanism at the Seventh BWC Review Conference*, August 2010.

implement the following:

*“Exchange of data, including name, location, scope and general description of activities, on **all** 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 specialize in permitted biological activities directly related to the Convention.”*

Modalities

*The Third Review Conference agreed that data should be provided by States Parties on each facility, within their territory or under their jurisdiction or control anywhere, which **fulfill the requirements for maximum containment (BSL4) for handling human and/or animal pathogens classified as Risk Group 4 microorganisms.***

23. In addition, footnote 4 to Form A, part 1 should be revised to refer to the *latest* version of the WHO Laboratory Biosafety Manual and should also include a reference standard for veterinary facilities, e.g. the relevant chapter from the OIE Terrestrial Manual. The footnote should be amended to read as follows with amendments shown in bold:

*4 In accordance with the **latest version of the WHO Laboratory Biosafety Manual, or the latest version of the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals.***

24. Form A, part 1. It is ambiguous what is required to be declared in response to item 6 on this form, which states;

6. *If no maximum containment unit, indicate highest level of protection*

It is therefore proposed that item 6 on Form A, part 1 should be deleted. In its place, the Modalities to Form A, part 1 should be extended by the addition of a sentence along the following lines:

Should the State Party not possess a BSL 4 facility, then Form A, part 1 (ii), should be completed.

25. Form A, part 1 (ii) would comprise a new form along the following lines:

Form A, part 1(ii)

Exchange of data on centres and laboratories.

Provide information on the highest biosafety level implemented in facilities within the country that handle biological agents and toxins.

Does the State have biosafety level 2 (BSL 2) facilities? Yes/No

Does the State have biosafety level 3 (BSL 3) facilities? Yes/No

Are these facilities administered by government, industry or academia?

Government/Industry/Academia

26. Form A, part 2. Exchange of information on national biological defence research and development programmes. The Second Review Conference agreed in the *Final Declaration* that the information to be exchanged here would include:

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.*** [Emphasis added].

27. The modalities agreed at the subsequent ad hoc meeting on 31 March to 15 April 1987²¹⁸ agreed that data should be provided *on each research centre or laboratory, within the territory of a State Party, under its jurisdiction or under its control anywhere, ...*

(b) which has containment unit(s) and specializes in research or development for prophylactic or protective purposes against possible hostile use of microbial and/or other biological agents or toxins.

28. It was at the Third Review Conference in 1991 that the States Parties in agreeing to *reaffirm those measures established at the Second Review Conference with the following improvements ... to amend and extend the exchange of data on research centres and laboratories* introduced a part 2 to Confidence-building measure “A” which referred for the first time to “*national biological defence research and development programmes.*” Such an amendment was understandable back in 1991 when the focus was primarily on the possible misuse by States Parties with little if any attention being given to possible use by non-State actors or terrorists.

29. With the benefit of hindsight and considering the concerns today about the possible misuse of biological agents and toxins, it is evident that States Parties should return to the Second Review Conference language requiring declaration of *centres and laboratories that ... specialise in permitted biological activities directly related to the Convention* as it is evident that today the requirement should be to declare *any* facilities, whether in government, industry or academia, that are engaged in activities to counter deliberate outbreaks of disease or uses of toxins in humans, animals or plants. The word *research* should be omitted to make it clear that all such facilities are to be declared. This could be achieved by the Seventh Review Conference in its *Final Declaration* recognizing that the information submitted in response to Form A part 2 should be regarding *any* facilities engaged in *activities to counter deliberate* outbreaks of disease or uses of toxins.

30. There are then several consequential changes to parts of Form A relating to this exchange as follows:

²¹⁸ United Nations, Ad Hoc Meeting of Scientific and Technical Experts from States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, 31 March – 15 April 1987, *Report*, BWC/CONF.II/EX/2, 21 April 1987. Available at <http://www.unog.ch/bwc> and at <http://www.opbw.org>

a. Form A, part 2 requires amendment of its heading so as to read *Exchange of information on programmes to counter the deliberate release of biological agents and toxins.*

b. Form A, part 2 (i) requires amendment of its heading so as to read *Programmes to counter the deliberate release of biological agents and toxins. Declaration*

c. The first paragraph of Form A, part 2 (i) should be amended to read:

Are there programmes to counter the deliberate release of biological agents and toxins within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a programme would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

d. Form A, part 2 (ii) requires amendment of its heading so as to read *Programmes to counter the deliberate release of biological agents and toxins.*

e. Form A, part 2 (ii). Likewise, item 7 should be amended so as to read:

*7. Provide a declaration in accordance with Form A, part 2 (iii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to ~~the national biological defence research and development programme~~ **countering the deliberate release of biological agents or toxins** within the territory of the reporting State, or under its jurisdiction or control anywhere.*

31. Form A, part 2 (ii). Item 2. This should be extended to read as follows:

*State the total funding for the programme and its source. **If more than one Ministry (or Government Department) is involved, name each Ministry involved and indicate the proportion of the budget contributed by each Ministry.***

32. Form A, part 2 (ii). This form should also be extended to include a question as to what procedures and/or practices are in place within the facilities engaged in the programme to review national compliance with the Convention, i.e. a question on so-called “oversight procedures”. This could be achieved by amending item 6 to read as follows:

*6. Provide a diagram of the organizational structure of the programme and the reporting relationships (include individual facilities participating in the programme). **Also provide information on what oversight procedures are in place for both facilities and the programme as a whole.***

33. Form A, part 2 (iii). In view of the changed focus onto programmes countering the deliberate release of biological agents and toxins, Form A, part 2 (iii) would be amended in several places so as to read as follows:

National programme to counter deliberate release of biological agents and toxins

Facilities

Complete a form for each facility declared in accordance with paragraph 7 in Form A, part 2 (ii).

In shared facilities, provide the following information for the portion to counter the deliberate release of biological agents and toxins only.

1. What is the name of the facility?

2. Where is it located (include both address and geographical location)?

3. Floor area of laboratory areas by containment level:
BL2 _____ (sqM)
BL3 _____ (sqM)
BL4 _____ (sqM)
Total laboratory floor area
_____ (sqM)

4. The organizational structure of each facility.
 - (I) Total number of personnel (excluding any contract staff)

 - (ii) Division of personnel:
Military (if any)

Civilian

 - (iii) Division of personnel by category:
Scientists

Engineers

Technicians

Administration and support staff

- (iv) *List the scientific disciplines **indicating the proportion of each** represented in the scientific/engineering staff.*
- (v) *Are contractor staff working in the facility? If so, provide an approximate number.*
- (vi) *What is (are) the source(s) of funding for the work conducted in the facility, including indication if activity is wholly or partly financed by **a Government Ministry? Include the names of the relevant Ministries.***
- (vii) *What are the funding levels for the following programme areas:*

Research

Development

Test and evaluation

- (viii) *Briefly describe the publication policy of the facility **and indicate the proportion of publicly available papers and reports to those not publicly available during the previous 12 months.***
- (ix) *Provide a list of publicly-available papers and reports resulting from the work during the previous 12 months. (To include authors, titles and full references.)*

5. Briefly describe the **work to counter the deliberate release of biological agents and toxins** carried out at the facility, including type(s) of micro-organisms* and/or toxins studied, as well as ~~outdoor~~ studies of biological aerosols.

34. Form A, part 2 (iii). Item 5 should be amended, as has been done in the revised format for this Form above, so as to delete the word “outdoor” thus making it clear that any studies of aerosols are to be declared whether conducted indoors or outside.

CBM Form B

35. Form B (i). Background information on outbreaks of reportable infectious diseases. As information on the reporting of outbreaks of reportable infectious diseases is now available from the WHO and OIE, the requirement for the States Parties to the BTWC to provide such information as part of the CBM regime is no longer required, and this form should be **deleted**. This will remove the possibility of any inconsistencies between the national reports on the CBM Form and those submitted to WHO and OIE.

36. Form B (ii). Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern. This information should continue to be provided. This form should be amended to enable States Parties to provide links to national websites and to WHO, OIE, FAO and PROMED websites where reports are published on disease outbreaks that seem to deviate from the normal pattern and that are considered particularly important to the Convention. Such links could be included as an additional item to item 8 on this form reading:

– list links to national websites and to WHO, OIE, FAO and PROMED websites where reports have been published on this disease outbreak that seems to deviate from the normal pattern.

Two further items could also be added to the list on Form B (ii) to further clarify the response to the outbreak as follows:

14. International assistance requested *Yes/No*

15. International assistance received *Yes/No*

CBM Form C

37. CBM C. Encouragement of publication of results and promotion of use of knowledge. As information about publications is widely available on the internet, CBM C could be discontinued. However, the provision of information about publications by those engaged in programmes to counter the deliberate releases of biological agents and toxins **should continue to be provided** in accordance with the requirement in part 4 (ix) of CBM Form A, part 2 (iii) for each facility so engaged. Such information makes an important contribution to enhancing transparency and building confidence.

*Including viruses and prions.

CBM Form D

38. Form D. Active promotion of contacts. As Form D has always been intended to promote professional contacts in activities directly related to the Convention, this form could usefully be extended by the addition of an item under which States Parties could indicate whether they are seeking assistance in any particular area and likewise if they are in a position to provide assistance to other States Parties. This could be achieved by adding the following:

- 3. Indicate areas in which assistance would be welcomed, providing a point of contact to whom such offers might be directed.**
- 4. Indicate areas in which assistance could be provided, indicating a point of contact from whom such assistance may be requested.**
- 5. Include information on relevant educational and training activities being carried out in their countries, including points of contact for applicants wishing to apply to participate in such activities.**

This final point, 5, on relevant educational and training activities is recommended in the chapter on *Article IV: National Implementation: Education, Outreach and Codes of Conduct* in these *Key Points for the Seventh Review Conference*.

CBM Form E

39. Form E. Declaration of legislation, regulations and other measures. This form should be extended by the addition of further Yes/No questions seeking information on transfers of dual-use items and technology, on end-use controls, and on oversight measures, as well as on national measures addressing biosafety, biosecurity, disease surveillance and codes of conduct for the life sciences. This could be achieved by the following additions:

(d) Transfers of dual-use items and technology	Yes/No	Yes/No	Yes/No
(e) End-use controls	Yes/No	Yes/No	Yes/No
(f) Oversight of activities in the life sciences	Yes/No	Yes/No	Yes/No
(g) Biosafety	Yes/No	Yes/No	Yes/No
(h) Biosecurity	Yes/No	Yes/No	Yes/No
(i) Disease surveillance	Yes/No	Yes/No	Yes/No
(j) Codes of conduct for the life sciences	Yes/No	Yes/No	Yes/No

40. In addition, Form E should be extended to allow the provision of the following information:

- 2. Contact details for the BTWC national authority/point of contact.**

3. Provide weblinks to databases wherein the above legislation, regulations or other measures are available.

4. Provide information on the steps they have taken nationally to improve education and outreach.

This final point, 4, on steps taken nationally to improve education and outreach is recommended in the chapter on *Article IV: National Implementation: Education, Outreach and Codes of Conduct* in these *Key Points for the Seventh Review Conference*.

CBM Form F

41. Form F. Declaration of past activities in offensive and/or defensive biological research and development programmes. The information requested in the first item – the date of entry into force of the Convention for the State Party – could be deleted as it is proposed that this information should in future be provided as an additional item on Form 0 – the form on which Nothing to Declare or Nothing New to Declare is indicated (see paragraph 41 below). Form F should be extended to provide information about the facilities at which the past offensive programmes were carried out and what those facilities are engaged in today. This would provide a significant addition to building transparency and confidence, and should not present any difficulties in completion. Form F should be extended by addition of the following:

4. Facilities at which the past offensive programme was carried out. For each facility provide the following information:

(a) What was the name of the facility when it was engaged in the past offensive programme?

(b) Where was it located (include both address and geographical location)?

(c) What is the name of the facility today?

(d) What activities are carried out at the facility today?

CBM Form G

42. CBM G. Declaration of vaccine production facilities. As this CBM was initially limited to the declaration of vaccines licensed for the protection of humans, it would be useful to extend it to also include the declaration of facilities that produce vaccines licensed by a State Party for the protection of animals. The wording on CBM G should be amended to read as follows:

*To further increase the transparency of biological research and development related to the Convention and to broaden scientific and technical knowledge as agreed in Article X, each State party will declare all facilities, both governmental and non-governmental, within its territory or under its jurisdiction or control anywhere, producing vaccines licensed by the State party for the protection of humans **and of animals**. Information shall be provided on Form G attached.*

43. Form G. This should be amended to read as follows:

A. Declaration of production facilities for vaccines licensed for the protection of humans

1. *Name of facility:*
2. *Location (mailing address):*
3. *General description of the types of diseases covered:*

B. Declaration of production facilities for vaccines licensed for the protection of animals

1. *Name of facility:*
2. *Location (mailing address):*
3. *General description of the types of diseases covered:*

CBM Form 0

44. This form, which already includes a requirement to enter the name of the State Party to the Convention, should be extended by including a question asking when the Convention entered into force for the State Party.

45. This form should be amended so that when a State Party is advising that it has “nothing new to declare,” the last year in which information was provided for a particular form should be shown.

46. The revised Form 0, on the assumption that the recommendations made above to add Form A part 1 (ii) and discontinue Form B (i) and Form C are agreed, would have the following format:

1. *Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange*

<i>Measure</i>	<i>Nothing to declare</i>	<i>Nothing new to declare</i>	<i>Year when last completed</i>
<i>A, part I</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<i>A, part I (ii)</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<i>A, part 2 (ii)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>A, part 2 (iii)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>B (ii)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>D</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>E</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>F</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>G</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Please mark the appropriate box(es) for each measure, with a tick and in the third box by inserting the last year in which information was submitted for this CBM.)

Date: _____

State Party to the Convention: _____

Date of entry into force of the Convention for the State Party:

Points for the *Final Document*

47. It is probable at the Seventh Review Conference, if it follows the precedent of the Sixth Review Conference, that language on CBMs will be agreed both in regard to Article V in the Article by Article *Final Declaration* and also in a *Decisions and Recommendations* section of the *Final Document*. Points for both of these are set out here. It also needs to be recalled that the CBMs **are** politically-binding and are the measures that the Second Review Conference, repeated by the Third, agreed *that the States parties are to implement, on the basis of mutual cooperation*.

Article V in the Article by Article *Final Declaration*

48. It is recommended that the Seventh Review Conference should adopt more concrete language for the CBMs in Article V than that in the *Final Declaration* of the Sixth Review Conference. It should make the following points:

- a. To note the comprehensive attention given to the Confidence-Building Measure regime at the Seventh Review Conference and to welcome the amendments agreed to the Confidence-Building Measures [See *Part III: Decisions and Recommendations*].
- b. To emphasise the importance of the exchange of information among States Parties through the politically binding confidence-building measures (CBMs) agreed at the Second and Third Review Conferences and amended at the Seventh Review Conference.
- c. To welcome the exchange of information carried out under these measures, and to note that this has contributed to enhancing transparency and building confidence.
- d. To note that only a limited number of States Parties make an annual CBM submission and to recognise the urgent need to increase the number of States Parties participating in CBMs.
- e. To reaffirm that the data submitted in the framework of the annual exchange of information should be provided to the United Nations Office for Disarmament Affairs and promptly forwarded by it to all States Parties according to existing modalities.
- f. To agree that a working group reporting to the annual Meeting of States Parties throughout the intersessional process should be established to examine further how the effectiveness of, and the participation in, the CBM regime might be enhanced.

Decisions and Recommendations section of the Final Document

49. The assumption is made that the Seventh Review Conference will follow the precedent of the Sixth Review Conference and have a section entitled *Confidence-Building Measures* in the *Decisions and Recommendations* section of the *Final Document*. This should make the following points:

Confidence-Building Measures

- a. To note that the review of Article V of the Convention has shown the need to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein.
- b. To decide that the Confidence-Building Measures shall be amended as detailed in Annex A. [Annex A would provide a detailed listing of the amendments indicated in paragraphs 22 to 46 above].
- c. To decide further that a Working Group on Confidence-Building Measures shall be established to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein. The Working Group shall consider whether additional types of information or alternative means would increase transparency and build confidence. The Working Group shall report throughout the intersessional process to the annual Meeting of States Parties which shall decide on any further amendments to the CBM process.

d. To decide that the ISU shall give professional support to the implementation of these decisions by providing necessary services as required by States Parties individually and collectively

(i) for the effective operation of the CBMs already agreed, and their associated modalities, including but not limited to the following tasks decided by the Sixth Review Conference and now reaffirmed:

1. The Implementation Support Unit (ISU) within the United Nations Office for Disarmament Affairs, with the assistance of interested States Parties, shall develop an electronic format of the existing CBM forms.

2. Once completed, the electronic forms shall, with the consent of the State Party submitting them, be posted on a secure Internet site and made available for the use of States Parties, to be developed under the auspices of the ISU.

3. States Parties are invited to submit forms using the electronic format. States Parties that wish to submit completed paper forms instead of electronic forms may do so. The ISU shall insert the submitted hard copy data in the secure Internet site with the consent of the State Party providing this data in order to make it electronically available to all States Parties.

4. The ISU shall centralize requests and offers of assistance regarding the submission of CBMs.

5. The ISU shall regularly inform States Parties about CBM returns and provide statistics on the level of participation at the annual meetings of States Parties.

6. States Parties shall designate a national point of contact in charge of preparing the submission of CBMs, the contact details of which shall be sent to the ISU.

7. The ISU shall circulate to points of contact a notice informing States Parties of the deadline for submitting information under the information exchange procedure (15 April) at least three months prior to this deadline.

(ii) for the new Working Group on CBMs which is to be established by decision [49c] above, including action on any decisions arising out of its recommendations to the annual Meeting of States Parties throughout the intersessional process;

(iii) for consequential changes and any other aspects of the CBM regime as they arise over the intersessional period, under the supervision of the troika consisting of the President of the Seventh Review Conference assisted by the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee.

e. To agree that the CBM regime merits further attention at the Eighth Review Conference.

50. In addition, the *Decisions and Recommendations* section on the *Implementation Support Unit* should also include the assignment of tasks to the Implementation Support Unit relating to the CBMs which should make the following points:

B. Confidence Building Measures:

- (i) Receiving and distributing confidence-building measures (CBMs) to/from States Parties;
- (ii) Sending information notices to States Parties regarding their annual submissions;
- (iii) Supporting the Working Group in its activities to enhance the effectiveness of the Confidence-Building Measures (CBM) regime and to increase participation therein;
- (iv) Compiling, analyzing and distributing data on CBMs and informing on participation at each Meeting of States Parties;
- (v) To the extent possible, and with the assistance of States Parties able to do so, making the CBM data available in more than one of the UN languages;
- (vi) Developing and maintaining a secure website on CBMs to be accessible only to States Parties;
- (vii) Serving as an information exchange point for assistance related to preparation of CBMs;
- (viii) Facilitating activities to promote participation in the CBM regime, as agreed by the States Parties.

**ARTICLE VI: LODGING OF COMPLAINTS WITH AND
THEIR INVESTIGATION BY THE SECURITY COUNCIL**

by Graham S Pearson

Consideration of Article VI at the Sixth Review Conference

1. Article VI of the Convention states that:

(1) Any State Party to this Convention which finds that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all possible evidence confirming its validity, as well as a request for its consideration by the Security Council.

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*²¹⁹ in respect of Article VI stated that:

26. The Conference notes that the provisions of this Article have not been invoked.

27. The Conference emphasizes the provision of Article VI that such a complaint should include all possible evidence confirming its validity. It stresses that, as in the case of the implementation of all the provisions and procedures set forth in the Convention, the procedures foreseen in Article VI should be implemented in good faith within the scope of the Convention.

28. The Conference invites the Security Council:

(i) to consider immediately any complaint lodged under this Article and to initiate any measures it considers necessary for the investigation of the complaint in accordance with the Charter;

(ii) to request, if it deems necessary and in accordance with its resolution 620 of 1988, the United Nations Secretary-General to investigate the allegation of use, using the technical guidelines and procedures contained in Annex I of United Nations Document A/44/561;

²¹⁹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

(iii) to inform each State Party of the results of any investigation initiated under this Article and to consider promptly any appropriate further action which may be necessary.

29. The Conference reaffirms the agreement of States Parties to consult, at the request of any States Party, regarding allegations of use or threat of use of biological or toxin weapons. The Conference reaffirms the undertaking of each State Party to cooperate in carrying out any investigations which the Security Council initiates.

30. The Conference notes that the Secretary-General's investigation mechanism, set out in A/44/561 and endorsed by the General Assembly in its resolution 45/57, represents an international institutional mechanism for investigating cases of alleged use of biological or toxin weapons. The Conference notes in this regard General Assembly resolution 60/288 (2006).

31. The Conference notes that the procedure outlined in this Article is without prejudice to the prerogative of the States Parties to consider jointly the cases of alleged non-compliance with the provisions of the Convention and to make appropriate decisions in accordance with the Charter of the United Nations and applicable rules of international law.

3. The statement at the Sixth Review Conference was updated but largely similar to that agreed at the Fourth Review Conference of the BTWC held from 25 November to 6 December 1996, when the *Final Declaration*²²⁰ in respect of Article VI stated that:

1. The Conference notes that the provisions of this Article have not been invoked.

2. The Conference reaffirms the importance of Article VI, which, in addition to the procedures contained in Article V, provides that any State Party which finds that any other State Party is acting in breach of its obligations under the Convention may lodge a complaint with the United Nations Security Council. The Conference notes that the provisions of Article VI will be taken into account, as appropriate, for any future verification regime resulting from the consideration by the Ad Hoc Group of a system of measures to promote compliance with the Convention. The Conference emphasizes the provision of Article VI that such a complaint should include all possible evidence confirming its validity. It stresses that, as in the case of the implementation of all the provisions and procedures set forth in the Convention, the procedures foreseen in Article VI should be implemented in good faith within the scope of the Convention.

3. The Conference invites the Security Council to consider immediately any complaint lodged under Article VI and to initiate any measures it considers necessary for the investigation of the complaint in accordance with the Charter. The Conference reaffirms the undertaking of each State Party to cooperate in carrying out any investigations which the Security Council may initiate.

²²⁰ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

4. *The Conference recalls, in this context, United Nations Security Council resolution 620 (1988), which at the time encouraged the United Nations Secretary-General to carry out prompt investigations, in response to allegations brought to its attention by any Member State concerning the possible use of chemical and bacteriological (biological) or toxin weapons that could entail a violation of the 1925 Geneva Protocol or of any other applicable rule of international treaty or customary law. The Conference also recalls the technical guidelines and procedures contained in Annex I of United Nations document A/44/561 to guide the United Nations Secretary-General on the timely and efficient investigation of reports of the possible use of such weapons. The States Parties reaffirm their agreement to consult, at the request of any State Party, regarding allegations of use or threat of use of bacteriological (biological) or toxin weapons and to cooperate fully with the United Nations Secretary-General in carrying out such investigations. The Conference stresses that in the case of alleged use the United Nations is called upon to take appropriate measures expeditiously, which could include a request to the Security Council to consider action in accordance with the Charter.*

5. *The Conference invites the Security Council to inform each State Party of the results of any investigation initiated under Article VI and to consider promptly any appropriate further action which may be necessary.*

6. *The Conference notes that the procedure outlined in this Article is without prejudice to the prerogative of the States Parties to the Convention to consider jointly the cases of alleged non-compliance with the provisions of the Convention and to make appropriate decisions in accordance with the Charter of the United Nations and applicable rules of international law.*

7. *The Conference notes that provisions for investigating alleged breaches of the Convention, including measures for the investigation of alleged use of biological and toxin weapons, continue to be considered by the Ad Hoc Group of States Parties, in accordance with its mandate.*

Developments since the Sixth Review Conference

4. The provisions of this Article have never been invoked.

2010 Meeting of States Parties

5. At the Sixth Review Conference, the intersessional programme agreed²²¹ for 2007 – 2010 included the following topic:

(vi) Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.

²²¹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

which was considered by the Meeting of Experts and then the Meeting of States Parties held in 2010.

6. This was thus a further consideration of the two topics addressed in 2004 during the intersessional period between the Fifth and the Sixth Review Conferences, when the Meeting of States Parties considered:

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, animals, and plants;

The first topic was relevant to Article VI of the Convention in that topic iii. addresses *enhancing international capabilities for responding to, investigating and mitigating the effects of cases of alleged use.*

7. The report²²² of the annual Meeting of States Parties in 2010 that considered the topic:

(vi) Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.

included among its substantive paragraphs – which are set out in full in the next chapter of these *Key Points* on Article VII – one of particular relevance to the investigation of alleged use:

29. The States Parties noted the importance of effectively investigating cases of alleged use of biological or toxin weapons, using appropriate expertise, both from experts and laboratories, and taking into account developments in biological science and technology. The States Parties reaffirmed the relevant mechanism established by Article VI of the Convention and noted that the Secretary-General's investigation mechanism, set out in A/44/561 and endorsed by the General Assembly in its resolution 45/57, represents an international institutional mechanism for investigating cases of alleged use of biological or toxin weapons. Recognizing the various views on this issue, the States Parties noted that the Seventh Review Conference would consider it further.

²²² United Nations, Meeting 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, 2010 Meeting, Geneva, 6-10 December 2010, *Report of the Meeting of States Parties*, BWC/MSP/2010/6, 17 December 2010. Available at <http://www.opbw.org>

United Nations Global Counter-Terrorism Strategy

8. In a further development since 2006, the United Nations General Assembly adopted Resolution A/RES/60/288²²³ *The United Nations Global Counter-Terrorism Strategy* on 20 September 2006. This, *inter alia*:

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

and in its annex sets out a *Plan of Action*. This includes the following specific item:

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

9. The *Plan of Action* also includes other relevant elements:

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

and

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

and

²²³ United Nations General Assembly, *The United Nations Global Counter-Terrorism Strategy*, Resolution A/RES/60/288, 20 September 2006. Available at: <http://www.un.org/terrorism/strategy-counter-terrorism.shtml>

10. To encourage the World Health Organization to step up its technical assistance to help States to improve their public health systems to prevent and prepare for biological attacks by terrorists;

10. The Secretary-General presented a report²²⁴ to the General Assembly on 17 June 2010 on *progress made in the implementation of the Strategy, which could contain suggestions for its future implementation by the United Nations system, as well as in the implementation of that resolution*. This report states that:

55. In the Strategy, the United Nations system was invited to develop, together with Member States, a single comprehensive database on biological incidents. In addition, the Secretary-General was encouraged to update the roster of experts and laboratories and the technical guidelines and procedures available to him for the timely and efficient investigation of alleged use.

56. Beginning in 2008, the Office for Disarmament Affairs has been developing its Biological Incident Database and has provided secure web-based access to interested Member States. Member States are encouraged to use the database on a trial basis. Following a briefing to Member States in March 2009, the Office published a paper entitled “Developing a biological incident database”. [A paper describing A Singular Comprehensive Biological Incident Database is available²²⁵]

57. INTERPOL has worked closely with the Office for Disarmament Affairs in the development of its biocrimes database, which will gather information relating to biological cases in which criminal intent is identified and/or where lessons can be drawn, such as biocrimes, acts of bioterrorism, hoaxes and “grey area” incidents. It will contain practical information and standard operating procedures for law enforcement officers handling biocrime incidents.

58. INTERPOL has also conducted a series of train-the-trainer sessions and tabletop exercises, bringing together officials from police, public health, customs and crisis management/response, and has developed a new training manual for national trainers, as well as a fellowship programme to equip police officers with the capacity to develop bioterrorism prevention and response strategies in their own countries.

59. The Office for Disarmament Affairs, together with Member States, has strengthened the Secretary-General’s mechanism for the investigation of alleged use of biological weapons by expanding the roster of experts and laboratories capable of carrying out fact-finding missions to investigate reports of the possible use. The first training course for experts from the roster, hosted by the Government of Sweden in 2009, resulted in the establishment of a core team of experts trained to perform such missions. The World Health Organization (WHO) provides technical support to the Office for Disarmament Affairs for the improvement of the mechanism by updating the roster of experts, providing equipment and support for that training and updating and refining the relevant technical manuals and procedures.

²²⁴ United Nations Secretary-General, *United Nations Global Counter-Terrorism Strategy: activities of the United Nations system in implementing the Strategy*, A/64/818, 17 June 2010. Available at: <http://www.un.org/terrorism/strategy-counter-terrorism.shtml>

²²⁵ United Nations Office for Disarmament Affairs, *A Singular Comprehensive Biological Incident Database, 2009-2010*. Available at <http://www.un.org/disarmament/WMD/e-Portfolio/Bio-incidents.pdf>

60. *The WHO Global Alert and Response Section is addressing the issue of interface between security and public health. Among its other duties, the Section is responsible for establishing procedures to guide public health responses to potential events and to address health and security concerns at mass gatherings.*

61. *At the international level, a round-the-clock system of alert and response operations detects international public health events and performs risk assessments of the public health implications of these events. The system is constantly being tested, both through annual exercises and during real events, in order to optimize operational performance and the effectiveness of collaboration with international partners.*

62. *Through its network of laboratories and technical institutions, including the network of WHO collaborating centres and other informal “virtual” clinical, laboratory, epidemiological and poison centre networks, WHO has rapid access to a range of specialized scientific expertise. Standards and training on laboratory biosafety and biosecurity are being disseminated in all WHO regions to encourage safe use, transport and storage of biological materials, minimizing the risk of their diversion for malicious use. WHO is also exploring the public health issues surrounding the potential risks of accidentally or deliberately misusing life sciences research and is developing guidance, as well as a self-assessment questionnaire, on responsible life sciences research. In addition, WHO is working in collaboration with the European Union and other partners to strengthen biorisk management and laboratory practices to provide protection against biological risks.*

63. *WHO is strengthening its stockpiles of vaccines and treatments for disease specific risks, such as smallpox, is exploring the possibility of a new global stockpile for radio-nuclear and chemical emergencies and has developed and refined internal standard operating procedures to respond to intentionally caused outbreaks and emergencies.*

64. *In 2009, UNICRI, in collaboration with the European Commission, initiated a project on present and future security implications of advances in biotechnology, with a focus on the dual-use potential of synthetic biology and nanobiotechnology. A similar collaboration is also planning to create chemical, biological, radiological and nuclear centres of excellence, with the aim of assisting States in developing a comprehensive strategy for the mitigation of risk in these areas.*

11. Subsequent to the Secretary-General’s report to the General Assembly, the General Assembly adopted a resolution A/RES/64/297²²⁶ on 13 October 2010 again entitled *The United Nations Global Counter-Terrorism Strategy*. This reaffirmed the approaches being taken and encouraged the Member States to step up their efforts to implement the Strategy in an integrated manner and in all its aspects.

12. It is also evident from the first report²²⁷ published in August 2010 of the *Working Group*

²²⁶ United Nations General Assembly, *The United Nations Global Counter-Terrorism Strategy*, Resolution A/RES/64/297, 13 October 2010. Available at: <http://www.un.org/terrorism/strategy-counter-terrorism.shtml>

²²⁷ United Nations Counterterrorism Implementation Task Force (UNCITF), Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks, *Interagency Coordination in the Event of a Nuclear or*

on Preventing and Responding to Weapons of Mass Destruction Attacks that is part of the United Nations Counterterrorism Implementation Task Force (UNCITF) that whilst the initial focus is on interagency coordination in the event of a nuclear or radiological terrorist attack, *the report serves as a vehicle for further work by examining the experience of well-established systems for nuclear and radiological security with a view to exploring how best to develop similar interagency mechanisms in the context of chemical and biological weapons and materials.* It is, however, noted that although the participants in the Working Group have the lead from the International Atomic Energy Agency (IAEA) and the co-chair from the OPCW, there was no representation from the Implementation Support Unit. The CTITF entities shown as participating in this *Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks* are listed²²⁸ as follows:

- * International Atomic Energy Agency (IAEA) (lead)
- * Organization for the Prohibition of Chemical Weapons (OPCW) (co-chair)
- * Office for Disarmament Affairs (ODA)
- * United Nations Interregional Crime and Justice Research Institute (UNICRI)
- * World Health Organization (WHO)
- * Expert Staff of the 1540 Committee
- * International Criminal Police Organization (INTERPOL)
- * United Nations Development Programme (UNDP)
- * Department of Public Information (DPI)
- * Department of Security and Safety (DSS)
- * International Maritime Organization (IMO)
- * United Nations Office on Drugs and Crime (UNODC)
- * International Civil Aviation Organization (ICAO)

with the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) shown as an additional partner. Given that the report²²⁹ published in August 2010 is the first phase of a broader effort, which will also examine interagency mechanisms and coordination for responding to other types of WMD attacks by terrorists (i.e. using chemical or biological weapons), there would be benefits to the States Parties to the BTWC in requesting the ISU to participate in the future activities of the Task Force.

Secretary-General's Mechanism for Investigation of Alleged Use

13. As noted above in the extract from the Secretary-General's report²³⁰ of 17 June 2010:

59. The Office for Disarmament Affairs, together with Member States, has strengthened the Secretary-General's mechanism for the investigation of alleged use of biological weapons by expanding the roster of experts and laboratories capable of

Radiological Terrorist Attack: Current Status, Future Prospects, August 2010. Available at: <http://www.un.org/terrorism/strategy-counter-terrorism.shtml>

²²⁸ United Nations Counterterrorism Implementation Task Force (UNCITF), *Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks*. Available at: <http://www.un.org/terrorism/wmd.shtml>

²²⁹ United Nations Counterterrorism Implementation Task Force (UNCITF), Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks, *Interagency Coordination in the Event of a Nuclear or Radiological Terrorist Attack: Current Status, Future Prospects*, August 2010. Available at: <http://www.un.org/terrorism/strategy-counter-terrorism.shtml>

²³⁰ United Nations Secretary-General, *United Nations Global Counter-Terrorism Strategy: activities of the United Nations system in implementing the Strategy*, A/64/818, 17 June 2010. Available at: <http://www.un.org/terrorism/strategy-counter-terrorism.shtml>

carrying out fact-finding missions to investigate reports of the possible use. The first training course for experts from the roster, hosted by the Government of Sweden in 2009, resulted in the establishment of a core team of experts trained to perform such missions.

This has resulted in the Appendices to the technical guidelines and procedures being updated²³¹ with particular attention being given to possible investigations of alleged use of biological weapons.

14. A note issued²³² by UNODA in autumn 2010 sets out the programme to provide specialized training for experts on the roster for the Secretary-General's mechanism for investigation of alleged use to be carried out in 2011 – 2012. This reports that:

In 2007, ODA organized meetings of specialized experts to update the technical appendices contained in the 1990 guidelines and procedures. In 2008 and 2009, ODA updated the roster of experts and laboratories. At present, the roster includes of over 300 experts and 40 analytical laboratories. The Office for Disarmament Affairs is developing a set of operational procedures to be used by teams of experts during factfinding missions in case the Secretary-General decides to launch an investigation in response to a report on alleged use of biological weapons.

15. The note goes on to add that:

6. The timely and efficient investigation of alleged use of biological weapons will rely on the technical knowledge and skills of experts on the roster who would be called upon by the Secretary-General to carry out fact-finding missions. In order to enable them to achieve objectives of their missions, it is essential that they receive specialized training. The training is aimed at familiarizing experts with the Secretary-General's mechanism for investigations of alleged use; developing their practical skills to work as a team in a fact-finding mission; building up an understanding of the challenges associated with field investigations. The training would enhance UN capabilities to maintain a core group of trained experts that could be called upon by the Secretary-General to conduct an investigation of alleged use of biological weapons.

7. The Office for Disarmament Affairs has initiated specialized training courses for experts from the roster. The first ever course was held in May-June 2009 with funding from the Government of Sweden. During its two-week proceedings, it provided comprehensive training for the practical preparation and conduct of on-site fact-finding activities by United Nations teams composed of experts from the roster. The first course trained 14 experts from the roster which contains over 120 biological experts nominated by Member States.

16. Further information on the Secretary-General's mechanism (SGM) and its reinvigoration in regard to investigation of alleged use of biological weapons is contained in the UNODA

²³¹ United Nations Office for Disarmament Affairs, *Index to Appendices*. Revised in 2007 and website updated in 2010. Available at: http://www.un.org/disarmament/WMD/Secretary-General_Mechanism/appendices

²³² United Nations Office for Disarmament Affairs, *Training of qualified experts on the roster for the Secretary-General's Mechanism (SGM) for Investigation of Alleged Use of Chemical, Biological or Toxin Weapons*, 2011-2012. Available at <http://www.un.org/disarmament/WMD/e-Portfolio/CBW-use.pdf>

contribution²³³ to the BTWC Meeting of States Parties in December 2010. This included the information that:

In order to be able to carry out effective and safe investigations of alleged use, fact-finding teams should follow proper operational procedures to be incorporated in appropriate manuals. ODA staff initiated the preparation of specific manuals to support the operational activities of fact-finding teams in the biological area such as: Health and Safety; Sampling procedures including sample shipment; and List of equipment for possible use by fact-finding teams. In order to ensure the completeness of the manuals and their up-to-date status, the drafts were submitted for review by OIE and WHO, as well as by selected experts with expertise in the relevant areas. The process of this peer review is on-going.

17. It is evident that the UNODA is developing effective coordination with other international organizations:

In order to carry out efficient and thorough investigations of reports of alleged use, in particular of biological weapons, the Secretary-General's Mechanism will require support not only from Member States but also from international organizations such as FAO, OIE and WHO which specialize in the areas of plant, animal and human diseases. ODA is developing close collaboration with a number of international organizations:

- OPCW: Collaboration has been established with OPCW. A relationship agreement between the UN and OPCW, specifying modes of interaction in cases of reports of chemical weapons use, has been in force since 2001. Our organizations exchange invitations to events organized by them. Recently ODA staff members participated in table top exercises held by OPCW in Tunisia and Poland.*
- WHO: A work plan for joint activities and collaboration was agreed with WHO in January 2009, benefiting from available relevant expertise for investigations and training. Upon a request by ODA, WHO reviewed and provided substantive input to the draft operational manuals prepared by ODA. WHO and ODA prepared a special Memorandum of Understanding on issues of cooperation in investigations of alleged use. The cooperation has been expanded to include participation of roster experts in specific WHO training activities, sharing of information on outbreak response procedures and field operations as well as facilitating planning and logistic support. Other areas of cooperation are also included.*
- ODA has also approached FAO and OIE in order to establish collaborative relations in support of the SGM along the same lines of the WHO-ODA collaboration effort. Both organizations welcomed this initiative and discussions are on-going.*
- Collaboration with INTERPOL continues. ODA staff members responsible for the SGM participated in a number of INTERPOL exercises related to*

²³³ United Nations Office for Disarmament Affairs, *Meeting of BWC States Parties*, 6 – 10 December 2010. Available at: www.opbw.org/new.../BWC_MSP_2010_Statement_UNODA_101209_E.pdf

international responses to biological attacks, the most recent one was “Bioshield 2010” hosted by the Government of The Netherlands (Utrecht, 16-18 November 2010).

18. The UNODA contribution went on to note that *The efforts to reinvigorate the SGM have started to bring practical results. The SGM is recognized as an important tool available to Member States in international efforts to prepare responses to possible bioattacks.* It concluded by pointing out that:

- *The ultimate objective of the efforts to reinvigorate the SGM is to create, based on the existing mandates, an effective and operational tool at the disposal of the United Nations, for investigation of alleged use. As the mechanism draws upon the highest possible level of expertise and a cadre of trained experts, its value would be recognised by all Member States and the international community.*
- *It is a mechanism of Member States, their support and contributions are essential.*
- *BWC State Parties could play a leading role in support of efforts to reinvigorate the SGM to bolster international response to biological and toxin weapons use, which would violate key prohibitions established by the Convention.*

Issues for the Seventh Review Conference

19. As noted previously, the Meeting of States Parties in 2010 considered the topic:

- 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.*

The substantive paragraph in the 2010 report²³⁴ of the Meeting of States Parties in regard to investigation of alleged use was the following one:

29. The States Parties noted the importance of effectively investigating cases of alleged use of biological or toxin weapons, using appropriate expertise, both from experts and laboratories, and taking into account developments in biological science and technology. The States Parties reaffirmed the relevant mechanism established by Article VI of the Convention and noted that the Secretary-General’s investigation mechanism, set out in A/44/561 and endorsed by the General Assembly in its resolution 45/57, represents an international institutional mechanism for investigating cases of alleged use of biological or toxin weapons. Recognizing the various views on this issue, the States Parties noted that the Seventh Review Conference would consider it further.

20. This paragraph rightly points out that *the Secretary-General’s investigation mechanism, ... , represents an international institutional mechanism for investigating cases of alleged use of biological or toxin weapons* and goes on to say that the Seventh Review Conference would

²³⁴ United Nations, Meeting 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, 2010 Meeting, Geneva, 6-10 December 2010, *Report of the Meeting of States Parties*, BWC/MSP/2010/6, 17 December 2010. Available at <http://www.opbw.org>

consider further the issue on which various views had been expressed in 2010. Although not explicitly identified in the report, the issue in question was understood to be how best to characterize the relationship between the mechanism and the Convention. It is, however, evident that the United Nations Office for Disarmament Affairs have taken steps to reinvigorate the Secretary-General's mechanism for the investigation of alleged use of biological or toxin weapons and have initiated training of those on the United Nations roster. In these circumstances, the States Parties to the BTWC at the Seventh Review Conference are urged to take steps to ensure that the Implementation Support Unit is directly involved in the activities of the United Nations Office for Disarmament Affairs in regard to the reinvigoration of the Secretary-General's mechanism for the investigation of alleged use of biological or toxin weapons.

21. The *United Nations Global Counter-Terrorism Strategy* has clearly gained momentum and its *Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks* is clearly about to explore how best to develop interagency mechanisms in the context of chemical and biological weapons and materials. The States Parties to the BTWC at the Seventh Review Conference are urged to take steps to ensure that the Implementation Support Unit is directly involved in the activities of the UNCITF *Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks*.

Points for the *Final Document*

22. It is recommended that in respect of Article VI the language in the *Final Document* at the Seventh Review Conference should be similar to that adopted at the Sixth Review Conference but with agreement that the Implementation Support Unit should be named as being associated with UNODA in its ongoing activities to reinvigorate the Secretary-General's mechanism to investigate alleged use of biological weapons. The Implementation Support Unit should also be listed as a participating entity in the United Nations Counterterrorism Implementation Task Force (UNCITF) *Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks* in its consideration of how best to develop interagency mechanisms in the context of chemical and biological weapons and materials. Consideration is given here to both the Article by Article *Final Declaration* and then to the *Part III: Decisions and Recommendations* section of the *Final Document*.

Article VI in the Article by Article *Final Declaration*

23. The language to be adopted by the Seventh Review Conference in its Final Declaration should be similar to that adopted at the Sixth Review Conference in the Article VI section of its *Final Declaration* with additional points relating to the UNCITF Working Group on Preventing and Responding to Weapons of Mass Destruction and to the reinvigoration of the Secretary-General's mechanism for the investigation of alleged use of biological and toxin weapons. The following points are recommended:

- a. To note that the provisions of this Article have not been invoked.
- b. To emphasize the provision of Article VI that such a complaint should include all possible evidence confirming its validity and to stress that, as in the case of the implementation of all the provisions and procedures set forth in the Convention, the procedures foreseen in Article VI should be implemented in good faith within the scope of the Convention.

c. To invite the Security Council:

(i) to consider immediately any complaint lodged under this Article and to initiate any measures it considers necessary for the investigation of the complaint in accordance with the Charter;

(ii) to request, if it deems necessary and in accordance with its resolution 620 of 1988, the United Nations Secretary-General to investigate the allegation of use, using the technical guidelines and procedures contained in Annex I of United Nations Document A/44/561;

(iii) to inform each State Party of the results of any investigation initiated under this Article and to consider promptly any appropriate further action which may be necessary.

d. To reaffirm the agreement of States Parties to consult, at the request of any State Party²³⁵, regarding allegations of use or threat of use of biological or toxin weapons, and the undertaking of each State Party to cooperate in carrying out any investigations which the Security Council initiates.

e. To note that the Secretary-General's investigation mechanism, set out in A/44/561 and endorsed by the General Assembly in its resolution 45/57, represents an international institutional mechanism for investigating cases of alleged use of biological or toxin weapons.

f. To welcome the steps being taken to reinvigorate the Secretary-General's mechanism in regard to the investigation of an alleged use of biological or toxin weapons and to agree that the Implementation Support Unit should be directly engaged in these steps. [See *Part III: Decisions and Recommendations*]

g. To welcome the United Nations Global Counter-Terrorism Strategy set out in General Assembly resolution 60/288 (2006) and to note that the United Nations Counterterrorism Implementation Task Force (UNCITF) Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks is considering how best to develop interagency mechanisms in the context of chemical and biological weapons and materials and to agree that the Implementation Support Unit should be a participating entity. [See *Part III: Decisions and Recommendations*]

h. To note that the procedure outlined in this Article is without prejudice to the prerogative of the States Parties to consider jointly the cases of alleged non-compliance with the provisions of the Convention and to make appropriate decisions in accordance with the Charter of the United Nations and applicable rules of international law.

²³⁵ It should be noted that whilst paragraph 29 of the *Final Declaration* for the Sixth Review Conference stated *at the request of any States Party*, it would be more correct to say *at the request of any State Party* as the right to request belongs individually to each State Party.

Decisions and Recommendations section of the Final Document

24. The section addressing the Implementation Support Unit in the *Decisions and Recommendations* section (*Part III* of the *Final Document*) should include the following points:

- a. To agree that the Implementation Support Unit should be directly engaged in the steps being taken by the United Nations Office for Disarmament Affairs to reinvigorate the Secretary-General's mechanism in regard to the investigation of an alleged use of biological or toxin weapons.
- b. To agree that the Implementation Support Unit should be a participating entity of the United Nations Counterterrorism Implementation Task Force (UNCITF) Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks in its consideration of how best to develop interagency mechanisms in the context of chemical and biological weapons and materials.

ARTICLE VII: ASSISTANCE TO STATES PARTIES

by Graham S Pearson

Consideration of Article VII at the Sixth Review Conference

1. Article VII of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*²³⁶ in respect of Article VII stated that:

32. The Conference notes with satisfaction that these provisions have not been invoked.

33. The Conference takes note of desires expressed that, should a request for assistance be made, it be promptly considered and an appropriate response provided. In this context, pending consideration of a decision by the Security Council, timely emergency assistance could be provided by States Parties if requested.

34. The Conference considers that in the event that this Article might be invoked, the United Nations could play a coordinating role in providing assistance, with the help of States Parties as well as the appropriate intergovernmental organizations such as the World Health Organization (WHO), the World Organisation for Animal Health (OIE), the Food and Agricultural Organization of the United Nations (FAO), and the International Plant Protection Convention (IPPC).

35. The Conference notes that State Parties' national preparedness contributes to international capabilities for response, investigation and mitigation of outbreaks of disease, including those due to alleged use of biological or toxin weapons.

36. The Conference takes note of the proposal that States Parties may need to discuss the detailed procedure for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons.

37. The Conference reaffirms the undertaking of States Parties to provide or support assistance to any State Party which so requests, if the Security Council decides that such State Party has been exposed to danger as a result of a violation of the Convention.

38. The Conference takes note of the willingness of States Parties, where appropriate,

²³⁶ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

to provide or support assistance to any State Party which so requests, when that State Party has been exposed to danger or damage as a result of the use of bacteriological (biological) agents and toxins as weapons by anyone other than a State Party.

3. The seven paragraphs agreed at the Sixth Review Conference were largely developed from the five paragraphs agreed at the Fourth Review Conference of the BTWC held from 25 November to 6 December 1996, when the *Final Declaration*²³⁷ in respect of Article VII stated that:

1. The Conference notes with satisfaction that these provisions have not been invoked.

2. The Conference reaffirms the undertaking made by each State Party to provide or support assistance in accordance with the Charter of the United Nations to any Party to the Convention which so requests, if the Security Council decides that such Party has been exposed to danger as a result of violation of the Convention.

3. The Conference takes note of desires expressed that, should a request for assistance be made, it be promptly considered and an appropriate response provided. In this context, pending consideration of a decision by the Security Council, timely emergency assistance could be provided by States Parties if requested.

4. The Conference takes note of the proposal that the Ad Hoc Group might need to discuss the detailed procedure for assistance in order to ensure that timely emergency assistance would be provided by States Parties if requested.

5. The Conference considers that in the event that this Article might be invoked, the United Nations, with the help of appropriate intergovernmental organizations such as the World Health Organization (WHO), could play a coordinating role.

4. Where the Sixth Review Conference broke new ground, recording consensus beyond that of 1996, was in its recognition of the eventuality of the use of biological or toxin weapons “by anyone other than a State Party.” Paragraph 38 was entirely new. It arose from the realisation that Article VII concerns only assistance required “as a result of violation of the Convention”. But what if an incident of the use of biological or toxin weapons occurred which could not be attributed to a State Party to the BTWC? This might be the case if the perpetrator of the incident could not be identified at all; or if the perpetrator was identified as a State not party to the Convention; or, in some circumstances, if the perpetrator was identified as a non-State actor falling outside the jurisdiction or not under the control of a State Party. Paragraph 38 can thus be read as a shared understanding that the States Parties would voluntarily extend their same willingness, where appropriate, to provide or support assistance to any State Party which so requests in an eventuality not explicitly covered by Article VII. This was an extended understanding of mutual commitment which should be reaffirmed by the Seventh Review Conference.

²³⁷ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996.

Developments since the Sixth Review Conference

5. The intersessional programme agreed for 2007 – 2010 included the following topic:

(vi) Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.

which was considered by the Meeting of Experts and then the Meeting of States Parties held in 2010.

6. This was thus a further consideration of the two topics addressed in 2004 during the intersessional period between the Fifth and the Sixth Review Conferences, when the Meeting of States Parties considered:

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, animals, and plants;

The two topics are relevant to Article VII of the Convention in that topic iii. addresses *mitigating the effects of cases of alleged use* and topic iv. addresses the *combating of infectious diseases*. It is recognized that assistance is likely to be required in combating an outbreak of infectious disease long before it is clear whether it was a deliberate or natural outbreak.

7. The report²³⁸ of the annual Meeting of States Parties in 2010 that considered the topic included the following concluding paragraphs:

19. On the provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, States Parties recognized that this is an issue that has health and security components, at both the national and international levels. States Parties highlighted the importance of pursuing initiatives in this area through effective cooperation and sustainable partnerships. States Parties noted the importance of ensuring that efforts undertaken are effective irrespective of whether a disease outbreak is naturally occurring or deliberately caused, and cover diseases and toxins that could harm humans, animals, plants or the environment. States Parties also recognised that capabilities to detect, quickly and effectively respond to, and recover from the alleged use of a biological or toxin weapon need to be in place before they are required.

²³⁸ United Nations, Meeting 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, 2010 Meeting, Geneva, 6-10 December 2010, *Report of the Meeting of States Parties*, BWC/MSP/2010/6, 17 December 2010. Available at <http://www.opbw.org>

20. *Recognising that developing effective measures for the provision of assistance and coordination with relevant international organizations to respond to the use of a biological or toxin weapon is a complex task, States Parties noted the following challenges:*

- (a) the need for clear procedures for submitting requests for assistance or for responding to a case of alleged use of biological or toxin weapons;*
- (b) the need for additional resources in the human and animal health fields, and most acutely in the area of plant health, particularly in developing countries;*
- (c) the potentially complex and sensitive interface between an international public health response and international security issues; and*
- (d) the public health and humanitarian imperatives of a prompt and timely response.*

21. *States Parties noted that there are differences among States Parties in terms of their level of development, national capabilities and resources, and that these differences affect national and international capacity to respond effectively to an alleged use of a biological or toxin weapon. States Parties, taking into account their commitments under Articles VII and X, emphasised the value of assisting other States Parties, including by:*

- (a) enhancing relevant capabilities, including through promoting and facilitating the generation, transfer, and acquisition upon agreed terms, of new knowledge and technologies, consistent with national law and international agreements, as well as of materials and equipment;*
- (b) strengthening human resources; identifying opportunities for collaborative research and sharing advances in science and technology;*
- (c) sharing appropriate and effective practices for biorisk standards in laboratories handling biological agents and toxins.*

22. *Given their commitments under the Convention, in particular under Article VII, States Parties recognized that they bear the primary responsibility for providing assistance and coordinating with relevant organizations in the case of alleged use of biological or toxin weapons. States Parties underlined the importance of assistance being provided promptly, upon request, to any State Party that has been exposed to a danger as a result of violation of the Convention. As national preparedness contributes to international capabilities and cooperation, States Parties recognised the importance of working to build their national capacities according to their specific needs and circumstances.*

23. *Recognizing the importance of disease surveillance and detection efforts for identifying and confirming the cause of outbreaks, States Parties recognized the need to work, in accordance with their respective circumstances, national laws and regulations, to improve their own capacities in this area, and cooperating, upon*

request, to build the capacity of other States Parties. This could include the development of:

- (a) diagnostic capacity for relevant diseases;*
- (b) tools for sampling, epidemiological intelligence and investigation;*
- (c) diagnostic and detection techniques, tools and equipment;*
- (d) adequate technical expertise;*
- (e) international, regional and national laboratory networks;*
- (f) relevant standards, standard operating procedures and best practices;*
- (g) effective information-sharing; and*
- (h) cooperation, especially with developing countries, on research and development of vaccines and diagnostic reagents, and between international reference laboratories and research institutions.*

24. Given the importance of investigating, and mitigating the potential impact of, an alleged use of biological or toxin weapons, States Parties noted the value of, in accordance with national laws and regulations: a coordinated government approach in emergency management; addressing the full range of possible implications; establishing clear channels of communication and command; accessing expert advice; training and exercises; adopting a communication strategy; as well as enabling coordination across sectors through the provision of sufficient financing.

25. Noting that an effective response requires efficient coordination among relevant actors, States Parties recognised the particular importance of ensuring a coordinated response from the law enforcement and health sectors. States Parties agreed on the value of working, in accordance with their national laws and regulations, to improve effective cooperation between these sectors, including by fostering mutual awareness, understanding, and improved information exchange, and by undertaking joint training activities.

26. On the role to be played by the Convention in the provision of assistance and coordination with relevant organizations, affirming the consultation procedures agreed at previous Review Conferences, States Parties noted that the Convention is an appropriate and capable instrument for:

- (a) bilateral, regional or multilateral consultations for the provision of prompt and timely assistance, prior to an allegation of use being presented to the Security Council;*
- (b) developing clearer and more detailed procedures for submitting requests for assistance, and for promptly providing assistance following an allegation of use; and*

(c) developing a comprehensive range of information on sources of assistance, and/or a mechanism to request assistance.

27. The States Parties recalled that the Sixth Review Conference took note of desires expressed that, should a request for assistance be made, it be promptly considered and an appropriate response provided, and that in this context, pending consideration of a decision by the Security Council, timely emergency assistance could be provided by States Parties if requested.

28. States Parties noted the role played by relevant international organisations, in close cooperation and coordination with the States Parties under the provisions of the Convention, in the provision of assistance and coordination, including, inter alia, the United Nations, the World Health Organization, the Food and Agriculture Organization, the World Organization for Animal Health, the World Customs Organization, and the International Criminal Police Organization. States Parties noted the value of encouraging these organizations to work together more closely, strictly within their respective mandates, to address specific relevant aspects of the threats posed by the use of biological and toxin weapons, and to assist States Parties to build their national capacities.

29. The States Parties noted the importance of effectively investigating cases of alleged use of biological or toxin weapons, using appropriate expertise, both from experts and laboratories, and taking into account developments in biological science and technology. The States Parties reaffirmed the relevant mechanism established by Article VI of the Convention and noted that the Secretary-General's investigation mechanism, set out in A/44/561 and endorsed by the General Assembly in its resolution 45/57, represents an international institutional mechanism for investigating cases of alleged use of biological or toxin weapons. Recognizing the various views on this issue, the States Parties noted that the Seventh Review Conference would consider it further.

30. The States Parties noted that the International Health Regulations (2005) are important for building capacity to prevent, protect against, control and respond to the international spread of disease. The States Parties noted that such aims are complementary with the objectives of the Convention.

Issues for the Seventh Review Conference

8. One paragraph in particular, paragraph 26, of the Report²³⁹ of the Meeting of States Parties in December 2010 addresses the role to be played by the Convention and should be considered further in preparing for the Seventh Review Conference. Paragraph 26 says:

26. On the role to be played by the Convention in the provision of assistance and coordination with relevant organizations, affirming the consultation procedures

²³⁹ United Nations, Meeting 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, 2010 Meeting, Geneva, 6-10 December 2010, *Report of the Meeting of States Parties*, BWC/MSP/2010/6, 17 December 2010. Available at <http://www.opbw.org>

agreed at previous Review Conferences, States Parties noted that the Convention is an appropriate and capable instrument for:

(a) bilateral, regional or multilateral consultations for the provision of prompt and timely assistance, prior to an allegation of use being presented to the Security Council;

(b) developing clearer and more detailed procedures for submitting requests for assistance, and for promptly providing assistance following an allegation of use; and

(c) developing a comprehensive range of information on sources of assistance, and/or a mechanism to request assistance.

9. In considering each of the sub-paragraphs in turn, no action needs to be taken in regard to the paragraph 26 (a) other than reaffirming this in the Article VII section of the *Final Declaration*. The second subparagraph 26 (b) could with advantage be taken further by the Seventh Review Conference who could decide to request the Annual Meeting of States Parties to develop such procedures preferably by having a Meeting of Experts prepare draft procedures for consideration and adoption by a subsequent Annual Meeting of States Parties. The third subparagraph 26 (c) could be assigned to the Implementation Support Unit to develop an information document on sources of assistance including in that document how such assistance can be requested by States Parties. Consideration should be given to whether the Implementation Support Unit would require additional resources to carry out this task and to keep the document up to date by reissuing it at least every two years.

10. Paragraph 29 is primarily related to Article VI and notes that the Seventh Review Conference would consider this further. This is considered in the chapter on Article VI in these *Key Points*.

11. The remaining paragraphs from the Report of the Meeting of States Parties in December 2010 are suitable for addressing in the Article VII section of the *Final Declaration* at the Seventh Review Conference using language similar to that adopted in the Article VII section at the Sixth Review Conference.

12. However, a further point that emerges from the Meeting of Experts and the Meeting of States Parties in 2010 is that the benefits which can accrue from advances in science and technology can significantly increase the ability of States Parties to come to the assistance of a State Party. This could usefully be reflected in the *Final Declaration*.

13. In addition, as already noted in paragraph 4 above, the extended understanding encapsulated in paragraph 38 of the Article VII section of the *Final Declaration* of the Sixth Review Conference that states:

38. The Conference takes note of the willingness of States Parties, where appropriate, to provide or support assistance to any State Party which so requests, when that State Party has been exposed to danger or damage as a result of the use of bacteriological (biological) agents and toxins as weapons by anyone other than a State Party.

should be reaffirmed by the Seventh Review Conference.

Points for the *Final Document*

14. Consideration is given here to both the Article by Article *Final Declaration* and then to the *Decisions and Recommendations* section (*Part III* of the *Final Document*).

Article VII in the Article by Article *Final Declaration*

15. As Article VII has never been invoked, it is suggested that the Seventh Review Conference should adopt similar language to that in the *Final Declaration* of the Sixth Review Conference together with the inclusion of paragraphs containing the substance of the outcome of the 2010 Meeting of States Parties and tasking the Annual Meeting of States Parties and the Implementation Support Unit accordingly, along the following lines:

- a. To note with satisfaction that these provisions have never been invoked.
- b. To note that the Convention is an appropriate and capable instrument for bilateral, regional or multilateral consultations for the provision of prompt and timely assistance, prior to an allegation of use being presented to the Security Council.
- c. To take note of desires expressed that, should a request for assistance be made, it be promptly considered and an appropriate response provided. In this context, pending consideration of a decision by the Security Council, timely emergency assistance could be provided by States Parties if requested.
- d. To consider that in the event that this Article might be invoked, the United Nations could play a coordinating role in providing assistance, with the help of States Parties as well as the appropriate intergovernmental organizations such as the World Health Organization (WHO), the World Organisation for Animal Health (OIE), the Food and Agricultural Organization of the United Nations (FAO), and the International Plant Protection Convention (IPPC) as well as the World Customs Organization, and the International Criminal Police Organization.
- e. To note the value of encouraging these organizations to work together more closely, strictly within their respective mandates, to address specific relevant aspects of the threats posed by the use of biological and toxin weapons, and to assist States Parties to build their national capacities.
- f. To note that State Parties' national preparedness contributes to international capabilities for response, investigation and mitigation of outbreaks of disease, including those due to alleged use of biological or toxin weapons.
- g. To recognize the need for appropriate detailed procedures for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons and to agree that the annual Meeting of States Parties shall prepare and adopt such procedures.
- h. Recognizing the value of a comprehensive range of information on sources of assistance, to request the Implementation Support Unit to compile a document providing such information also including information as to how such assistance might be requested by States Parties.

i. To note with satisfaction that relevant advances in the fields of microbiology and biotechnology have significantly increased the ability of States Parties to come to the assistance of a State Party should the Security Council decide that such State Party has been exposed to danger as a result of violation of the Convention.

j. To reaffirm the undertaking of States Parties to provide or support assistance to any State Party which so requests, if the Security Council decides that such State Party has been exposed to danger as a result of a violation of the Convention.

k. To reaffirm the willingness of States Parties, where appropriate, to provide or support assistance to any State Party which so requests, when that State Party has been exposed to danger or damage as a result of the use of bacteriological (biological) agents and toxins as weapons by anyone other than a State Party.

Decisions and Recommendations Section of the Final Document

16. The assumption is made that the Seventh Review Conference will follow the precedent of the Sixth Review Conference and have a *Part III: Decisions and Recommendations* section in the *Final Document*. Two decisions in the *Part III: Decisions and Recommendations* arise from the issues considered here and likely to be considered by the Review Conference in relation to Article VII.

17. The first is in regard to the *Intersessional Programme for 2012 to 2015* where it is recommended that an item be included:

a. In recognition of the need for appropriate detailed procedures for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons, it is agreed that the Annual Meeting of States Parties shall prepare and adopt such procedures.

18. The second point is in relation to the *Implementation Support Unit* where it is recommended that an item be included:

a. In recognition of the value of a comprehensive range of information on sources of assistance, it is agreed that the Implementation Support Unit shall compile a document providing such information also including information as to how such assistance might be requested by States Parties.

ARTICLE VIII: GENEVA PROTOCOL OBLIGATIONS AND THE BTWC

by Nicholas A Sims, Graham S Pearson & Angela Woodward

Consideration of Article VIII at the Sixth Review Conference

1. Article VIII of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held on 20 November to 8 December 2006, the *Final Declaration*²⁴⁰ in respect of Article VIII stated that:

39. The Conference appeals to all States Parties to the 1925 Geneva Protocol to fulfill their obligations assumed under that Protocol and urges all states not yet party to the Protocol to ratify or accede to it without delay.

40. The Conference acknowledges that the 1925 Geneva Protocol, which prohibits the use in war of asphyxiating, poisonous or other gases, and of bacteriological methods of warfare, and the Convention complement each other. The Conference reaffirms that nothing contained in the Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any state under the 1925 Geneva Protocol.

41. The Conference stresses the importance of the withdrawal of all reservations to the 1925 Geneva Protocol related to the Convention.

42. The Conference welcomes the actions which States Parties have taken to withdraw their reservations to the 1925 Geneva Protocol related to the Convention, and calls upon those 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.

43. The Conference notes that reservations concerning retaliation, through the use of any of the objects prohibited by the 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.

²⁴⁰ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

Developments since 1996

Adherence to the Geneva Protocol

3. Universal adherence to the Geneva Protocol by all States, including all States Parties to the BTWC, has been an agreed politically binding commitment since 1980, reaffirmed by every subsequent Review Conference that has issued a *Final Declaration*. It should be noted that the original statement, in the *Final Declaration* which the First Review Conference agreed on 21 March 1980, called on all States not yet parties to the Geneva Protocol to ratify or accede to it at the earliest possible date; the Second Review Conference on 26 September 1986 urged them to adhere to it at the earliest possible date; the Third Review Conference on 27 September 1991 urged them to accede to it without delay, as did the Fourth Review Conference on 6 December 1996 and the Sixth Review Conference on 8 December 2006.

4. However, both the proportion and the total number of BTWC States Parties which are **not** parties to the Geneva Protocol have increased since 1980, from 15 out of 87 (17%) to 38 out of 164 (23%) as of 27 August 2011. This makes it all the more necessary that the Seventh Review Conference should urge universal adherence to the Protocol and lay a special responsibility on BTWC States Parties, not yet parties to the Geneva Protocol, to take the necessary action without delay.

5. Since the Fourth Review Conference, eight BTWC States Parties have taken steps to confirm their adherence to the Geneva Protocol:

Slovakia 1997 (confirmation on 1 July 1997 of its indication on 22 September 1993 that it considered itself bound by succession to the Czechoslovak ratification of 16 August 1938)

Saint Vincent and the Grenadines 1999 (succession)

Ukraine 2003 (succession)

Croatia 2006 (acceptance)

Serbia 2006 (succession)

El Salvador 2008 (ratification)

Slovenia 2008 (adhesion)

Costa Rica 2009 (adhesion)

6. Thirty-eight BTWC States Parties, as of 27 August 2011, have yet to complete formalities to accede or succeed to the Geneva Protocol:

Armenia

Azerbaijan

Bahamas

Belarus
Belize
Bosnia and Herzegovina
Botswana
Brunei Darussalam
Colombia
Congo, Republic of
Cook Islands
Democratic Republic of Congo
Dominica
Gabon
Georgia
Honduras
Kazakhstan
Kyrgyzstan
Mali
Montenegro
Mozambique
Oman
Palau
Republic of Moldova²⁴¹
San Marino

²⁴¹ The Republic of Moldova passed “Law No. 236 of 24 September 2010 for Moldova’s accession to the Protocol on the Prohibition of the Use in War of Asphyxiating , Poisonous or other Gases, and of Bacteriological Methods of Warfare” which authorizes Moldova’s adherence to the Geneva Protocol and, in Article 3, mandates the Ministry of Foreign Affairs and European Integration to prepare the accession instrument for submission to the Depository (unofficial translation from the Romanian original); <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=336284>. As of 27 August 2011, the Depository’s website does not list this adherence.

Sao Tome and Principe
Seychelles
Singapore
Suriname
Tajikistan
The Former Yugoslav Republic of Macedonia
Timor-Leste
Turkmenistan
United Arab Emirates
Uzbekistan
Vanuatu
Zambia
Zimbabwe

7. These lists have been compiled with care but discrepancies are not unknown in Geneva Protocol listings, and some aspects of state succession in particular give rise to uncertainties over treaty status in international law.

8. For example, it is possible that some states in this list of non-parties may have supposed themselves to have adhered by virtue of general declarations of succession to obligations, made at the time of gaining independence: general declarations which are, however, not recognised by the Depositary for the Geneva Protocol because they are insufficiently specific. Such states may be reluctant to deposit instruments of accession or succession because of the possible implication that they are doing so as non-parties from outside the Geneva Protocol. One solution in such cases might be a regularisation of notification. There is a precedent in the case of Paraguay, which transmitted its instrument of accession on 26 October 1933 but was not counted as a State Party by the Depositary until regularisation of the notification on 13 January 1969. Alternatively the route of confirmation of an earlier indication of succession to obligations might be followed, as by Slovakia on 1 July 1997.

9. All delegations to the Seventh Review Conference of BTWC States Parties which appear to be non-parties to the Geneva Protocol are recommended to check with the legal department of their Ministry of Foreign Affairs what action has been taken or might be taken in conjunction with the Depositary (France). It is possible in some cases that formal effect has not yet been given to political decisions: that the necessary international legal procedures, including formal communication to the Depositary and notification of the communication by the Depositary, have still to be completed. Delegations are recommended to clarify the position and if possible to announce, or to confirm, their government's adherence to the Geneva Protocol during the Seventh Review Conference.

Withdrawal of Geneva Protocol Reservations

10. At the time the Fourth Review Conference adopted its uncompromising appeal to BTWC States Parties for the withdrawal of the remaining reservations to the Geneva Protocol, the most recent such withdrawals were those of

South Africa	12 July 1996
France	25 November 1996

They were joined in the next few years by four other BTWC States Parties, which withdrew their reservations to the Geneva Protocol on the following dates:

Belgium	17 February 1997
Estonia	28 May 1999
Russian Federation	18 January 2001
Portugal	23 December 2002

11. In addition, two BTWC States Parties which had already, in 1991, modified their reservations so as to exclude bacteriological methods of warfare (Canada) or the use in war of the objects prohibited by Article I of the BTWC (United Kingdom) from the scope of their reservations, so as to render their Geneva Protocol and BTWC obligations fully consistent with one another, completed the withdrawal of the remaining parts of their reservations on the following dates:

Canada	28 October 1999
United Kingdom	20 December 2002

the latter giving legal effect to the withdrawal announced at the political level by Tony Lloyd MP, Minister of State at the UK Foreign and Commonwealth Office, at the opening Conference of the States Parties of the OPCW held 6 – 24 May 1997 at The Hague upon the entry into force of the Chemical Weapons Convention.

12. One BTWC State Party is understood to have modified its reservation so as to exclude the use of biological and toxin weapons in a letter to which the Depository refers on its website, on the following date:

Republic of Korea	19 September 2002
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If this modification limited the scope of the South Korean reservation to retaliation with chemical methods of warfare only, it will have assimilated the Republic of Korea to the position occupied by the United States ever since it ratified the Protocol in 1975, and previously occupied by the Netherlands 1930-1995, Canada 1991-1999 and the United Kingdom 1991-2002 until they completed the withdrawal of the remaining parts of their reservations.

13. It is surprising, and indicative of a worrying lack of momentum, that there has been only one reservation withdrawal reported, and no reservation modified prior to withdrawal, since the end of 2002. Serbia announced in the BTWC Meeting of States Parties on 6 December 2010 that it had withdrawn its reservation on retaliation. This reservation had been understood to have been inherited from the original reservation *in regard to any enemy State whose armed forces or whose Allies fail to respect the prohibitions laid down in the Protocol* attached by the Kingdom of the Serbs, Croats and Slovenes – shortly thereafter officially renamed Yugoslavia – to its ratification of the Geneva Protocol on 12 April 1929. Serbia’s withdrawal of its reservation has yet to be notified by the Depositary. When it takes full legal effect by such notification, this welcome action by Serbia will leave nineteen BTWC States Parties in the position of appearing to retain explicit reservations, attached upon ratification, accession or succession to the Geneva Protocol, which in the absence of any statement to the contrary purport to maintain a right of retaliation with bacteriological, as well as chemical, methods of warfare, twenty years since the Third Review Conference called for such reservations to be withdrawn and fifteen years since the Fourth Review Conference strengthened that call.

Algeria

Bahrain

Bangladesh

Cambodia²⁴²

China²⁴³

Fiji

India

Iraq

Jordan

²⁴² Cambodia’s status with regard to the Geneva Protocol is unclear. The Depositary has communicated on its website that Cambodia submitted to it a *note verbale* dated 30 September 1993 in which the Ministry of Foreign Affairs and International Cooperation of Cambodia noted that the Royal Government of Cambodia considers itself bound by the 1925 Geneva Protocol which the coalition government of Democratic Kampuchea ratified on 15 March 1983. However, the Depositary also communicates that Democratic Kampuchea’s adherence was not considered to have legal effect by Australia, Bulgaria, Cuba, Czechoslovakia, Ethiopia, France, German Democratic Republic, Hungary, Mauritius, Mongolia, Poland, the USSR and Vietnam. *Protocole concernant la prohibition d’emploi à la guerre de gaz asphyxiants, toxiques ou similaires et de moyens bactériologiques : Réserve*, Document number 19250001, Undated, Base Pacte, Ministère des Affaires étrangères, France. <http://www.doc.diplomatie.gouv.fr/BASIS/pacte/webext/multidep/DDW?W%3D+ORDER+BY+DATOP/Ascend%26M%3D18%26K%3D19250001%26R%3DY%26U%3D1>. Accessed on 27 August 2011. The United Nations Office for Disarmament Affairs website lists a reservation entered by Cambodia reserving the right to retaliate in kind. The Depositary’s website does not list this reservation.

²⁴³ The United Nations Office for Disarmament Affairs website lists a reservation submitted by China at the time it succeeded to the Geneva Protocol by a declaration dated 13 July 1952, “The People’s Republic of China undertook to apply the Protocol subject to reciprocal application by the other Contracting and Acceding Power” (sic), UNODA website <http://unhq-appspub-01.un.org/UNODA/TreatyStatus.nsf>. The Depositary’s website does not list this reservation.

Korea, People's Democratic Republic of

Korea, Republic of²⁴⁴

Kuwait

Libya

Nigeria

Pakistan

Papua New Guinea

Solomon Islands

Vietnam

Yemen

Even though some of these States Parties may regard their BTWC obligations as having effectively superseded their Geneva Protocol reservations in so far as biological and toxin weapons are concerned, and may regard their reservations as obsolete, it is **strongly recommended** nevertheless that they act to put the matter beyond doubt by formally withdrawing those reservations. This action, when communicated to the French government as Depositary and notified by the latter to all States Parties, would render their treaty status under the Geneva Protocol fully consistent with their obligations under the BTWC and under customary international humanitarian law as elucidated by the International Committee of the Red Cross in Rules 72-76 of its 2005 study²⁴⁵. Rules 72 – 76 state:

Poison

Rule 72. *The use of poison or poisoned weapons is prohibited. [IAC/NIAC]*²⁴⁶

Biological Weapons

Rule 73. *The use of biological weapons is prohibited. [IAC/NIAC]*

Chemical Weapons

Rule 74. *The use of chemical weapons is prohibited. [IAC/NIAC]*

Rule 75. *The use of riot-control agents as a method of warfare is prohibited. [IAC/NIAC]*

Rule 76. *The use of herbicides as a method of warfare is prohibited if they:*

²⁴⁴ The status and nature of the Republic of Korea's reservation to the Geneva Protocol remains unclear, as discussed in paragraph 12 above.

²⁴⁵ Jean-Marie Henckaerts and Louise Doswald-Beck, Customary International Humanitarian Law. Volume I: Rules. International Committee of the Red Cross and Cambridge University Press, 2005, pp. 251-254, 256-267. Available at: <http://www.icrc.org/eng/resources/documents/misc/customary-law-rules-291008.htm>

²⁴⁶ The abbreviation IAC refers to customary rules applicable in international armed conflicts and the abbreviation NIAC to customary rules applicable in non-international armed conflicts.

- (a) are of a nature to be prohibited chemical weapons;*
- (b) are of a nature to be prohibited biological weapons;*
- (c) are aimed at vegetation that is not a military objective;*
- (d) would cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which may be expected to be excessive in relation to the concrete and direct military advantage anticipated;*
- or*
- (e) would cause widespread, long-term and severe damage to the natural environment.*

[IAC/NIAC]

14. They would thereby be giving effect to the politically binding commitment agreed by the Third Review Conference and in more absolute terms by the Fourth and Sixth Review Conferences. They would also be complying with the appeals for withdrawal of the remaining reservations which were issued jointly by France and Switzerland – respectively the Depository Government and the Host Government for the Geneva Protocol – on the occasion of its eightieth anniversary, and subsequently by the Secretary-General of the United Nations in his message to the BTWC Meeting of States Parties when it opened on 5 December 2005.

Appeals for the Withdrawal of Reservations

15. In June 2005, France and Switzerland initiated an international seminar on the occasion of the 80th anniversary of the signing of the 1925 Geneva Protocol. The report²⁴⁷ noted that:

The seminar was lively with a rich debate following the presentations that covered much ground and led to the recognition of a number of conclusions and points for further consideration:

- a. The 1925 Geneva Protocol was clearly the cornerstone of the multilateral regime that now through the 1972 Biological Weapons Convention and the 1993 Chemical Weapons Convention totally prohibits both chemical and biological weapons.*
- b. There would be advantages in an enhanced campaign to encourage those States Parties to the 1925 Geneva Protocol who still maintain reservations to lift these.*
- c. The Action plans adopted by the Organisation for the Prohibition of Chemical Weapons (OPCW) for the universality and the national implementation of the Chemical Weapons Convention had proved to be very effective tools. There is much to be said for considering the adoption of similar action plans for universality and for national implementation of the Biological Weapons Convention.*

²⁴⁷ UNIDIR & GCSP, *The Biological and Chemical Weapons Threat Yesterday and Today*, Geneva, 9-10 June 2005, International Seminar Initiated by Switzerland and France on the Occasion of the 80th Anniversary of the Signing of the Geneva Protocol Prohibiting the Use of Chemical and Biological Weapons.

d. In regard to the Biological Weapons Convention, the Sixth Review Conference in 2006 would provide an opportunity to carry out a comprehensive review and strengthen the regime further. In respect of the existing Confidence Building Measures (CBMs) agreed by the States Parties, consideration should be given by all States Parties to make them better known in order to promote transparency and build confidence.

e. It was evident that all possible efforts should be made to strengthen the effectiveness and improve the implementation of the multilateral treaty regime comprising the 1925 Geneva Protocol, the 1972 Biological Weapons Convention and the 1993 Chemical Weapons Convention, through all the instruments available to us such as norms, verification mechanisms and confidence building measures as these are mutually complementary.

f. At the closure of the seminar, France and Switzerland issued a joint final declaration.

16. The joint Final Declaration issued by France and Switzerland stated that:

On the occasion of the 80th anniversary of the signing in Geneva of the Protocol for the prohibition of the use of chemical and bacteriological weapons, France, Depositary of the 1925 Geneva Protocol, and Switzerland, Host Country, launch an appeal for the pursuit of international efforts towards the universalization of the Protocol.

France and Switzerland also call on those States which have made reservations upon accession to the Protocol to consider constructively the withdrawal of such reservations.

France and Switzerland consider that, in the present international situation, the path opened by the 1925 Protocol, at the crossroad of humanitarian imperatives and non-proliferation and disarmament objectives, appears as a priority, still pertinent and topical.

Our two countries call for the continuation, with the greatest energy, of the efforts initiated eighty years ago in order to ensure the total prohibition of chemical and biological weapons. More than ever, we must make the best appropriate use of the multilateral instruments at our disposal: norms, verification mechanisms, confidence-building measures, which are mutually complementary and intrinsically linked for this purpose.

With all the participants to the Geneva International Seminar, States Parties to the Protocol, international organisations, non-governmental organisations and international research institutions, our two countries are determined to spare no effort to continue to promote, in all the relevant fora, the objectives of the signatories of the 1925 Protocol, which remain those of all humankind today.

17. Later the same year, the Secretary-General of the United Nations in his message²⁴⁸ to the Meeting of the States Parties to the BTWC on 5 December 2005 included the following call:

The Geneva Protocol was the first truly international agreement to seek the prohibition of the use of chemical and biological weapons as a method of warfare. It is therefore appropriate to call on the countries that still maintain reservations to the Protocol to withdraw them, since other conventions agreed to since then have rendered them obsolete.

18. The Secretary-General's report A/61/116²⁴⁹ to the General Assembly on 28 June 2006 reported that *no withdrawals of reservations by States parties have been reported by the depositary of the 1925 Geneva Protocol* since the adoption of General Assembly resolution A/59/70²⁵⁰ on 3 December 2004. On 6 December 2006, the General Assembly adopted resolution A/61/61²⁵¹ by 173 votes to none, with 4 abstentions (Israel, Marshall Islands, Palau, United States of America) on measures to uphold the authority of the 1925 Geneva Protocol which included:

Welcoming the recent initiatives by three more States Parties to withdraw their reservations to the 1925 Geneva Protocol,

1. Takes note of the note by the Secretary-General;

2. Renews its previous call to all States to observe strictly the principles and objectives of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, and reaffirms the vital necessity of upholding its provisions;

3. Calls upon those States that continue to maintain reservations to the 1925 Geneva Protocol to withdraw them;

19. Two years later the situation was unchanged. The Secretary-General's report A/63/91²⁵² to the General Assembly on 25 June 2008 reported that *no withdrawals of reservations by States parties have been reported by the depositary of the 1925 Geneva Protocol* since the adoption of General Assembly resolution A/61/61 on 6 December 2006. On 2 December 2008, the General Assembly adopted resolution A/63/53²⁵³ by 174 votes to none, with 4 abstentions (Israel, Marshall Islands, Palau, United States of America) which in its third paragraph

3. Calls upon those States that continue to maintain reservations to the 1925 Geneva

²⁴⁸ United Nations, *The Secretary-General Message to the Meeting of States parties to the Biological and Toxin Weapons Convention (BTWC)*, Geneva, 5 December 2005. Available at <http://www.opbw.org>

²⁴⁹ United Nations General Assembly, *Measures to uphold the authority of the 1925 Geneva Protocol: Note by the Secretary-General*, A/61/116, 28 June 2006.

²⁵⁰ United Nations General Assembly, *Resolution adopted by the General Assembly 59/70 Measures to uphold the authority of the 1925 Geneva Protocol*, A/RES/59/70, 17 December 2004.

²⁵¹ United Nations General Assembly, *Resolution adopted by the General Assembly 61/61 Measures to uphold the authority of the 1925 Geneva Protocol*, A/RES/61/61, 3 January 2007.

²⁵² United Nations General Assembly, *Measures to uphold the authority of the 1925 Geneva Protocol: Note by the Secretary-General*, A/63/91, 25 June 2008.

²⁵³ United Nations General Assembly, *Resolution adopted by the General Assembly 63/53 Measures to uphold the authority of the 1925 Geneva Protocol*, A/RES/63/53, 12 January 2009.

Protocol to withdraw them;

20. Two years later the situation was again unchanged. The Secretary-General's report A/65/95²⁵⁴ to the General Assembly on 30 June 2010 reported that *no withdrawals of reservations by States parties have been reported by the depositary of the 1925 Geneva Protocol* since the adoption of General Assembly resolution A/63/53 on 2 December 2008. On 8 December 2010, the General Assembly adopted resolution A/65/51²⁵⁵ by 178 votes to none, with 4 abstentions (Israel, Marshall Islands, Palau, United States of America) which in its third paragraph

3. *Calls upon* those States that continue to maintain reservations to the 1925 Geneva Protocol to withdraw them;

21. The Seventh Review Conference is recommended to reaffirm the call for withdrawal of reservations in terms at least as strong and uncompromising as in 2006.

Proposals for the Seventh Review Conference

22. The Seventh Review Conference has again the opportunity to call upon all States Parties not yet party to the Geneva Protocol to adhere to it without delay and to emphasise the absolute character and permanent status of the Convention by calling upon all States Parties to ensure that their treaty status under the Geneva Protocol is henceforth consistent with their obligations under the Convention, and to regularise that status, if there is any uncertainty remaining, by taking appropriate legal action in relation to the withdrawal of pertinent reservations.

23. The *Final Declaration* in 2011 will naturally draw upon language which proved its acceptability in 2006, and thereby confirm the cumulative development of the text through the recording of extended understandings of the implications of Articles of the Convention. In addition, it is recommended that the Conference authorise its continuing representative body (this could usefully be a high-level troika made up of the President of the Seventh Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee)²⁵⁶, in close cooperation with France as Depositary for the Geneva Protocol, to follow up the requests reaffirmed from paragraph 39 (of the Sixth Review Conference *Final Declaration*) that urges BTWC States Parties still outside the Geneva Protocol to accede or adhere to the Protocol and in paragraph 42 (of the Sixth Review Conference *Final Declaration*) calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations. This would be consistent with the authorisation of the same continuing high-level representative body to

²⁵⁴ United Nations General Assembly, *Measures to uphold the authority of the 1925 Geneva Protocol: Note by the Secretary-General*, A/65/95, 30 June 2010.

²⁵⁵ United Nations General Assembly, *Resolution adopted by the General Assembly 65/51 Measures to uphold the authority of the 1925 Geneva Protocol*, A/RES/65/51, 13 January 2011.

²⁵⁶ Such a troika would be an extension of the continuing role which a President of a BTWC Review Conference has always held, through the years following the Review Conference at which he presided, acting in close cooperation with the Depositaries. That role goes back to 1980 – 1986 when Norway, holding the Presidency of the First Review Conference in 1980, took the responsibility in the years that followed in caring for the Convention. More information on this is provided in the chapter on *Article XIV: Universal Adherence to the Convention* in these *Key Points for the Seventh Review Conference*.

undertake demarches proposed²⁵⁷ under paragraph 2 of the Article XIV section of the *Final Declaration*. There is, after all, a complementarity between actions to achieve universalisation of the Convention and actions to universalize acceptance (and acceptance without reservations) of the Geneva Protocol and both would benefit from universality.

Points for the *Final Document*

24. It is suggested that the Seventh Review Conference should agree language relating to Article VIII both in the Article by Article *Final Declaration* and also in the *Decisions and Recommendations* section of the *Final Document*. Points for both of these are set out here.

Article VIII in the Article by Article *Final Declaration*

25. The Conference is recommended to repeat the points made in the five paragraphs of the Article VIII section in the 2006 *Final Declaration* with the addition of a further point to authorise its continuing representative body (this could usefully be a troika made up of the President of the Seventh Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee), in close cooperation with France as Depositary for the Geneva Protocol, to follow up its request urging *all states not yet party to the Protocol to ratify or accede to it without delay* (reaffirming paragraph 39 of the 2006 *Final Declaration*) and its request calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations (reaffirming paragraph 42 of the 2006 *Final Declaration*). At the Seventh Review Conference, the *Final Declaration* should use the broader term “*adhere to*” – as it was in the *Final Declaration*²⁵⁸ of the Second Review Conference in 1986 – rather than “*accede to*” as “*adhere to*” encompasses not only accession by non-signatories but the possibility of a state adhering to the Geneva Protocol by regularisation of a prior notification or by a specific declaration of succession to obligations.

26. The points to be made by the Seventh Review Conference in its *Final Declaration* on Article VIII are thus:

- a. To appeal to all States Parties to the 1925 Geneva Protocol to fulfill their obligations assumed under that Protocol and to urge all states not yet party to the Protocol to adhere to it without delay.
- b. To acknowledge that the 1925 Geneva Protocol, which prohibits the use in war of asphyxiating, poisonous or other gases, and of bacteriological methods of warfare, and the Convention complement each other.
- c. To reaffirm that nothing contained in the Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any state under the 1925 Geneva Protocol.

²⁵⁷ See Graham S. Pearson & Nicholas A. Sims, *Article XIV: Universal Adherence to the Convention*, in Graham S. Pearson, Nicholas A. Sims & Malcolm R. Dando (eds), *Strengthening the Biological Weapons Convention: Key Points for the Seventh Review Conference*, University of Bradford, Division of Peace Studies, September 2011. Available at <http://www.brad.ac.uk/acad/sbtwc>

²⁵⁸ United Nations, The Second 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, 8–26 September 1986, *Final Document*, BWC/CONF.II/13, Geneva 1986. Available at <http://www.opbw.org>

d. To stress the importance of the withdrawal of all reservations to the 1925 Geneva Protocol related to the Convention.

e. To welcome the actions which States Parties have taken to withdraw their reservations to the 1925 Geneva Protocol related to the Convention, and to call upon those 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.

f. To note that reservations concerning retaliation, through the use of any of the objects prohibited by the 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.

g. To call upon its continuing representative body (this could usefully be a troika made up of the President of the Seventh Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee), in close cooperation with France as Depositary for the Geneva Protocol, to follow up its requests calling on all States Parties not yet party to the Protocol to adhere to it without delay and calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations and to provide an annual report on their follow up of these requests to the Meeting of States Parties and to the Eighth Review Conference.

Decisions and Recommendations Section of the Final Document

27. The point about the continuing representative body following up on requests also needs to be included in the *Decisions and Recommendations* section of the *Final Document*. As it is proposed that the same continuing representative body as that recommended to oversee *Promotion of Universalization*²⁵⁹ should also follow up requests calling on all States Parties not yet party to the Protocol to adhere to it without delay and calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations, it would be logical to include additional points within the *Promotion of Universalization* section of *Part III: Decisions and Recommendations* as follows:

a. To request the troika, in close cooperation with France as Depositary for the Geneva Protocol, to follow up requests calling on all States Parties not yet party to the Protocol to adhere to it without delay and calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations.

b. To agree that the troika shall provide an annual report on their follow up of these requests to the Meeting of States Parties and to the Eighth Review Conference.

²⁵⁹ See Graham S. Pearson & Nicholas A. Sims, *Article XIV: Universal Adherence to the Convention*, in Graham S. Pearson, Nicholas A. Sims & Malcolm R. Dando (eds), *Strengthening the Biological Weapons Convention: Key Points for the Seventh Review Conference*, University of Bradford, Division of Peace Studies, September 2011. Available at <http://www.brad.ac.uk/acad/sbtwc>

ARTICLE IX: PROHIBITION OF CHEMICAL WEAPONS

by Graham S Pearson

Consideration of Article IX at the Sixth Review Conference

1. Article IX of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*²⁶⁰ in respect of Article IX stated that:

44. The Conference reaffirms that this Article identifies the recognized objective of the effective prohibition of chemical weapons.

45. The Conference welcomes the fact that the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction entered into force on 29 April 1997 and that 181 instruments of ratification or accession have now been deposited with the United Nations. The Conference calls upon all states that have not yet done so to accede to that Convention without delay.

3. The Article IX section of the 2006 *Final Declaration* was understandably much shorter than that made at the Fourth Review Conference of the BTWC held from 25 November to 6 December 1996, when the Chemical Weapons Convention (CWC) was yet to enter into force. The *Final Declaration*²⁶¹ at the Fourth Review Conference in respect of Article IX stated that:

1. The Conference reaffirms that Article IX identifies the recognized objective of effective prohibition of chemical weapons. The Conference welcomes conclusion of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, which was opened for signature on 13-15 January 1993 in Paris.

2. The Conference welcomes the fact that sixty-five instruments of ratification have now been deposited, and that the Convention will therefore enter into force on 29 April 1997.

²⁶⁰ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

²⁶¹ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

3. *The Conference stresses the importance to the Convention that all possessors of chemical weapons, chemical weapons production facilities or chemical weapons development facilities should be among the original parties to the Convention and, in this context, the importance of the United States of America and the Russian Federation, having declared possession of chemical weapons, being among the original States Parties to the Convention.*

4. *The Conference calls upon all States that have not yet done so to sign and/or ratify the Convention without delay.*

5. *The Conference notes that the Preparatory Commission for the Organization for the Prohibition of Chemical Weapons, at its fourteenth session (22-26 July 1996) entrusted the Chairman of the Commission, in close consultation with its member States, with the task of convening, as necessitated by circumstances in connection with the occurrence of the trigger point, a meeting of the Commission to provide appropriate guidance.*

Developments since the Sixth Review Conference

4. Insofar as **universality** is concerned, as of **August 2006**, the BTWC had 155 States Parties and 16 Signatory States and the CWC had 178 States Parties and 8 Signatory States. The situation in 2011 is that the number of States Parties to the BTWC has risen from 155 States Parties to 164 States Parties with 13 Signatory States and 18 other States not party, whilst the number of States Parties to the CWC has risen from 178 States Parties to 188 States Parties with 2 Signatory States and 5 other States not party.

5. Analysis of the 2011 information showed that the States who were signatory to only one or other Convention or to neither were as follows:

	C	
Andorra		Party
Angola		
Burundi	Signatory	Party
Cameroon		Party
Central African Republic	Signatory	Party
Chad		Party
Comoros		Party
Cote d'Ivoire	Signatory	Party
Democratic People's Republic of Korea	Party	
Djibouti		Party
Egypt	Signatory	
Eritrea		Party
Guinea		Party
Guyana	Signatory	Party
Haiti	Signatory	Party
Israel		Signatory
Kiribati		Party
Liberia	Signatory	Party
Malawi	Signatory	Party

Marshall Islands		Party
Mauritania		Party
Micronesia, Federated States of		Party
Myanmar	Signatory	Signatory
Namibia		Party
Nauru		Party
Nepal	Signatory	Party
Niue		Party
Samoa		Party
Somalia	Signatory	
Syrian Arab Republic	Signatory	
Tuvalu		Party
United Republic of Tanzania	Signatory	Party

The only State that in 2011 had not signed or acceded to either the BTWC or the CWC is Angola. All the other non-Parties to the BTWC have at least signed the CWC – and most are Parties, and all the other non-parties to the CWC have at least signed the BTWC apart from Israel.

6. Although the Chairmen of the Meetings of States Parties in the intersessional programme from 2007 to 2010 have together with the Implementation Support Unit and the States Parties been engaged in seeking to promote the universality of the BTWC, their annual reports have shown only slow progress:

- a. Four States – Gabon, Kazakhstan, Montenegro and Trinidad and Tobago – ratified or acceded between the Sixth Review Conference in 2006 and the Meeting of States Parties in 2007.
- b. Three States – Zambia, Madagascar and the United Arab Emirates – ratified or acceded between the Meeting of States Parties in 2007 and the Meeting of States Parties in 2008. A further State – the Cook Islands – acceded during the Meeting of States Parties in 2008.
- c. No States ratified or acceded between the Meeting of States Parties in 2008 and the Meeting of States Parties in 2009.
- d. No States ratified or acceded between the Meeting of States Parties in 2009 and the Meeting of States Parties in 2010.
- e. Subsequent to the Meeting of States Parties in 2010, Mozambique acceded on 29 March 2011 bringing the number of States Parties up to 164

7. Given that the number of States Parties to the BTWC currently at 164 is now some 24 behind the number of States Parties to the CWC, there is a powerful argument for the Seventh Review Conference to agree to instigate an Action Plan on Universality that should especially focus on those States that have become States Parties to the CWC but not to the BTWC. Assistance should be offered to these States Parties to build capacity so that they can become States Parties to the BTWC and assistance should also be offered in drafting the necessary national legislation and regulations.

8. That there is an **overlap** – and rightly so – of the two Conventions is evident from consideration of their basic prohibitions. The basic prohibition of the Chemical Weapons Convention is set out in Article I in which:

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

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

(b) to use chemical weapons

Chemical weapons are defined in Article II of the Convention as being the following, together or separately:

(a) Toxic chemicals and their precursors, except where intended for purpose not prohibited under this Convention, as long as the types and quantities are consistent with such purposes;

(b) Munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;

(c) Any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b).

with toxic chemicals being defined in the same Article as:

Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of manufacture, and regardless of whether they are produced in facilities, in munitions or elsewhere.

9. The prohibition thus applies to all chemicals, however produced, and therefore applies to toxins. Quite correctly there is an overlap between the scope of the Chemical Weapons Convention and that of the Biological and Toxin Weapons Convention in which the basic prohibition is that in Article I where

Each State Party to the 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.

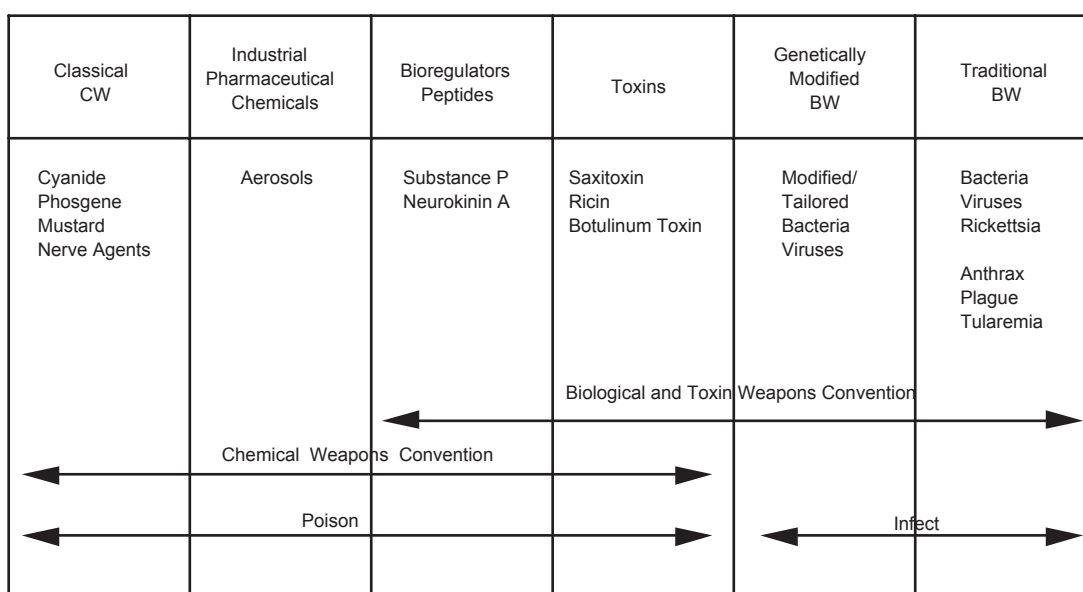
At the Sixth Review Conference in 2006 the States Parties in their *Final Declaration*²⁶² had stated that:

²⁶² United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

1. The Conference reaffirms the importance of Article I, as it defines the scope of the Convention. The Conference declares that the Convention is comprehensive in its scope and that all naturally or artificially created or altered microbial and other biological agents and toxins, as well as their components, regardless of their origin and method of production and whether they affect humans, animals or plants, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes, are unequivocally covered by Article I.

It is clear that both Conventions cover toxins. Two toxins – ricin and saxitoxin – are specifically included in Schedule I of the Chemical Weapons Convention.

10. The overlap of the two Conventions can be shown graphically as a chemical and biological weapons spectrum:



The materials in the mid-spectrum such as toxins as well as bioregulators and peptides are covered by the prohibitions of **both** the BTWC and the CWC.

11. There is thus a complementarity between the two prohibition regimes. Both are seeking to ensure that an entire class of weapons is entirely prohibited and this complementarity extends to many of the steps taken nationally to implement the two Conventions. In many countries the national authorities for addressing chemical and biological weapons are collocated and national regulations for control of exports frequently address both types of materials in the same document. There are thus benefits to both those engaged in the BTWC and those engaged in the CWC being aware of each other’s activities as there will frequently be common ground that can benefit the efforts in regard to both Conventions.

12. At present there is no structured arrangement whereby those engaged in the two Conventions can benefit from the cross-fertilization of ideas. There would be benefits in the ISU and the OPCW agreeing to keep each other informed and this might extend to poster sessions being mounted at the annual Meetings of the States Parties to the BTWC in Geneva and at the annual Conference of States Parties to the CWC in the Hague at which the the OPCW is available at the former and the ISU at the latter with a poster of ongoing activities to answer

queries from States Parties. This benefit from the cross-fertilization of ideas will become increasingly relevant now that the CWC is reaching the stage in its implementation when its focus will become less on the verification of destruction of chemical weapons stockpiles and more onto other elements of the Convention.

Points for the *Final Declaration*

13. It is proposed that the Seventh Review Conference should in its *Final Declaration* largely reiterate, with the total of 181 updated to 188 and ratification added to accession because two signatories have yet to ratify the CWC, what it said at the Sixth Review Conference along the following lines:

a. To reaffirm that this Article identifies the recognized objective of the effective prohibition of chemical weapons.

b. To welcome the fact that the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction entered into force on 29 April 1997 and that 188 instruments of ratification or accession have now been deposited with the United Nations, and to call upon all states that have not yet done so to ratify or accede to that Convention without delay.

14. The points made above about an Action Plan on Universality in the BTWC and the complementarity of the two Conventions are considered further in the sections of this Key Points for the Seventh Review Conference relating to *Article XIV Universal Adherence to the Convention* and in that relating to *Agenda Item 11: Consideration of Issues Identified in the Review of the Operation of the Convention as Provided for in its Article XII and any Possible Consensus Follow-Up Action*.

ARTICLE X: INTERNATIONAL COOPERATION AND ASSISTANCE

by Graham S. Pearson

Consideration of Article X at the Sixth Review Conference

1. Article X of the Convention states that:

"(1) The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials, and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes. Parties to the Convention in a position to do so shall also cooperate in contributing individually or together with other States or international organisations to the further development and application of scientific discoveries in the field of bacteriology (biology) for the prevention of disease, or for other peaceful purposes.

(2) This Convention shall be implemented in a manner designed to avoid hampering the economic or technological development of States Parties to the Convention or international cooperation in the field of peaceful bacteriological (biological) activities, including the international exchange of bacteriological (biological) agents and toxins and equipment for the processing, use or production of bacteriological (biological) agents and toxins for peaceful purposes in accordance with the provisions of the Convention."

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*²⁶³ in respect of Article X stated that:

46. The Conference stresses the importance of implementation of this Article and recalls that the States Parties have a legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.

47. The Conference reaffirms the commitment to the full and comprehensive implementation of this Article by all States Parties. The Conference recognises that while recent scientific and technological developments in the field of biotechnology would increase the potential for cooperation among States Parties and thereby strengthen the Convention, they could also increase the potential for the misuse of both science and technology. Therefore, the Conference urges all States Parties possessing advanced biotechnology to adopt positive measures to promote technology transfer and international cooperation on an equal and non-discriminatory basis, particularly with countries less advanced in this field, while promoting the basic

²⁶³ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

objectives of the Convention, as well as ensuring that the promulgation of science and technology is fully consistent with the peaceful object and purpose of the Convention.

48. The Conference reaffirms that existing institutional ways and means of ensuring multilateral cooperation among all States Parties need to be developed further in order to promote international cooperation for peaceful uses in areas relevant to the Convention, including such areas as medicine, public health, agriculture and the environment.

49. The Conference calls for the use of the existing institutional means within the United Nations system and other international organizations, in accordance with their respective mandates, to promote the objectives of this Article. In this regard the Conference urges States Parties, the United Nations and its specialized agencies to take further specific measures within their competence for the promotion of the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and of international cooperation in this field.

50. The Conference also recognises that there should be efficient coordination mechanisms between the specialized agencies of the United Nations system and international and regional organizations, in order to facilitate scientific cooperation and technology transfer.

51. The Conference emphasises that in the interest of facilitating the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxin agents for peaceful purposes, States Parties should not use the provisions of the Convention to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials.

52. The Conference recognises the need to effectively implement national measures in order to further implementation of Article X. In this regard, the Conference urges States Parties to undertake to review their national regulations governing international exchanges and transfers in order to ensure their consistency with the objectives and provisions of all the articles of the Convention.

53. The Conference urges States Parties to develop frameworks for disease surveillance in humans, animals and plants, and to support programmes for effective responses at the national, bilateral, regional and multilateral levels, including through the conclusion of appropriate agreements that would promote the regular exchange of scientific and technical information in these fields.

54. The Conference encourages States Parties to provide appropriate information on how this Article is being implemented to the United Nations Department for Disarmament Affairs, and requests the Department to collate such information for the information of States Parties.

55. The Conference:

(i) encourages the States Parties to continue strengthening existing

international organizations and networks working on infectious diseases, in particular those of the WHO, FAO, OIE and IPPC, within their respective mandates;

(ii) notes that the role of these organizations is limited to the epidemiological and public/animal/plant health aspects of any disease outbreak, but recognises the added value of information exchange with them;

(iii) encourages States Parties to improve communication on disease surveillance at all levels, including between States Parties and with the WHO, FAO, OIE and IPPC;

(iv) calls upon States Parties to continue establishing and/or improving national and regional capabilities to survey, detect, diagnose and combat infectious diseases as well as other possible biological threats and integrate these efforts into national and/or regional emergency and disaster management plans;

(v) urges States Parties in a position to do so to continue supporting, directly as well as through international organizations, capacity-building in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research;

(vi) calls upon States Parties to promote the development and production of vaccines and drugs to treat infectious disease through international cooperation and, as appropriate, public-private partnerships.

56. The Conference recognises the important role of the private sector in the transfer of technology and information and the wide range of organizations within the United Nations system that are already engaged in international cooperation relevant to this Convention.

3. The Article X section of the Sixth Review Conference *Final Declaration* with its eleven paragraphs was longer than any other section continuing the trend that was apparent with the *Final Declaration* of the Fourth Review Conference²⁶⁴ which contained some seventeen paragraphs on Article X which was longer than for any other Article.

4. The language in the Article X section of the Sixth Review Conference *Final Declaration* was developed from the 17 paragraphs in the Fourth Review Conference *Final Declaration*. The section was extensively rewritten to reflect changes between 1996 and 2006. For example, the emphases on synergies in paragraph 55 and on the private sector in paragraph 56 were new, as was much of the language in paragraphs 52 and 53. Other paragraphs carried forward the accumulated understandings of Article X from 1996 but sought to clarify their expression. Both accumulated and new points in this section from 2006 will now be examined.

5. Paragraphs 46 and 47 emphasised the importance of implementation of Article X in language that is new:

46. The Conference stresses the importance of implementation of this Article and recalls that the States Parties have a legal obligation to facilitate and have the right

²⁶⁴ United Nations, The Fourth 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, 25 November – 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1998. Available at <http://www.opbw.org>

to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.

47. The Conference reaffirms the commitment to the full and comprehensive implementation of this Article by all States Parties. The Conference recognises that while recent scientific and technological developments in the field of biotechnology, would increase the potential for cooperation among States Parties and thereby strengthen the Convention, they could also increase the potential for the misuse of both science and technology. Therefore, this Conference urges all States Parties possessing advanced biotechnology to adopt positive measures to promote technology transfer and international cooperation on an equal and non-discriminatory basis, particularly with countries less advanced in this field while promoting the basic objectives of the Convention, as well as ensuring that the promulgation of science and technology is fully consistent with the peaceful object and purpose of the Convention.

6. Paragraph 48 was similar to the previous paragraph 5 and paragraph 49 and 50 were developed from previous paragraph 11. Paragraph 51 was developed from the previous paragraph 4. Paragraphs 52 and 53 were largely new:

52. The Conference recognises the need to effectively implement national measures in order to further implementation of Article X. In this regard, the Conference urges States Parties to undertake to review their national regulations governing international exchanges and transfers in order to ensure their consistency with the objectives and provisions of all the articles of the Convention.

53. The Conference urges States Parties to develop frameworks for disease surveillance in humans, animals and plants, and to support programmes for effective responses at the national, bilateral, regional and multilateral levels, including through the conclusion of appropriate agreements that would promote the regular exchange of scientific and technical information in these fields.

7. Paragraph 54 was a clearer and more explicit version of previous paragraph 14. Paragraph 55 was new with its listing of six sub-items that the Conference calls upon or urges the States Parties to do in regard to measures related to Article X. This new paragraph reflected the Sixth Review Conference's recognition of the synergies involving closer relationships between the BTWC and other sectors of national and international activity, including relevant international organizations and networks. Paragraph 56 was also new with its reference to the role of the private sector:

56. The Conference recognises the important role of the private sector in the transfer of technology and information and the wide range of organisations within the United Nations system that are already engaged in international cooperation relevant to this Convention.

Developments since the Sixth Review Conference

The Intersessional Programme

8. At the Sixth Review Conference, the States Parties agreed²⁶⁵ that there should be an annual Meeting of States Parties prepared for by a one week Meeting of Experts on six topics. The two topics considered by the Meeting of States Parties in 2007 were:

(i) Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.

(ii) Regional and sub-regional cooperation on implementation of the Convention.

The mandate for the annual Meetings of the States Parties in the intersessional period between the Sixth and Seventh Review Conferences requires that:

(e) The Seventh Review Conference will consider the work and outcome of these meetings and decide on any further action.

9. Whilst the topics in 2007 were primarily addressing topics related to Article IV of the Convention, the report²⁶⁶ of the Meeting of States Parties in 2007 concluded:

26. The States Parties agreed on the value of promoting international cooperation at all levels, in order to exchange experiences and best practices on the implementation of the Convention. To facilitate the sharing of information on national implementation and regional cooperation, States Parties are urged to nominate a national point of contact in accordance with the decision of the Sixth Review Conference, and to inform the Implementation Support Unit of their national measures and any updates or changes to them (for example, through the submission of confidence-building measures), and of any relevant regional or sub-regional activities.

10. It is recommended that the substance of the outcome of the 2007 Meeting of States Parties should be incorporated into the Article X section of the *Final Declaration* of the Seventh Review Conference by making the following point:

a. To recognize the value of promoting international cooperation at all levels, in order to exchange experiences and best practices on the implementation of the Convention.

11. The two topics addressed by the Meeting of States Parties in 2008 were:

(iii) National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.

²⁶⁵ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

²⁶⁶ United Nations, Meeting 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, 10-14 November 2007, *Report of the 2007 Meeting of States Parties*, BWC/MSP/2007/5, 7 January 2008. Available at <http://www.opbw.org>

(iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

Whilst these were again largely addressing topics related to Article IV of the Convention, the report²⁶⁷ of the Meeting of States Parties in 2008 concluded:

21. Recognising that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention, States Parties agreed on the value of:

(vi) International cooperation on biosafety and biosecurity at the bilateral, regional and international levels, in particular to overcome difficulties encountered by some States Parties where additional resources, improved infrastructure, additional technical expertise, appropriate equipment and increased financial resources are needed to build capacity.

(vii) The Implementation Support Unit, in accordance with its mandate, facilitating networking activities, maintaining lists of relevant contacts, and acting as a clearing house for opportunities for international cooperation and assistance on biosafety and biosecurity, including through tools such as a database containing information on such opportunities for international cooperation and assistance.

22. States Parties noted that pursuing biosafety and biosecurity measures could also contribute to the fulfilment of their other respective international obligations and agreements, such as the revised International Health Regulations of the WHO, and relevant codes of the World Organisation for Animal Health (OIE). The States Parties recalled United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention.

23. Recalling that the Sixth Review Conference stressed the legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes, States Parties recognised the value of cooperation and assistance to build biosafety and biosecurity capacity, particularly in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research.

24. States Parties encouraged those States Parties in a position to do so to provide assistance, upon request, to other States Parties to enact and improve national legislation to implement biosafety and biosecurity; to strengthen laboratory

²⁶⁷ United Nations, Meeting 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, 10-14 November 2007, *Report of the 2007 Meeting of States Parties*, BWC/MSP/2007/5, 7 January 2008. Available at <http://www.opbw.org>

infrastructure, technology, security and management; to conduct courses and provide training; and to help incorporate biosafety and biosecurity in existing efforts to address emerging or re-emerging diseases. States Parties noted that where relevant assistance is currently available bilaterally and regionally, as well as through international organisations, those seeking assistance are encouraged, as appropriate, to make use of existing offers to the fullest extent possible.

12. It is recommended that the substance of the outcome of the 2008 Meeting of States Parties should be incorporated into the Article X section of the *Final Declaration* of the Seventh Review Conference by making the following points:

a. To recognise that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention and to agree on the value of:

(i) International cooperation on biosafety and biosecurity at the bilateral, regional and international levels, in particular to overcome difficulties encountered by some States Parties where additional resources, improved infrastructure, additional technical expertise, appropriate equipment and increased financial resources are needed to build capacity.

(ii) The Implementation Support Unit, in accordance with its mandate, facilitating networking activities, maintaining lists of relevant contacts, and acting as a clearing house for opportunities for international cooperation and assistance on biosafety and biosecurity, including through tools such as a database containing information on such opportunities for international cooperation and assistance.

b. To note that biosafety and biosecurity measures could also contribute to the fulfilment of other respective international obligations and agreements of States Parties, such as the revised International Health Regulations of the WHO, and relevant codes of the World Organisation for Animal Health (OIE), and to recall United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention.

c. To recognise the value of cooperation and assistance to build biosafety and biosecurity capacity, particularly in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research.

13. The topic addressed in 2009:

(v) With a view to enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, promoting capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases:

(1) for States Parties in need of assistance, identifying requirements and requests for capacity enhancement; and

(2) from States Parties in a position to do so, and international organizations, opportunities for providing assistance related to these fields.

was closely related to the fifth topic listed in paragraph 55 of the *Final Declaration* of the Sixth Review Conference:

(v) urges States Parties in a position to do so to continue supporting, directly as well as through international organizations, capacity-building in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research;

14. The report²⁶⁸ of the annual Meeting of States Parties in 2009 included the following concluding paragraphs:

20. Recognizing the fundamental importance of enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, in the interests of achieving comprehensive implementation of the Convention, States Parties agreed on the value of working together to promote capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases. States Parties affirmed that building such capacity would directly support the objectives of the Convention.

21. In this connection, States Parties recalled that the Sixth Review Conference stressed the importance of implementation of Article X and recalled that the States Parties have a legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties. States Parties recognized that the Convention is a useful and appropriate platform for collaboration and that through the full implementation of the Convention, including Article X, States Parties can complement the activities of other forums and promote maximum cooperation and assistance in areas concerning disease surveillance, detection, diagnosis, and containment of infectious diseases.

22. States Parties agreed that although disease surveillance, mitigation and response are primarily national responsibilities, infectious diseases know no geographic boundaries and neither should efforts to combat them. States Parties noted that international organizations, such as the FAO, IPPC, OIE and WHO, within their respective mandates, have a fundamental role to play in addressing disease and recognized the importance of these intergovernmental organizations in supporting and financing relevant national activities. States Parties recognized the value of enhancing the capabilities and coordinating role of these organizations.

23. States Parties recognized the importance of developing effective infrastructure for disease surveillance, detection, diagnosis and containment.

(i) Such infrastructure could include:

²⁶⁸ United Nations, Meeting 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, 2009 Meeting, Geneva, 7-11 December 2009, *Report of the Meeting of States Parties*, BWC/MSP/2009/5, 16 December 2009. Available at <http://www.opbw.org>

(a) Surveillance systems which are sensitive, specific, representative, timely, simple, flexible and acceptable, and which have capabilities for continuously collecting and analyzing data from various sources;

(b) Capacity for rapid detection and identification of pathogens, including improved access to high quality diagnostics and expertise;

(c) Primary health care services and veterinary and phytosanitary services, such as laboratory systems and disease management and treatment capacity;

(d) Emergency and epidemiological response capabilities;

(e) Communication capabilities, including for public information and professional collaboration;

(f) An appropriate national regulatory framework, including available resources for its implementation and surveillance activities;

(g) Facilitation of treatment of diseases, including availability of diagnostic equipment, vaccines and medicines.

(ii) States Parties noted that developing such infrastructure could also contribute to the fulfilment of their other respective international obligations and agreements, such as the revised International Health Regulations (2005).

24. Recognizing that infrastructure, equipment and technology is of little use if there are not appropriately trained individuals to use it, States Parties agreed on the value of developing human resources for disease surveillance, detection, diagnosis and containment, including by:

(i) Making use of workshops, training courses and conferences at the national, regional and international levels;

(ii) Ensuring that training materials are available in native languages;

(iii) Taking advantage of both computer-based and hands-on training;

(iv) Fostering an interdisciplinary approach to infectious disease problems, incorporating traditional biomedical science with economics, social sciences, demographics and agricultural science;

(v) Engaging with all relevant human resources, including technicians, managers, policy makers, health professionals and academia;

(vi) Identifying ways to reduce "brain-drain";

(vii) Providing the political leadership needed to ensure training and personnel issues are given adequate attention at the national level; and

(viii) If in a position to do so, providing sponsorship for training, exchange visits, and travel to expert meetings.

25. Recognizing the opportunities for building capacity through sharing practices and procedures, States Parties agreed on the value of implementing standard operating procedures, taking into account their national needs and circumstances, including through:

(i) Using standard operating procedures to enhance sustainability, improve trust, build confidence, contribute to quality control, and foster the highest standards of professional performance;

(ii) Working at the national level with ministries of health and agriculture and other relevant agencies to develop relevant legislation, standards and guidelines;

(iii) Developing and using best practices for surveillance, management, laboratory practice, manufacturing, safety, security, diagnostics, trade in animals and products, as well as associated procedures;

(iv) Strengthening international protocols for the rapid sharing of information; and

(v) Using case studies of biosecurity considerations, risk assessment and the transportation of dangerous goods and disease management to improve existing practices and procedures.

26. States Parties agreed on the value of ensuring the sustainability of capacity building in the fields of disease surveillance, detection, diagnosis and containment, including through: pooling resources; making funding processes longer-term and more predictable (including through the use of mutually-agreed exit strategies); ensuring ownership by the receiving country and the involvement of all relevant stakeholders; addressing needs for day-to-day maintenance of core health capacity; tailoring activities to meet the differing circumstances of each recipient state; taking full advantage of existing resources, networks and institutional arrangements; utilising twinning programmes to strengthen networks of reference laboratories; and using collaborative projects to develop biosafety, biosecurity, basic science, tools and core technologies thereby increasing motivation and support.

27. States Parties agreed on the value of improving integration of capacity-building activities so that scarce resources are used effectively to combat disease irrespective of its cause, including through: ensuring effective communication and coordination among human, animal and plant health sectors; using an inter-disciplinary, all-hazards approach drawing on all relevant disciplines; and improving how government departments and agencies work with the private sector, academia and non-governmental experts. States Parties also noted the utility of public-private partnerships in dealing with disease.

28. States Parties recognized the importance of ensuring that there is effective coordination among relevant activities to minimise duplication and ensure a more comprehensive approach to building capacity, including through: improved

coordination and information sharing among assistance providers both internationally and among national departments; enhanced communication among States Parties and with international efforts to tackle infectious disease, such as those undertaken by the FAO, IPPC, OIE and WHO, within their respective mandates; taking advantage of all appropriate routes for assistance – bilateral, regional, international and multilateral, including the Convention – to forge North-South, South-South and North-North partnerships; and improving cooperation, communication and networking among national institutions, departments, agencies and other stakeholders.

29. States Parties recognized the range of bilateral, regional and multilateral assistance, cooperation and partnerships already in place to support States Parties in meeting their national obligations under the Convention and in enhancing their disease surveillance, detection, diagnosis and containment capabilities. States Parties also recognized, however, that there remain challenges to be overcome in developing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes to their full potential, and that addressing such problems, challenges, needs and restrictions will help States Parties to build sufficient capacity for disease surveillance, detection, diagnosis and containment. Keeping in mind Article X, States Parties agreed on the value of mobilizing resources, including financial resources, to facilitate the widest possible exchange of equipment, material and scientific and technological information to help overcome challenges to disease surveillance, detection, diagnosis and containment. Recognizing that all States Parties have a role to play, States Parties stressed that those States Parties seeking to build their capacity should identify their specific needs and requirements and seek partnerships with others, and that those States Parties in a position to do so should provide assistance and support.

30. Recalling the agreements on Article X and Article III reached at the Sixth Review Conference, States Parties recalled that the Conference had emphasized that in the interest of facilitating the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxin agents for peaceful purposes, States Parties should not use the provisions of the Convention to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials. States Parties noted in this respect that full implementation of Article III of the Convention would help to facilitate the exchange of equipment, materials and scientific and technological information in accordance with Article X.

31. States Parties affirmed the role of the Implementation Support Unit, consistent with its mandate, in supporting the capacity-building activities of the States Parties by facilitating communication and partnerships, and acting as a clearing-house for information on needs for and sources of assistance and cooperation. In this context, the States Parties recalled that the Sixth Review Conference had encouraged States Parties to provide appropriate information to the Implementation Support Unit on their implementation of Article X, and welcomed the reports on cooperation activities that were submitted by States Parties during this meeting.

32. Recognizing the need to sustain progress on capacity-building in the fields of disease surveillance, detection, diagnosis and containment, with a view to enhancing

international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, States Parties noted that the Seventh Review Conference could consider current and future proposals on means of better identifying needs, overcoming challenges to capacity-building, mobilizing financial resources, facilitating the development of human resources, supporting the participation of developing States Parties in the meetings and other activities of the Convention, and coordinating cooperation with other relevant international and regional organizations.

33. The States Parties further considered that in pursuing the above understandings and actions, States Parties could, according to their respective circumstances and constitutional and legal processes, take into account the considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions made by delegations on the topic under discussion at the Meeting of Experts, as contained in Annex I of the Report of the Meeting of Experts (BWC/MSP/2009/MX/3), as well as the synthesis of these considerations, lessons, perspectives, recommendations, conclusions and proposals contained in BWC/MSP/2009/L.1, which is attached to this report as Annex I. This annex was not proposed for adoption as an outcome of the Meeting, and therefore was not discussed with that aim. Thus, the annex was not agreed upon and consequently has no status.

34. States Parties are encouraged to inform the Seventh Review Conference of, inter alia, any actions, measures or other steps that they may have taken on the basis of the discussions at the 2009 Meeting of Experts and the outcome of the 2009 Meeting of States Parties, in order to facilitate the Seventh Review Conference's consideration of the work and outcome of these meetings and its decision on any further action, in accordance with the decision of the Sixth Review Conference (BWC/CONF.VI/6, Part III, paragraph 7 (e)).

15. It is recommended that the substance of the outcome of the 2009 Meeting of States Parties should be incorporated into the Article X section of the *Final Declaration* of the Seventh Review Conference by making the following points:

a. To recognize the value of working together on surveillance, detection, diagnosis, and containment of infectious diseases and to affirm that building such capacity would directly support the objectives of the Convention.

b. To recognize that the Convention is a useful and appropriate platform for collaboration and that through the full implementation of the Convention, including Article X, States Parties can complement the activities of other forums and promote maximum cooperation and assistance in areas concerning disease surveillance, detection, diagnosis, and containment of infectious diseases.

c. To agree that although disease surveillance, mitigation and response are primarily national responsibilities, infectious diseases know no geographic boundaries and neither should efforts to combat them; to note that international organizations, such as the FAO, IPPC, OIE and WHO, within their respective mandates, have a fundamental role to play in addressing disease and recognized the importance of these intergovernmental organizations in supporting and financing relevant national activities; and to recognize the value of enhancing the capabilities and coordinating

role of these organizations.

d. To recognize the opportunities for building capacity through sharing practices and procedures, and to agree on the value of implementing standard operating procedures, taking into account their national needs and circumstances, including through:

(i) Using standard operating procedures to enhance sustainability, improve trust, build confidence, contribute to quality control, and foster the highest standards of professional performance;

(ii) Working at the national level with ministries of health and agriculture and other relevant agencies to develop relevant legislation, standards and guidelines;

(iii) Developing and using best practices for surveillance, management, laboratory practice, manufacturing, safety, security, diagnostics, trade in animals and products, as well as associated procedures;

(iv) Strengthening international protocols for the rapid sharing of information; and

(v) Using case studies of biosecurity considerations, risk assessment and the transportation of dangerous goods and disease management to improve existing practices and procedures.

e. To recognize the importance of ensuring that there is effective coordination among relevant activities to minimise duplication and ensure a more comprehensive approach to building capacity, including through: improved coordination and information sharing among assistance providers both internationally and among national departments; enhanced communication among States Parties and with international efforts to tackle infectious disease, such as those undertaken by the FAO, IPPC, OIE and WHO, within their respective mandates; taking advantage of all appropriate routes for assistance – bilateral, regional, international and multilateral, including the Convention – to forge North-South, South-South and North-North partnerships; and improving cooperation, communication and networking among national institutions, departments, agencies and other stakeholders.

f. To affirm the role of the Implementation Support Unit, consistent with its mandate, in supporting the capacity-building activities of the States Parties by facilitating communication and partnerships, and acting as a clearing-house for information on needs for and sources of assistance and cooperation.

International Organizations

16. There have also been numerous international developments in the areas that have been addressed in Article X sections of the *Final Declarations* of previous Review Conferences. A brief indication of these developments is indicated by considering a few activities of five international instruments and organizations referred to in the *Final Declaration* of the Fourth and the Sixth Review Conferences.

Convention on Biological Diversity

17. *The Convention on Biological Diversity* was referred to in paragraph 9 of the Article X section in the *Final Declaration* of the Fourth Review Conference:

9. The Conference takes note of the significant steps forward in promoting cooperation in the biological field taken by the United Nations Conference on Environment and Development held in Rio de Janeiro, Brazil, in 1992, including the adoption of Agenda 21 and the Rio Declaration, and by the Convention on Biological Diversity, and underlines their importance in the context of Article X implementation.

In its *Article 18 Technical and Scientific Cooperation* it states that:

1. The Contracting Parties shall promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity, where necessary, through the appropriate international and national institutions.

and goes on to say that:

3. The Conference of the Parties, at its first meeting, shall determine how to establish a clearing-house mechanism to promote and facilitate technical and scientific cooperation. [Emphasis added]

The Convention on Biological Diversity entered into force on 29 December 1993.

18. The Clearing House Mechanism (CHM) has accordingly been established with a strategic plan²⁶⁹ that identifies three major goals:

- 1. The promotion and facilitation of **technical and scientific cooperation***
- 2. The promotion and facilitation of information exchange among Parties, other Governments and stakeholders*
- 3. A fully operational mechanism with participation of all Parties and an expanded network of partners.* [Emphasis added]

19. At the most recent, tenth, Conference of the Parties to the Convention on Biological Diversity held in October 2010 in Japan, a decision (X/16) was taken on technology transfer and cooperation in which Parties and other Governments, as well as relevant international organizations and initiatives, research institutions and the business sector, were invited “to submit to the Executive Secretary information on activities currently being undertaken by international, regional or national organizations and initiatives, including sectoral organizations and initiatives, which support, facilitate, regulate or promote technology transfer and scientific and technological cooperation of relevance to the Convention, such as on:

- i. Support for technology needs assessments and regulations, including capacity-building for technology assessments;*
- ii. Pertinent capacity-building and training courses;*
- iii. Pertinent seminars and symposia;*

²⁶⁹ Convention on Biological Diversity, CHM Strategic Plan for the Period 2005-2010. Available at <http://www.cbd.int/chm/strategy/>

- iv. *Information dissemination;*
- v. *Other implementation activities including match-making and catalysing or facilitating the establishment of research-centre networks, alliances or consortia, joint ventures, twinning arrangements, or other proven mechanisms, on technologies of relevance to the Convention.”*

It is made clear that this information will be analyzed and disseminated through the clearing-house mechanism.

Cartagena Protocol on Biosafety

20. The *Cartagena Protocol on Biosafety* to the *Convention on Biological Diversity* was adopted on 29 January 2000. This entered into force on 11 September 2003 when the fiftieth instrument of ratification was deposited. By September 2006, the number of States Parties to the Cartagena Protocol on Biosafety has increased to 134²⁷⁰. and by 26 July 2011, this had increased to 161²⁷¹. The Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. It establishes an advance informed agreement (AIA) procedure for ensuring that countries are provided with the information necessary to make informed decisions before agreeing to the import of such organisms into their territory. The Protocol contains reference to a precautionary approach and reaffirms the precaution language in Principle 15 of the Rio Declaration on Environment and Development. The Protocol also establishes a Biosafety Clearing-House to facilitate the exchange of information on living modified organisms and to assist countries in the implementation of the Protocol.

21. The Cartagena Protocol includes in its *Article 20 Information Sharing and the Biosafety Clearing-House*²⁷² the requirement that:

1. A Biosafety Clearing-House is hereby established as part of the clearing-house mechanism under Article 18, paragraph 3, of the Convention, in order to:

(a) Facilitate the exchange of scientific, technical, environmental and legal information on, and experience with, living modified organisms; and

(b) Assist Parties to implement the Protocol, taking into account the special needs of developing country Parties, in particular the least developed and small island developing States among them, and countries with economies in transition as well as countries that are centres of origin and centres of genetic diversity.

22. *An Introduction to the Biosafety Clearing House*²⁷³ makes it clear that a clearing-house mechanism serves to:

²⁷⁰ Convention on Biological Diversity, *Cartagena Protocol on Biosafety (Montreal, 29 January 2000) Status of Ratification and Entry into Force*. Available at <http://www.biodiv.org/biosafety/signinglist.aspx?sts=rtf&ord=dt>

²⁷¹ Convention on Biological Diversity, *Cartagena Protocol on Biosafety Parties to the Protocol*. Available at: <http://bch.cbd.int/protocol/parties/>

²⁷² Convention on Biological Diversity, *Cartagena Protocol on Biosafety, Article 20 Information Sharing and the Biosafety Clearing-House*. Available at: <http://bch.cbd.int/protocol/text/article.shtml?a=cpb-20>

- Promote and facilitate technical and scientific cooperation within and between countries;
- Develop a global mechanism for exchanging and integrating information on biodiversity; and
- Develop a human and technological network.

and goes on to add that the mechanism's key aspects include compatibility with different levels of national capacity, needs-driven, provides access to information, supports decision making, has no vested interest in controlling the expertise or information, and is created for the mutual benefit of all participants.

23. It is also evident²⁷⁴ that one of the specific roles of the Biosafety Clearing House is to provide assistance in regard to capacity building in the following respects:

Parties and others can access important information about capacity-building and other assistance for implementation of the Cartagena Protocol. The following databases are provided:

*(i) **Biosafety Capacity Building Projects**, which contains information on project status and location, lead organization(s) and contacts, objectives and activities, lessons learned, a brief description of each project and web links for detailed information;*

*(ii) **Capacity-Building Opportunities**, which includes information on one-time, short-term capacity building opportunities, such as: funding grants, scholarships and fellowships, technical assistance, training workshops, internships/apprenticeships, study tours, partnerships, discussion forums and others;*

*(iii) **Compendium of Academically-Accredited Biosafety Courses**, which includes a listing of recurrent academically-accredited biosafety education and training programs offered around the world; and*

*(iv) **Capacity-Building Needs and Priorities**, which includes national and regional necessities for the implementation of the Biosafety Protocol, identified and categorized in line with the elements of the Capacity-building Action Plan.²⁷⁵*

24. Another activity that has been carried out to assist developing countries and countries in transition to prepare their **National Biosafety Frameworks** (NBFs) for the entry into force of the *Cartagena Protocol on Biosafety* has been carried out by UNEP (United Nations

²⁷³ Convention on Biological Diversity, Cartagena Protocol on Biosafety, *An Introduction to the Biosafety Clearing House*, March 2010, Revision 4.0. Available at: http://bch.cbd.int/help/topics/en/webframe.html?BCH_Central_Portal.html

²⁷⁴ Convention on Biological Diversity, Cartagena Protocol on Biosafety, *An Introduction to the Biosafety Clearing House*, March 2010, Revision 4.0. Available at: http://bch.cbd.int/help/topics/en/webframe.html?BCH_Central_Portal.html

²⁷⁵ Convention on Biological Diversity, Cartagena Protocol on Biosafety, Biosafety Clearing House, *An Introduction to the Biosafety Clearing House*, March 2010, Revision 4.0. Available at: https://bch.cbd.int/help/topics/en/webframe.html?BCH_Help_Complete_Manuals.html

Environment Programme) as the implementing agency of the Global Environment Facility (GEF). The objectives²⁷⁶ of the UNEF-GEF global project are to:

- *Assist eligible countries to prepare their National Biosafety Frameworks. Using a country-driven process, the global project will help each participating country to set up a framework for management of living modified organisms (LMOs) at the national level, allowing them to meet the requirements of the Cartagena Protocol.*
- *Promote regional and sub-regional collaboration and exchange of experience on issues of relevance to the National Biosafety Frameworks. This will help to make efficient use of financial and human resources, establish regional and subregional networks, and promote harmonization of risk assessment procedures and regulatory instruments.*

25. The main activities designed in order to achieve the project objectives are as follows:

- *Strengthening national capacity in order to implement biosafety procedures and maximize the potential for the safe use of modern biotechnology;*
- *Applying biosafety procedures to enhance environmental management;*
- *Applying biosafety guidelines under the Protocol taking into account the work of the Inter-governmental Committee for the Cartagena Protocol on Biosafety (ICCP);*
- *Harmonising regional and sub-regional legal instruments to simplify the process of applying and conforming to regulations;*
- *Raising public awareness of the issues involved in release of living modified organisms to promote informed debate and to ensure that where any use of modern biotechnology is permitted, it is done in an open and transparent way;*
- *Providing all stakeholders with an opportunity to be involved in the design and implementation of a national framework for biosafety;*
- *Carrying out an assessment of technological capacity, its effect on implementation of national biosafety frameworks and means to improve it.*

26. It is made clear that for each country, the process of developing their national biosafety framework would consist of four phases: setting up the required project management structures, gathering of baseline information, analysis of that information in consultation with stakeholders, and preparation of the draft NBF. Whilst allowing for country specific situations, needs, and priorities, each NBF would consist of five common elements:

1. *Biosafety policy*
2. *Regulatory regime*
3. *System to handle requests (administrative, risk assessment & management, decision-making)*
4. *Follow up actions (monitoring, inspections and enforcement)*
5. *Public awareness and participation*

27. As of August 2010. National Biosafety Frameworks are available for 116 countries: 39 countries in Africa, 33 countries in Asia and the Pacific, 18 countries in Central and Eastern

²⁷⁶ Global Environment Facility, *Building Biosafety Capacity in Developing Countries: Experiences of the UNEP-GEF Project on Development of National Biosafety Frameworks*. Available at <http://www.unep.org/biosafety/National%20Biosafety%20frameworks.aspx>

Europe, and 26 countries in Latin America and the Caribbean. These countries are listed in the table below.

National Biosafety Frameworks (NBFs)

(From <http://www.unep.org/biosafety/National%20Biosafety%20frameworks.aspx>)

As of 2nd August 2010, 116 countries have completed the majority of development of their National Biosafety Projects and their draft NBFs are available online. These projects have generated a wealth of in-country experience in building capacity for biosafety.

Africa – 39 countries	Asia and the Pacific – 33 countries
Algeria [English] [Français] Benin Botswana Burkina Faso Burundi Cape Verde Central African Republic Chad Comoros [English] Congo Congo, Democratic Republic of the [Français] Côte d'Ivoire [Français] Djibouti [English] Eritrea Ethiopia Gabon Gambia Ghana Guinea Guinea Bissau [English] [Português] Lesotho Liberia Libya [English] [Arabic] Madagascar [Français] Mali [Français] Mozambique [Português] Morocco [French] [English] Niger Nigeria Rwanda Sao Tome and Principe [Português] Senegal Seychelles Sierra Leone Sudan [[[Arabic] Swaziland Tanzania, United Republic of	Azerbaijan Bangladesh Bhutan Cambodia Cook Islands Indonesia Iran, Islamic Republic of Jordan Kazakhstan Kiribati Korea, Democratic People's Republic of Korea, Republic of Kyrgyzstan Lao People's Democratic Republic Lebanon Micronesia Maldives Mongolia Myanmar Nepal Niue Papua New Guinea Philippines Samoa Sri Lanka Syrian Arab Republic [[[Arabic] Tajikistan Thailand Tonga Tuvalu Vanuatu Viet Nam Yemen

Togo [Français] Zimbabwe	
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Central and Eastern Europe – 18 countries	Latin America and the Caribbean – 26 countries
Albania Armenia Belarus [Русский] Croatia Czech Republic Estonia Georgia Latvia Lithuania Malta Moldova, Republic of Romania Serbia Slovakia Slovenia Macedonia, The Former Yugoslav Republic of Turkey Ukraine	Antigua and Barbuda Argentina [Español] Argentina [Español Vol 2][English Vol 2] Bahamas Barbados Belize Chile[English][Español] Costa Rica[Español] Dominica[English][Español] Dominican Republic Ecuador El Salvador [Español] Grenada Guatemala Guyana Honduras[English] [Español] Jamaica Nicaragua[English][Español] Panama[English] [Español] Paraguay [Español] Peru [Español] Saint Kitts and Nevis Saint Lucia Saint Vincent and the Grenadines Suriname[English] Uruguay[English] [Español] Venezuela Trinidad and Tobago

28. It is thus evident that the clearing house mechanisms set up under the *Convention for Biological Diversity* and the *Cartagena Protocol on Biosafety* in order to promote international cooperation and assistance provide a useful model that could be adopted by the States Parties to the BTWC in developing a clearing house mechanism to facilitate the implementation of Article X of the Convention. Furthermore, the National Biosafety Frameworks (NBFs) already established for 116 countries given that the primary objective is *Strengthening national capacity in order to implement biosafety procedures and maximize the potential for **the safe use of modern biotechnology***; [emphasis added] provide a national basis to which biosecurity and biocontainment could readily be added thus contributing to the strengthening of the BTWC.

World Health Organisation

29. *The World Health Organization* was referred to in paragraph 55 in the Article X section of the *Final Declaration*²⁷⁷ of the Sixth Review Conference:

55. *The Conference:*

(i) *encourages the States Parties to continue strengthening existing international organizations and networks working on infectious diseases, in particular those of the WHO, FAO, OIE and IPPC, within their respective mandates;*

(ii) *notes that the role of these organizations is limited to the epidemiological and public/animal/plant health aspects of any disease outbreak, but recognises the added value of information exchange with them;*

(iii) *encourages States Parties to improve communication on disease surveillance at all levels, including between States Parties and with the WHO, FAO, OIE and IPPC;*

30. In a significant development, the World Health Assembly unanimously adopted on 23 May 2005 a revision of the International Health Regulations, known as IHR (2005)²⁷⁸. The broadened purpose and scope of the IHR(2005) are to "*prevent, protect against, control and provide a public health response to the international spread of disease and which avoid unnecessary interference with international traffic and trade.*" The IHR (2005) entered into force on 15 June 2007. Since then with the support of WHO, its 194 Member States have been implementing these global rules to enhance national, regional and global public health security. Key milestones for countries include the assessment of their surveillance and response capacities by June 2009 and the development and implementation of plans of action to ensure that these core capacities are functioning by 2012.

31. In 2007, the WHO published *Risk reduction and emergency preparedness*²⁷⁹ a six-year strategy for the health sector and community capacity development. This makes it clear that in line with the widely technically accepted approach both at international and at country levels, the WHO strategy in risk reduction and emergency preparedness is based on an *All-Hazard / Whole-Health* concept in which the

• **All-Hazard** entails developing and implementing emergency management strategies for the full range of likely risks and emergencies (natural, biological, technological and societal). Different hazards and emergencies can cause similar problems in a community; and such measures as planning, early warning, intersectoral and intrasectoral coordination, evacuation, health services and community recovery are usually implemented along the same model adopted by the community regardless of cause.

²⁷⁷ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

²⁷⁸ World Health Assembly, *Revision of the International Health Regulations*, Resolution WHA 58.3, 23 May 2005. Available at http://www.who.int/gb/e/e_wha58.html

²⁷⁹ World Health Organisation, *Risk reduction and emergency preparedness A six-year strategy for the health sector and community capacity development*, 2007. Available at <http://www.who.int/hac/techguidance/preparedness/en/index.html>

The benefits of the States Parties to the BTWC working with the WHO to prepare to counter deliberate outbreaks have long been evident and the value of such continued collaboration is evident.

OIE World Organisation for Animal Health

32. The G20 Agriculture Ministers met for the first time in Paris on 22 and 23 June 2011 and in their Ministerial Declaration they concluded that global food security and sustainable agriculture production must be the ultimate goal of any effective agriculture policy, at global and national level. It clearly identified animal health as a critical component of this goal and stressed the *importance of strengthening international and regional networks, **international standard setting** taking into account national and regional differences, information, surveillance and traceability systems, good governance and official services, since they ensure an early detection and a **rapid response to biological threats**, facilitate trade flows and contribute to global food security*²⁸⁰. [Emphasis added]

33. In 2010, the OIE issued a fact sheet on *Bioterrorism*²⁸¹ – this being one of the nine fact sheets issued by OIE. This states that *Animal disease agents including those transmissible to humans (zoonoses) have the potential to be used as biological weapons because they have wide economic and social ranging impacts and are readily available. Thanks to efficient national Veterinary Services, countries applying good veterinary governance are in a better position to early detect and respond to animal disease outbreaks resulting from natural, accidental or **deliberate release** of pathogens.* [emphasis added]. The fact sheet goes on to say that *an effective veterinary service complying with OIE standards on quality (http://www.oie.int/eng/oie/organisation/en/vet_eval_tool.htm?e1d2) that can early detect and rapidly respond to any disease incursion is the best protection against natural or deliberate attempts to introduce animal pathogens within animal and human populations.* In addition, the fact sheet includes a box on the Biological and Toxin Weapons Convention which states *inter alia* that *Through its overarching missions for the safeguard of animal health the OIE manages a number of mechanisms able to help countries meet their obligations as required by the Biological and Toxin Weapons Convention.*

34. At the workshop organized by China, Canada and the Implementation Support Unit in Beijing on 4 to 6 November 2010 entitled *Strengthening International Efforts to Prevent the Proliferation of Biological Weapons: The Role of the Biological and Toxin Weapons Convention* the Deputy Director-General of the OIE, Kazuaki Miyagishima, made a presentation entitled *Capacity and preparedness: disease surveillance, investigation and response*²⁸². This included a slide on *Building Biosafety/Biosecurity Capacity of Laboratories* that said

²⁸⁰ See OIE World Organization for Animal Health, *G20 Agriculture Ministers recognize the role of animal health and OIE standards in global food security*. Available at: <http://www.oie.int/en/for-the-media/press-releases/detail/article/g20-agriculture-ministers-recognize-the-role-of-animal-health-and-oie-standards-in-global-food-secure/>

²⁸¹ OIE World Organization for Animal Health, *Bioterrorism Fact Sheet*, 2010. Available at: <http://www.oie.int/for-the-media/key-documents/fact-sheets/>

²⁸² OIE World Organization for Animal Health, *Capacity and preparedness: disease surveillance, investigation and response*. Presentation at Beijing workshop, 4 -6 November 2011. Available at: [http://www.unog.ch/80256EE600585943/\(httpPages\)/B2986EAA391AB86FC12577D600441ED4?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/B2986EAA391AB86FC12577D600441ED4?OpenDocument)

*BSL:Definitions and Laboratory Quality standards exist
-- but there are no "internationally applicable guidelines" or
"certifiable international standards" for biosafety/biosecurity*

35. It is thus evident that there are no international standards as such for laboratory biosafety/biosecurity. It is understood that the OIE together with the WHO are working together on a way forward. This would clearly be an area with direct benefits to the States Parties of the BTWC and one meriting collaboration between the BTWC and OIE.

Food and Agriculture Organisation

36. The Food and Agriculture Organisation (FAO) points out²⁸³ that *Food safety crisis situations may occur following, for example, a natural disaster or the accidental or deliberate contamination of food or water supplies, potentially leading to the exposure of consumers to contaminated food and the outbreak of food-borne diseases.* and goes on to point out that *Food safety can be compromised at any point in the food chain. Threats posed by contaminated water and food are interrelated and cannot be separated. In the case of natural disasters, poor sanitation, including lack of safe water and a shortage of suitable conditions to prepare food prior to consumption, can all lead to outbreaks of food-borne disease* [emphasis added].

37. In May 2010, the FAO established an Emergency Prevention System for Food Safety (EMPRES Food Safety). EMPRES Food Safety will complement and enhance FAO's ongoing work in food safety, as well as in animal health and plant health emergencies²⁸⁴. The strategic plan points out FAO's comparative advantages of having a mandate covering the entire food chain, its status as a neutral international forum and its linkages with national governments, regional bodies, other international agencies, universities, research centres and the donor community. In addition, the FAO points out the importance of biosecurity saying that *Biosecurity is emerging as one of the most pressing issues facing developed, developing and transition countries. Globalization, the increased movement of people, agricultural and food products across borders, changing agricultural practices, greater awareness of biodiversity and the environment, uncertainties surrounding new technologies, as well as international legal obligations are just some of the factors driving this interest.*²⁸⁵

38. The FAO Biosecurity Tool Kit issued in 2007 includes the following:

The overarching goal of biosecurity is to prevent, control and/or manage risks to life and health as appropriate to the particular biosecurity sector (Figure 1.1). In doing so, biosecurity is an essential element of sustainable agricultural development.

This toolkit advocates a strategic and integrated approach to biosecurity as a holistic concept that is of direct relevance in meeting consumer expectations in relation to the safety of their food supply, preventing and controlling zoonotic aspects of public health, ensuring the sustainability of agriculture, safeguarding terrestrial, freshwater

²⁸³ Food and Agriculture Organization, *Crisis management*. Available at: http://www.fao.org/ag/agn/agns/crisis_en.asp

²⁸⁴ Food and Agriculture Organization, EMPRES Food Safety, Emergency Prevention System for Food Safety, Strategic Plan. Available at: <http://www.fao.org/ag/agn/agns/>

²⁸⁵ Food and Agriculture Organization, *Biosecurity*. Available at: http://www.fao.org/ag/agn/agns/foodcontrol_biosecurity_en.asp

and marine environments, and protecting biodiversity. Biosecurity may also include measures to ensure security of the food supply in terms of counter-terrorism.

It also goes on to add that *Further, international events may superimpose requirements for more integrated approaches (e.g. increased recognition of the potential for wide-scale food-borne threats to public or animal health from acts of terrorism is a new consideration in modern biosecurity systems).*

39. It is evident from the considerations at the Meetings of States Parties that there are benefits to be gained from taking an integrated approach with agreed international standards to biosecurity around the world.

Reports on Article X implementation

40. It should be recalled that the *Final Declaration*²⁸⁶ of the Fourth Review Conference called for the Secretary-General to collate annually reports on how Article X is being implemented:

14. The Conference requests the Secretary-General to collate on an annual basis, and for the information of States Parties, reports on how this article [X] is being implemented.

15. The Conference welcomes the information provided by a number of States Parties on the cooperative measures they have undertaken towards fulfilling their Article X obligations and encourages States Parties in a position to do so to provide such information.

41. Although there was no such report in 2006 for the Sixth Review Conference to consider, similar language was again adopted²⁸⁷ by the Sixth Review Conference:

54. The Conference encourages States Parties to provide appropriate information on how this Article is being implemented to the United Nations Department for Disarmament Affairs, and requests the Department to collate such information for the information of States Parties.

The unog.ch/bwc web-site for the Convention has, in 2011, included a reminder to States Parties that information should be submitted by 31 August 2011 for a background information paper that is to be compiled on

- *the implementation of Article X, to be compiled from information submitted by States Parties, including information submitted pursuant to paragraph 54 of the Final Declaration of the Sixth Review Conference.*

²⁸⁶ United Nations, The Fourth 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, 25 November – 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1998. Available at <http://www.opbw.org>

²⁸⁷ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

It is therefore expected that there will be a background information paper on the implementation of Article X for the Seventh Review Conference.

Statements on Article X

42. The Non-Aligned Movement and Other States Parties have for some time been urging that action be taken in regard to Article X. Thus, at the Sixth Review Conference, they introduced a Working Paper No. 29²⁸⁸ in which they proposed language for the *Final Declaration* and subsequently proposed²⁸⁹ a Plan of Action for Article X. Subsequently, at the Meeting of Experts held in August 2009, the Non-Aligned Movement and Other States Parties submitted a Working Paper No. 24²⁹⁰ on the establishment of a mechanism for the full implementation of Article X. This working paper called for

establishment of a mechanism under the Convention open to participation of all States Parties, to perform the following tasks:

(i) Identify and address the needs in terms of equipment, materials and scientific and technological information regarding the use of the bacteriological (biological) and toxin agents for peaceful purposes;

(ii) Overcome the obstacles hampering the full implementation of Article X of the Convention;

(iii) Mobilize the necessary resources, including financial resources, to facilitate the widest possible exchange of equipment, material and scientific and technological information regarding the use of bacteriological (biological) and toxin agents for peaceful purposes, in particular from developed to developing States Parties;

(iv) Facilitate the development of human resources in developing States Parties in the implementation of the Convention, taking into account the special situation faced by them;

(v) Coordinate cooperation with other relevant international and regional organizations for the financial and technological support of activities for the use of bacteriological (biological) and toxin agents for peaceful purposes;

(vi) Establish sponsorship programme in the BWC to support participation of developing States Parties in the meetings and other activities of the Convention. This sponsorship programme could also be utilized, depending upon the availability of resources, to enhance participation of non States Parties in order to promote the goal of universalization of the Convention.

²⁸⁸ Non-Aligned Movement and Other States Parties, *Article X of the Convention*, BWC/CONF.VI/WP.29, 27 November 2006. Available at <http://www.opbw.org>

²⁸⁹ Non-Aligned Movement and Other States Parties, *Proposal for a Plan of Action on Implementation of Article X*, BWC/CONF.VI/WP.39, 8 December 2006. Available at <http://www.opbw.org>

²⁹⁰ Non-Aligned Movement and Other States Parties, *The Establishment of a Mechanism for the Full Implementation of Article X of the Convention*, BWC/MSP/2009/MX/WP.24, 25 August 2009. Available at <http://www.opbw.org>

43. Bradford Review Conference Paper No. 28²⁹¹ issued in March 2011 considered what sort of mechanism would be both an efficient and an effective means of promoting the implementation of Article X. It recalled that the report of the Meeting of States Parties²⁹² in 2009 included the following in its substantive paragraphs:

31. States Parties affirmed the role of the Implementation Support Unit, consistent with its mandate, in supporting the capacity-building activities of the States Parties by facilitating communication and partnerships, and acting as a clearing-house for information on needs for and sources of assistance and cooperation. In this context, the States Parties recalled that the Sixth Review Conference had encouraged States Parties to provide appropriate information to the Implementation Support Unit on their implementation of Article X, and welcomed the reports on cooperation activities that were submitted by States Parties during this meeting. [Emphasis added]

and then went on to examine a number of clearing house mechanisms. It concluded that:

the clearing-house mechanism that was established in the 1990s for the Convention on Biological Diversity in order to promote and facilitate scientific and technical cooperation is a useful model that could be adapted for promoting international cooperation in the Biological and Toxin Weapons Convention. It is also evident that such a clearing-house mechanism could also be used to facilitate capacity building and also a sponsorship mechanism as has successfully been done by the Biosafety Clearing-House mechanism that was created in 2000 to 2004 under the Cartagena Protocol on Biosafety. The manpower needed to operate such a Clearing-House Mechanism for the BTWC is estimated as being one P-4 level, one P-3 level and one G-7 level officer with additional resources being needed during the phase when the clearing-house mechanism is being established.

44. It then recommended that:

a decision be taken at the Seventh Review Conference to augment the Implementation Support Unit by the three posts needed for the clearing-house mechanism and that reports on progress in the implementation of the clearing-house mechanism should be included in the annual reports of the Implementation Support Unit to the Annual Meeting of States Parties.

45. Although various other suggestions have been made such as a confidence-building measure for the declaration of Article X related activities or for a standing working group on international cooperation, it is recognized that at the Seventh Review Conference the States Parties will need to bear in mind the resource-benefits for all the proposed activities. Bearing in mind the resources required and the likely benefits to the States Parties and to the overall strengthening of the Convention, it is considered that a clearing-house mechanism would be the most cost-effective step forward for the States Parties to take at the Seventh Review Conference in 2011. This practical approach to implementation of Article X will be all the

²⁹¹ Graham S. Pearson, *Promoting International Cooperation in the Field of Peaceful Biological Activities*, Bradford Review Conference Paper No. 28, March 2011. Available at: <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>

²⁹² United Nations, Meeting 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, *Report of the Meeting of States Parties*, BWC/MSP/2009/5, 16 December 2009.

more acceptable if States Parties continue to submit regular reports on their own actions to implement this Article, as encouraged by paragraph 54 of the *Final Declaration* of the Sixth Review Conference, and if the background information paper which is being compiled for the Seventh Review Conference demonstrates that such implementation in practice is already extensive.

Issues for the Seventh Review Conference

46. It is recommended that the Seventh Review Conference should adopt language developed from that in the *Final Declaration* of the Sixth Review Conference. In addition, this should include the points relating to Article X that were made in the substantive paragraphs of the reports of the Meeting of States Parties in 2007, 2008 and 2009.

47. In addition, the benefits to States Parties to the BTWC from working closely with the Convention on Biological Diversity and its Cartagena Protocol on Biosafety in regard to international collaboration and assistance, and national biosafety frameworks respectively should be elaborated. Likewise recognition needs to be given to the benefits arising from close collaboration with the WHO, OIE and FAO in regard to a coordinated response to outbreaks of disease – whether natural, accidental or deliberate – in humans, animals or plants. There are evident advantages to be gained from internationally agreed standards in biosecurity and this is a topic that could with advantage be addressed in an appropriate BTWC forum reporting to the annual Meeting of States Parties during the Intersessional Programme from 2012 to 2015.

Points for the *Final Document*

48. It is recommended that in respect of Article X the language in the *Final Document* at the Seventh Review Conference would be similar to that adopted at the Sixth Review Conference but with agreement to set up a clearing-house mechanism within the Implementation Support Unit to promote international cooperation and assistance. Consideration is given here to both the Article by Article *Final Declaration* and then to the *Decisions and Recommendations* section (*Part III* of the *Final Document*).

Article X in the Article by Article *Final Declaration*

49. The language to be adopted by the Seventh Review Conference in its *Final Declaration* might be similar to that adopted at the Sixth Review Conference in the Article X section of its *Final Declaration* with an additional point setting up the clearing-house mechanism to promote international cooperation and assistance. The following points are recommended:

- a. To stress the importance of implementation of this Article and to recall that the States Parties have a legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.
- b. To reaffirm the commitment to the full and comprehensive implementation of this Article by all States Parties and to recognise that while recent scientific and technological developments in the field of biotechnology would increase the potential

for cooperation among States Parties and thereby strengthen the Convention, they could also increase the potential for the misuse of both science and technology.

c. To urge all States Parties possessing advanced biotechnology to adopt positive measures to promote technology transfer and international cooperation on an equal and non-discriminatory basis, particularly with countries less advanced in this field, while promoting the basic objectives of the Convention, as well as ensuring that the promulgation of science and technology is fully consistent with the peaceful object and purpose of the Convention.

d. To reaffirm that existing institutional ways and means of ensuring multilateral cooperation among all States Parties need to be developed further in order to promote international cooperation for peaceful uses in areas relevant to the Convention, including such areas as medicine, public health, agriculture and the environment.

e. To call for the use of the existing institutional means within the United Nations system and other international organizations, in accordance with their respective mandates, to promote the objectives of this Article. In this regard, to urge States Parties, the United Nations and its specialized agencies to take further specific measures within their competence for the promotion of the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and of international cooperation in this field.

f. To recognise that there should be efficient coordination mechanisms between the specialized agencies of the United Nations system and international and regional organizations, in order to facilitate scientific cooperation and technology transfer.

g. To emphasise that in the interest of facilitating the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxin agents for peaceful purposes, States Parties should not use the provisions of the Convention to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials.

h. To recognise the need to effectively implement national measures in order to further implementation of Article X and to urge States Parties to undertake to review their national regulations governing international exchanges and transfers in order to ensure their consistency with the objectives and provisions of all the articles of the Convention.

i. To urge States Parties to develop frameworks for disease surveillance in humans, animals and plants, and to support programmes for effective responses at the national, bilateral, regional and multilateral levels, including through the conclusion of appropriate agreements that would promote the regular exchange of scientific and technical information in these fields.

j. To urge States Parties to provide regular national reports on how this Article is being implemented to the Implementation Support Unit within the United Nations Office for Disarmament Affairs, and to request the Implementation Support Unit to collate such information for the information of States Parties.[See also *Part III*:

Decisions and Recommendations]

k. To

- (i) encourage the States Parties to continue strengthening existing international organizations and networks working on infectious diseases, in particular those of the WHO, FAO, OIE and IPPC, within their respective mandates;
- (ii) note that the role of these organizations is limited to the epidemiological and public/animal/plant health aspects of any disease outbreak, but recognise the added value of information exchange with them;
- (iii) encourage States Parties to improve communication on disease surveillance at all levels, including between States Parties and with the WHO, FAO, OIE and IPPC;
- (iv) call upon States Parties to continue establishing and/or improving national and regional capabilities to survey, detect, diagnose and combat infectious diseases as well as other possible biological threats and integrate these efforts into national and/or regional emergency and disaster management plans;
- (v) urge States Parties in a position to do so to continue supporting, directly as well as through international organizations, capacity-building in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research;
- (vi) call upon States Parties to promote the development and production of vaccines and drugs to treat infectious disease through international cooperation and, as appropriate, public-private partnerships.

l. To recognise the important role of the private sector in the transfer of technology and information and the wide range of organizations within the United Nations system that are already engaged in international cooperation relevant to this Convention.

50. It is recommended that the following point be added that carries forward the substance of the outcome of the 2007 Meeting of States Parties:

m. To recognize the value of promoting international cooperation at all levels, in order to exchange experiences and best practices on the implementation of the Convention.

51. It is recommended that the following points be added that carry forward the substance of the outcome of the 2008 Meeting of States Parties:

n. To recognise that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention and to agree on the value of:

- (i) International cooperation on biosafety and biosecurity at the bilateral, regional and international levels, in particular to overcome difficulties encountered by some States Parties where additional resources, improved infrastructure, additional technical expertise, appropriate equipment and increased financial resources are needed to build capacity.
- (ii) The Implementation Support Unit, in accordance with its mandate, facilitating networking activities, maintaining lists of relevant contacts, and acting as a clearing house for opportunities for international cooperation and

assistance on biosafety and biosecurity, including through tools such as a database containing information on such opportunities for international cooperation and assistance.

o. To note that biosafety and biosecurity measures could also contribute to the fulfilment of other respective international obligations and agreements of States Parties, such as the revised International Health Regulations of the WHO, and relevant codes of the World Organisation for Animal Health (OIE), and to recall United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention.

p. To recognise the value of cooperation and assistance to build biosafety and biosecurity capacity, particularly in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research.

52. It is recommended that the following points be added that carry forward the substance of the outcome of the 2009 Meeting of States Parties insofar as these points have not been fully covered already in this section of the *Final Declaration*:

q. To recognize the value of working together on surveillance, detection, diagnosis, and containment of infectious diseases and to affirm that building such capacity would directly support the objectives of the Convention.

r. To recognize that the Convention is a useful and appropriate platform for collaboration and that through the full implementation of the Convention, including Article X, States Parties can complement the activities of other forums and promote maximum cooperation and assistance in areas concerning disease surveillance, detection, diagnosis, and containment of infectious diseases.

s. To agree that although disease surveillance, mitigation and response are primarily national responsibilities, infectious diseases know no geographic boundaries and neither should efforts to combat them; to note that international organizations, such as the FAO, IPPC, OIE and WHO, within their respective mandates, have a fundamental role to play in addressing disease and recognized the importance of these intergovernmental organizations in supporting and financing relevant national activities; and to recognize the value of enhancing the capabilities and coordinating role of these organizations.

t. To recognize the opportunities for building capacity through sharing practices and procedures, and to agree on the value of implementing standard operating procedures, taking into account their national needs and circumstances, including through:

(i) Using standard operating procedures to enhance sustainability, improve trust, build confidence, contribute to quality control, and foster the highest standards of professional performance;

(ii) Working at the national level with ministries of health and agriculture and other relevant agencies to develop relevant legislation, standards and guidelines;

(iii) Developing and using best practices for surveillance, management, laboratory practice, manufacturing, safety, security, diagnostics, trade in animals and products, as well as associated procedures;

(iv) Strengthening international protocols for the rapid sharing of information; and

(v) Using case studies of biosecurity considerations, risk assessment and the transportation of dangerous goods and disease management to improve existing practices and procedures.

u. To recognize the importance of ensuring that there is effective coordination among relevant activities to minimise duplication and ensure a more comprehensive approach to building capacity, including through: improved coordination and information sharing among assistance providers both internationally and among national departments; enhanced communication among States Parties and with international efforts to tackle infectious disease, such as those undertaken by the FAO, IPPC, OIE and WHO, within their respective mandates; taking advantage of all appropriate routes for assistance – bilateral, regional, international and multilateral, including the Convention – to forge North-South, South-South and North-North partnerships; and improving cooperation, communication and networking among national institutions, departments, agencies and other stakeholders.

v. To affirm the role of the Implementation Support Unit, consistent with its mandate, in supporting the capacity-building activities of the States Parties by facilitating communication and partnerships, and acting as a clearing-house for information on needs for and sources of assistance and cooperation. [See also *Part III: Decisions and Recommendations*].

53. In regard to the *Convention on Biological Diversity* and its *Cartagena Protocol on Biosafety*, it is recommended that language similar to that adopted at the Fourth Review Conference again be agreed:

w. To take note of the significant steps forward in promoting cooperation in the biological field taken by the United Nations Conference on Environment and Development held in Rio de Janeiro, Brazil, in 1992, including the adoption of Agenda 21 and the Rio Declaration, and by the Convention on Biological Diversity, and underlines their importance in the context of Article X implementation.

and to recognize the value to the implementation of the BTWC from the clearing-houses on international collaboration and assistance as well as from national biosafety frameworks:

x. To recognize that the clearing-house mechanism established in the 1990s for the Convention on Biological Diversity in order to promote and facilitate scientific and technical cooperation is a useful model that could be adapted for promoting international cooperation in the Biological and Toxin Weapons Convention, and that such a clearing-house mechanism could also be used to facilitate capacity building and also a sponsorship mechanism as has successfully been demonstrated by the Biosafety Clearing-House mechanism created under the Cartagena Protocol on Biosafety.

y. To recognize that the National Biosafety Frameworks (NBFs) already established under the Cartagena Protocol on Biosafety to strengthen national capacity in order to implement biosafety procedures and maximize the potential for the safe use of modern biotechnology provides a national basis to which biosecurity and biocontainment could readily be added thus contributing to the strengthening of the BTWC.

54. In regard to the WHO, it is recommended that the States Parties should make the following points:

z. To recognize the benefits to national, regional and global health security arising from the implementation of the International Health Regulations (IHR) 2005 and the enhanced surveillance and response capacities.

aa. To recognize the benefits to States Parties from working with the WHO to implement its strategy for risk reduction and emergency preparedness.

55. In regard to the OIE (World Organisation for Animal Health), it is important to recognize that there are no international standards as such for laboratory biosafety/biosecurity and that whilst this is an area in which the OIE together with the WHO are working together, this would be an area with direct benefits to the States Parties of the BTWC and one meriting collaboration between the BTWC and OIE. It is recommended that the following point be made at the Seventh Review Conference:

bb. To note that there are currently no international standards for laboratory biosafety/biosecurity and to recognize the benefits to the implementation of the BTWC through the adoption of such international standards and to agree that the Implementation Support Unit should in their annual reports inform the States Parties of progress in this area. [See also *Part III: Decisions and Recommendations*].

56. Likewise, in regard to the Food and Agriculture Organization, it is important to note that the FAO Biosecurity Tool Kit issued in 2007 has as its overarching goal the prevention, control and/or management of risks to life and health as an essential element of sustainable agricultural development. Moreover, the FAO Biosafety Toolkit advocates a strategic and integrated approach to biosecurity as a holistic concept that is of direct relevance in meeting consumer expectations in relation to the safety of their food supply, preventing and controlling zoonotic aspects of public health, ensuring the sustainability of agriculture, safeguarding terrestrial, freshwater and marine environments, and protecting biodiversity as well as including measures to ensure security of the food supply in terms of counter-terrorism. It is recommended that the following point be made at the Seventh Review Conference:

cc. To note that the FAO Biosafety Toolkit advocates a strategic and integrated approach to biosecurity and to urge the States Parties to adopt a coordinated and integrated approach to biosecurity.

Decisions and Recommendations section of the Final Document

57. The section addressing the Implementation Support Unit in the *Decisions and Recommendations* section (*Part III* of the *Final Document*) should include the following points:

- a. To agree that the Implementation Support Unit should have an additional three posts to establish a clearing-house mechanism to promote and facilitate scientific and technical cooperation and to facilitate capacity-building.
- b. To agree that States Parties shall submit regular national reports on how Article X is being implemented to the Implementation Support Unit, and to request the Implementation Support Unit to provide annual reports collating such information to the States Parties.

58. The section addressing the *Intersessional Programme 2012 – 2015* in the *Decisions and Recommendations* section (*Part III* of the *Final Document*) should include the following point:

- c. To agree that a topic to be included in the Intersessional Programme 2012 –2015 shall be the setting up and implementation of international standards for biosafety/biosecurity.

ARTICLE XI: AMENDMENTS TO THE CONVENTION

by Graham S Pearson & Nicholas A. Sims

Consideration of Article XI at the Sixth Review Conference

1. Article XI of the Convention states that:

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

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*²⁹³ in respect of Article XI stated that:

57. The Conference notes that the Islamic Republic of Iran has formally presented a proposal to amend Article I and the title of the Convention to include explicitly the prohibition of the use of biological weapons.

58. The Conference takes note of the statement by the Government of the Russian Federation as a Depositary that it has notified all States Parties of the proposal by the Islamic Republic of Iran to amend the Convention. The Conference encourages all States Parties to convey their views to the Depositaries on the proposal by the Islamic Republic of Iran.

59. The Conference reaffirms that the provisions of this Article should in principle be implemented in such a way as not to affect the universality of the Convention.

3. This was similar to what had been said at the Fourth Review Conference of the BTWC from 25 November to 6 December 1996, when the *Final Declaration*²⁹⁴ in respect of Article XI stated that:

1. The Conference notes that the Islamic Republic of Iran has formally presented a proposal to amend Article I and the title of the Convention to include explicitly the prohibition of use of biological weapons.

2. The Conference notes that the Depositaries are notifying all States Parties of the proposal. The Conference encourages all States Parties to convey their views to the Depositaries on whether the Convention needs to be amended to make clear explicitly that the use of biological weapons is effectively prohibited.

²⁹³ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

²⁹⁴ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

3. *The Conference requests the Depositaries to take such measures as may be requested by a majority of States Parties, including the option of convening a conference open to all States Parties to the Convention at the earliest appropriate opportunity to take a decision on the proposal, should a majority of the States Parties so decide.*

4. *The Conference meanwhile reaffirms the importance of Article XI. In this context the Conference underlines that the provisions of Article XI should in principle be implemented in such a way as not to affect the universality of the Convention.*

4. The statements at the Sixth and Fourth Review Conference were thus quite different – because of the formal proposal by Iran to amend the Convention – from the single paragraph on Article XI in the *Final Declaration*²⁹⁵ of the Third Review Conference of the BTWC held on 9-27 September 1991 which stated that:

The Conference notes the importance of Article XI and that since the entry into force of the Convention the provisions of the article have not been invoked. In this context the Conference underlined that the provisions of Article XI should in principle be implemented in such a way as not to affect the universality of the Convention.

Developments since the Fourth and Sixth Review Conferences

5. After Iran formally presented its proposal to amend the Convention at the Fourth Review Conference, it was agreed by that Review Conference that the Depositaries should notify all States Parties of the proposal submitted by Iran, that all States Parties should be encouraged to convey their views, and that the Depositaries should then take such measures as might be requested by a majority of States Parties, including the option of convening a conference to take a decision on the proposal. In the event, no such conference was convened. One reason may be that in addition the *Final Declaration* of the Fourth Review Conference included agreed language, in its Solemn Declaration and in a number of sections on Articles, reaffirming that use is effectively prohibited by the Convention. In so doing, this may well have caused several States Parties to regard the amendment proposal by Iran as unnecessary.

6. The agreed language²⁹⁶ at the Fourth Review Conference relating to use in the Solemn Declaration paragraphs included among the commitments declared:

- Their reaffirmation that under any circumstances the use, development, production and stockpiling of bacteriological (biological) and toxin weapons is effectively prohibited under Article I of the Convention.

- Their continued determination, for the sake of mankind, to exclude completely the possibility of the use of bacteriological (biological) agents and toxins as weapons, and their conviction that such use would be repugnant to the conscience of mankind;

²⁹⁵ United Nations, The Third 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, 9–27 September 1991, *Final Document*, BWC/CONF.III/23, Geneva 1992. Available at <http://www.opbw.org>

²⁹⁶ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

- Their recognition that purposes of this Convention include the prohibition of the use of biological weapons as contrary to the purpose of the Convention.

7. The language relating to use in the Article I section included:

3. The Conference reaffirms that the use by the States Parties, in any way and under any circumstances, of microbial or other biological agents or toxins, that is not consistent with prophylactic, protective or other peaceful purposes, is effectively a violation of Article I of the Convention.

and the Article IV section included:

... The States Parties recognize the need to ensure, through the review and/or adoption of national measures, the effective fulfilment of their obligations under the Convention in order, inter alia, to exclude use of biological and toxin weapons in terrorist or criminal activity.

as well as

7. The Conference reaffirms that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the Convention.

whilst the Article VIII section included:

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.

8. At the Sixth Review Conference the agreed language²⁹⁷ relating to use was closely similar to that agreed by the Fourth Review Conference. Thus, in the Solemn Declaration section, the commitments declared included:

(iv) Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time;

(v) Their continued determination, for the sake of humankind, to exclude completely the possibility of the use of bacteriological (biological) weapons, and their conviction that such use would be repugnant to the conscience of humankind;

²⁹⁷ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

(vi) Their reaffirmation that under any circumstances the use, development, production and stockpiling of bacteriological (biological) and toxin weapons is effectively prohibited under Article I of the Convention;

The language relating to use in the Article I section included:

3. The Conference reaffirms that the use by the States Parties, in any way and under any circumstances, of microbial or other biological agents or toxins, that is not consistent with prophylactic, protective or other peaceful purposes, is effectively a violation of Article I. ... The Conference affirms the determination of States Parties to condemn any use of biological agents or toxins for other than peaceful purposes, by anyone at any time.

and the Article IV section included:

19. The Conference reaffirms that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the Convention.

whilst the Article VIII section included:

43. The Conference notes that reservations concerning retaliation, through the use of any of the objects prohibited by the 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.

9. The knowledge that use is already effectively prohibited by the Convention, as reaffirmed in the extended understandings agreed by the Fourth Review Conference and again by the Sixth Review Conference, may well have caused States Parties once again to regard the amendment proposal by Iran as unnecessary when it was revived in 2006.

Issues for the Seventh Review Conference

10. The *Final Declaration* for the Seventh Review Conference needs to carry forward the reaffirmation of what was agreed at the Sixth Review Conference in 2006:

59. The Conference reaffirms that the provisions of this Article should in principle be implemented in such a way as not to affect the universality of the Convention.

which was also agreed at the Fourth Review Conference in 1996:

4. The Conference meanwhile reaffirms the importance of Article XI. In this context the Conference underlines that the provisions of Article XI should in principle be implemented in such a way as not to affect the universality of the Convention.

and carried forward the second part of what had been agreed at the Third Review Conference in 1991:

The Conference notes the importance of Article XI and that since the entry into force of the Convention the provisions of the article have not been invoked. In this context

the Conference underlined that the provisions of Article XI should in principle be implemented in such a way as not to affect the universality of the Convention.

11. The significance of this general principle that the provisions of Article XI should in principle be implemented in such a way as not to affect the universality of the Convention is that States Parties have historically been reluctant to contemplate the eventuality of amendments which some would accept and others reject, because of the risk of multiple tiers of obligation which might result. If some States Parties were bound by the Convention as amended, and others by the Convention unamended, there would be a weakening of reciprocity. For that reason there had been inconclusive discussion at the Third Review Conference over whether a two-thirds qualified majority requirement might reduce the risk of divisive amendments. The language above was agreed as a statement of general principle without committing States Parties to the requirement of a qualified majority. In 1991, and again in 1996 and 2006, the Review Conferences were in effect saying that in principle the only amendments which would find favour would be those commanding universal assent, having been judged both necessary and desirable, because only then would they be likely to be accepted by all States Parties. Under those conditions all States Parties would continue to be bound by identical obligations, and reciprocity would be undiminished.

Points for the *Final Declaration*

12. It is therefore recommended that the Seventh Review Conference should adopt similar language to that in paragraph 59 in the Article XI section of the *Final Declaration* of the Sixth Review Conference so as:

To reaffirm that the provisions of this Article should in principle be implemented in such a way as not to affect the universality of the Convention.

ARTICLE XII: REVIEW CONFERENCES

by Nicholas A. Sims & Graham S. Pearson

Consideration of Article XII at the Sixth Review Conference

1. Article XII of the Convention states that:

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

2. Although Article XII required only one Review Conference, which took place from 3 to 21 March 1980, the States Parties have chosen to meet regularly for further Review Conferences of their own volition. Such further Review Conferences have been held in 1986, 1991, 1996, 2001-02 and 2006. Although each Review Conference adopts its own agenda, taking account of elements recommended by its predecessor or arising from subsequent developments, Article XII continues to govern the overall purposes of successive Review Conferences.

3. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*²⁹⁸ in respect of Article XII stated that:

60. The Conference reaffirms that Review Conferences constitute an effective method of reviewing the operation of the Convention with a view to assuring that the purposes of the Preamble and the provisions of the Convention are being realized. The Conference therefore recommends that Review Conferences should continue to be held at least every five years.

61. The Conference decides that the Seventh Review Conference shall be held in Geneva not later than 2011 and should review the operation of the Convention, taking into account, inter alia:

- (i) new scientific and technological developments relevant to the Convention;*
- (ii) the progress made by States Parties on the implementation of the obligations under the Convention;*
- (iii) progress of the implementation of the decisions and recommendations agreed upon at the Sixth Review Conference.*

²⁹⁸ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

Developments since the Sixth Review Conference

4. The various items that the Sixth Review Conference decided should be considered were all included in the Provisional Agenda²⁹⁹ for the Seventh Review Conference as agenda items 10, 11 and 12:

10. Review of the operation of the Convention as provided for in its Article XII:

(a) General debate

(b) Articles I - XV

(c) Preambular paragraphs and purposes of the Convention

11. Consideration of issues identified in the review of the operation of the Convention as provided for in its Article XII and any possible consensus follow-up action

12. Follow-up to the recommendations and decisions of the Sixth Review Conference and the question of future review of the Convention

Issues for the Seventh Review Conference

5. The Conference is recommended to extend its review of Article XII and the corresponding section of the *Final Declaration* so as to ensure

a. the continuation, and ideally the perpetuation, of the review process, and

b. the continuation of the annual Meetings of States Parties in the intersessional period from 2012 to 2015.

c. that the momentum demonstrated in the years leading up to the Seventh Review Conference is maintained during the period between the Seventh and the Eighth Review Conferences by the creation of a troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee which would be responsible for promoting the development of the BTWC regime on behalf of the States Parties during the years between the Seventh and the Eight Review Conferences.

6. In regard to the annual Meeting of States Parties, it is recommended that such a meeting of one week's duration which shall make appropriate decisions by consensus should be held each year between the Seventh and the Eighth Review Conferences and should be prepared for by a Meeting of Experts or by meetings of standing working groups occupying two weeks in all as agreed by the Seventh Review Conference or subsequently by the annual Meeting of States Parties.

7. It is important to recognize that the annual Meetings of States Parties held prior to the Seventh Review Conference have made appropriate decisions by consensus – for example at MSP/2010, the dates of the Preparatory Committee and of the Seventh Review Conference were decided as well as the budget for the Seventh Review Conference and in the intersessional process each Meeting of States Parties has decided who shall be the Chairman for the following year's meetings. Consequently, the future annual Meetings of States Parties

²⁹⁹ United Nations, Seventh 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, Preparatory Committee, Geneva, 13 - 14 April 2011, *Report of the Preparatory Committee*, BWC/CONF.VII/PC/2, 26 April 2011. Available at <http://www.opbw.org>

should take appropriate decisions by consensus – such as the topic to be considered in the subsequent year by the standing working group of scientific and technological experts and guidance for any other standing working groups.

8. The analysis in these *Key Points for the Seventh Review Conference* in the chapter on *Article XIV: Universal Adherence to the Convention* has shown that the activities carried out to coordinate universalization activities each year by the Chairman for the Meeting of States Parties for 2007 through to 2010 have varied considerably. It is evident that **more** is required than has been possible since the Sixth Review Conference in 2006 when the successive Chairmen in conjunction with the Implementation Support Unit have endeavoured to make progress on universalization. For this reason, a troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, and supported by the ISU is attractive as it would provide continued attention throughout the period to the Eighth Review Conference and be able to report not only to the annual Meetings of States Parties but also to the Eighth Review Conference. In regard to universalization, the troika should take steps on behalf of the States Parties to promote the universalization of the Convention and to take opportunities to address states not party at the highest level. Consequently, such a troika could encourage a Foreign Minister to write to his/her counterparts in the states not party to the Convention – in a similar way to that in which the President-designate of the Seventh Review Conference has in April 2011 had the Foreign Minister of The Netherlands write to his counterparts in the states not party. The troika also adds the benefit of having a member from each group of States Parties which can be advantageous in promoting regional initiatives.

9. The establishment of a troika would also enable the momentum that has been evident during the past two years leading up to the Seventh Review Conference to be maintained on behalf of the States Parties throughout the period leading up to the Eighth Review Conference thereby bringing significant benefits to the strengthening of the overall BTWC regime. And, furthermore, such a troika could be represented at any high level initiatives such as the Secretary-General's meeting³⁰⁰ on 8 January 2010 with the heads of the IAEA, OPCW and CTBTO-PrepCom at which the importance of universality was underscored to achieve the common goal of a world free of weapons of mass destruction – when there was no BTWC representation and an opportunity was missed to promote the universality of the BTWC.

Points for the *Final Document*

10. It is recommended that the Seventh Review Conference should follow the precedent of the Sixth Review Conference and have both an Article by Article *Final Declaration* and also a *Part III: Decisions and Recommendations* section of the *Final Document*. Points for both of these are set out here.

Article XII in the Article by Article *Final Declaration*

11. It is recommended that the Article XII section of the *Final Declaration* should include the following points:

- a. To reaffirm that Review Conferences constitute an effective method of reviewing

³⁰⁰ United Nations Secretary-General, *Secretary-General's remarks at a meeting with the heads of the IAEA, OPCW and CTBTO-PrepCom*, 8 January 2010. Available at: <http://www.un.org/apps/sg/sgstats.asp?nid=4326>

the operation of the Convention with a view to assuring that the purposes of the Preamble and the provisions of the Convention are being realized and should continue to be held at least every five years.

b. To decide that to further assure that the purposes of the Preamble and the provisions of the Convention are being realized, a Meeting of States Parties of one week's duration shall be held each year which shall make appropriate decisions by consensus and be prepared for by a Meeting of Experts or by meetings of standing working groups occupying two weeks in all as agreed by the Seventh Review Conference or subsequently by the annual Meeting of States Parties.

c. To decide to maintain the momentum demonstrated prior to the Seventh Review Conference by agreeing that a troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, acting on behalf of the States Parties and supported by the ISU should promote the strengthening of the overall BTWC regime including *inter alia* the universalization of the Convention and should report to the annual Meetings of States Parties and to the Eighth Review Conference.

d. To decide that the Eighth Review Conference shall be held in Geneva not later than 2016 and should review the operation of the Convention, taking into account, *inter alia*:

- (i) new scientific and technological developments relevant to the Convention;
- (ii) the progress made by States Parties on the implementation of the obligations under the Convention;
- (iii) progress of the implementation of the decisions and recommendations agreed upon at the Seventh Review Conference.

Decisions and Recommendations section of the Final Document

12. The same points need to be made in the language adopted in *the Part III: Decisions and Recommendations* section of the *Final Document* in a section entitled *Intersessional Process*:

a. To decide that a Meeting of States Parties of one week's duration shall be held each year which shall make appropriate decisions by consensus and be prepared for by a Meeting of Experts or by meetings of standing working groups occupying two weeks in all as agreed by the Seventh Review Conference or subsequently by the annual Meeting of States Parties.

b. To decide that a troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, supported by the ISU should promote the strengthening of the overall BTWC regime including *inter alia* the universalization of the Convention and should report to the annual Meetings of States Parties and to the Eighth Review Conference.

ARTICLE XIII: DURATION AND WITHDRAWAL

by Graham S Pearson & Nicholas A. Sims

Consideration of Article XIII at the Sixth Review Conference

1. Article XIII of the Convention states that:

(1) This Convention shall be of unlimited duration.

(2) Each State Party to this Convention shall in exercising its national sovereignty have the right to withdraw from the Convention if it decides that extraordinary events, related to the subject matter of the Convention, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other States Parties to the Convention and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*³⁰¹ in respect of Article XIII stated that:

62. The Conference reaffirms that the Convention is of unlimited duration and applies at all times, and expresses its satisfaction that no State Party has exercised its right to withdraw from the Convention.

which was closely similar to that made at the Fourth Review Conference in 1996 when the *Final Declaration*³⁰² in respect of Article XIII stated that:

The Conference notes the provisions of Article XIII and, while emphasizing that the Convention is of unlimited duration and applies at all times, expresses its satisfaction that no State Party to the Convention has exercised its right to withdraw from the Convention.

Issues for the Seventh Review Conference

3. Paragraph 1 of this Article states that the Convention is of unlimited duration. The Conference should do more than merely note this fact: it should take the fact of the Convention's unlimited duration as encouragement to build up the BTWC treaty regime in expectation of its permanence. This awareness of the significance of a permanent treaty regime underlies the recommendations made in other chapters of these Key Points. Expectations of permanence have implications for the procedures, structures and resources which the Seventh Review Conference, building on the foundations laid by previous Review

³⁰¹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

³⁰² United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://opbw.org>

Conferences, needs to strengthen in order to encourage the progressive evolution of the BTWC treaty regime.

4. Although the provisions of paragraph 2 of Article XIII have never been invoked, attention was given by the UN Secretary-General's High Level Panel³⁰³ in 2004 - 5 to the parallel topic of withdrawal from the Nuclear Non-Proliferation Treaty in paragraph 134:

134. While the Treaty on the Non-Proliferation of Nuclear Weapons provides the right of withdrawal from the Treaty, States should be urged not to do so. Those who withdraw should be held responsible for violations committed while still a party to the Treaty. A State's notice of withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons should prompt immediate verification of its compliance with the Treaty, if necessary mandated by the Security Council. The IAEA Board of Governors should resolve that, in the event of violations, all assistance provided by IAEA should be withdrawn. [Emphasis in original]

5. In Bradford Review Conference Paper No. 14³⁰⁴, it was observed that both the BTWC and the CWC include Articles which provide a right of withdrawal from them and it was regretted that the High Level Panel had not used parallel language urging the States not to withdraw from the BTWC and the CWC and had not recommended that a State's notice of withdrawal from the BTWC or from the CWC should prompt immediate verification of its compliance with these Conventions, if necessary mandated by the Security Council.

6. There are **three** extended understandings in relation to paragraph 2 of Article XIII which could usefully be agreed at the Seventh Review Conference, and included in its *Final Declaration*, to discourage withdrawal from the Convention and to protect the interests of the other States Parties.

7. A **first** understanding which could usefully be agreed and recorded is that any invocation of Article XIII paragraph 2 would trigger a concerted response by the other States Parties, upon receiving notice of withdrawal. They should agree in advance that in the event of such notice being received, they would promptly come together as a Special Conference of the States Parties to the BTWC. Notice of withdrawal has to be given to the Security Council at the same time as to the States Parties, and as the Council would almost certainly meet urgently to consider this notification as a threat to the maintenance of international peace and security, it would probably be more convenient for the States Parties to convene in New York in the margins of the United Nations than to meet at Geneva. Both the Security Council and the States Parties would have the same interest in using the three months' notice of the intention to withdraw *"either to try to convince the State Party in question not to insist on its decision...or to prepare individually or collectively for measures adequate to cope with an adverse situation resulting from such a withdrawal."*³⁰⁵ These words of Krutzsch and Trapp apply as fully to Article XIII of the BTWC, where the notice period is expressed as three months, as to Article XVI of the CWC, where it is 90 days.

³⁰³ United Nations General Assembly, *In larger freedom: towards development, security and human rights for all, Report of the Secretary-General, A/59/2005*, 21 March 2005.

³⁰⁴ Graham S. Pearson, *The UN Secretary-General's High Level Panel: Biological Weapons Related Issues*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 14, May 2005. Available at <http://www.brad.ac.uk/acad/sbtwc>

³⁰⁵ Walter Krutzsch and Ralf Trapp, *A Commentary on the Chemical Weapons Convention* (Dordrecht: Martinus Nijhoff, 1994) p 248.

8. Close cooperation between the Security Council and the BTWC States Parties would be essential for the effective conduct of the intensive diplomacy, and coordination of contingency precautions, which would almost certainly occupy the three months prior to withdrawal taking effect. They might find themselves challenging the state which had given notice of withdrawal to justify its claim that its supreme interests had been jeopardized by extraordinary events, and that these extraordinary events were indeed related to the subject matter of the Convention, since both criteria need to be fulfilled for withdrawal to be permissible.

9. Language that might be adopted in the Article XIII section of the *Final Declaration* to cover this understanding could be as follows:

The Conference decides that, in the event of any State Party giving notice of its intention to withdraw from the Convention, a Special Conference shall be convened without delay in order to enable the States Parties:

(a) to consider the statement submitted by the State Party of the extraordinary events it regards as having jeopardized its supreme national interests, noting that in accordance with Article XIII such events must not only be extraordinary, and must have jeopardized its supreme national interests, but must also be related to the subject matter of the Convention, and that withdrawal on three months' notice is only permissible if all these conditions are fulfilled;

(b) to address collectively the implications of the intended withdrawal for the Convention and for States Parties;

(c) to coordinate their diplomacy to the extent possible with the United Nations Security Council throughout the period of notice;

(d) to agree recommendations to States Parties, individually and collectively, on actions necessary to safeguard their interests and the integrity of the Convention during the period of notice and following its expiration if withdrawal is effected.

10. A **second** understanding could usefully discourage withdrawal by affirming that BTWC processes already in train will not be terminated. For example, if the complaint procedure under Article VI has been invoked, the State Party against which a breach of the Convention has been alleged cannot escape the resulting Security Council investigation by withdrawing from the BTWC. If the contingency mechanism for handling compliance concerns multilaterally under Article V has been activated, leading (as in 1997) to the holding of Informal and Formal Consultative Meetings open to all States Parties at expert level, then that process would continue. Both procedures, under Article VI and Article V, will by their very nature be dealing with events, situations, ambiguities or other compliance concerns which logically antedate the withdrawal of the State Party. They should accordingly proceed to their conclusion.

11. One difference between the two Articles is that Article VI only requires States Parties to cooperate with the Security Council in the investigation, because it is the Council which is taking the lead, whereas action under Article V is entirely in the hands of the States Parties

themselves, and so is dependent upon their decision. The Security Council is unlikely to discontinue an investigation because of a change in the treaty status of the state whose activities are under investigation. The BTWC States Parties need to make evident the same resolve. That is why it is all the more desirable that an agreed understanding under Article XIII should affirm the principle that BTWC processes already in train will proceed to their conclusion in respect of procedures under Article V, and not just Article VI.

12. This second understanding comes as near as possible, in the different context of the BTWC, to finding an equivalent to the concerted international response when faced with a state's withdrawal from the NPT which the High Level Panel advocated in the third sentence of its paragraph 134: "*A State's notice of withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons should prompt immediate verification of its compliance with the Treaty, if necessary mandated by the Security Council.*" The phrase "*immediate verification of its compliance with the Treaty*" cannot be used in the BTWC context; but the purpose of recording this understanding would be similar, in that it would be warning any State Party which might be contemplating withdrawal that its withdrawal would not enable it to escape the consequences of investigations or other procedures already in train, because they would proceed to their conclusion. In both cases, it could expect its compliance or non-compliance while still a treaty Party to be established irrespective of its subsequent withdrawal.

13. Language that might be adopted in the Article XIII section of the *Final Declaration* to cover this understanding could be as follows:

The Conference further decides that in the event of a State Party withdrawing from the Convention:

(a) any multilateral processes already in train under Article V or Article VI of the Convention in which the State Party is implicated shall continue, and proceed to their conclusion, notwithstanding the withdrawal of the State Party from the Convention at any stage;

(b) the United Nations Security Council shall be invited to use the powers at its disposal to ensure that the facts regarding the compliance of such a State with its obligations under the Convention while still party to it are established irrespective of its subsequent withdrawal from the Convention.

14. A **third** understanding under the review of Article XIII would reinforce the provisions of Article VIII and remind any state contemplating withdrawal from the BTWC of its continuing legal obligations independent of the BTWC. This could be achieved by using language along the following lines in the *Final Declaration*:

The Conference, noting also the provisions of Article VIII of this Convention, declares that the withdrawal of a State Party from the Convention shall not in any way affect the duty of States to continue fulfilling the obligations assumed under any relevant rules of international law, particularly the Geneva Protocol of 1925.

Points for the *Final Declaration*

15. It is recommended that the Seventh Review Conference should adopt language developed and strengthened from that in the *Final Declaration* of the Sixth Review Conference that addresses the following points:

a. To note the provisions of Article XIII and emphasises that the Convention is of unlimited duration and applies at all times.

b. To note the expectations of permanence that flow from the unlimited duration of the Convention and recognise the need to strengthen its procedures, structures and resources in order to encourage the progressive evolution of this permanent treaty regime.

c. To express its satisfaction that no State Party has sought to withdraw from the Convention.

d. To decide that, in the event of any State Party giving notice of its intention to withdraw from the Convention, a Special Conference shall be convened without delay in order to enable the States Parties:

(i) to consider the statement submitted by the State Party of the extraordinary events it regards as having jeopardized its supreme national interests, noting that in accordance with Article XIII such events must not only be extraordinary, and must have jeopardized its supreme national interests, but must also be related to the subject matter of the Convention, and that withdrawal on three months' notice is only permissible if all these conditions are fulfilled;

(ii) to address collectively the implications of the intended withdrawal for the Convention and for States Parties;

(iii) to coordinate their diplomacy to the extent possible with the United Nations Security Council throughout the period of notice;

(iv) to agree recommendations to States Parties, individually and collectively, on actions necessary to safeguard their interests and the integrity of the Convention during the period of notice and following its expiration if withdrawal is effected.

e. To further decide that in the event of a State Party withdrawing from the Convention:

(i) any multilateral processes already in train under Article V or Article VI of the Convention in which the State Party is implicated shall continue, and proceed to their conclusion, notwithstanding the withdrawal of the State Party from the Convention at any stage;

(ii) the United Nations Security Council shall be invited to use the powers at its disposal to ensure that the facts regarding the compliance of such a State

with its obligations under the Convention while still party to it are established irrespective of its subsequent withdrawal from the Convention.

f. To declare, noting also the provisions of Article VIII of this Convention, that the withdrawal of a State Party from the Convention shall not in any way affect the duty of States to continue fulfilling the obligations assumed under any relevant rules of international law, particularly the Geneva Protocol of 1925.

ARTICLE XIV: UNIVERSAL ADHERENCE TO THE CONVENTION

by Graham S Pearson & Nicholas A. Sims

Consideration of Article XIV at the Sixth Review Conference

1. Article XIV states that:

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

The other paragraphs of this Article set out the procedures for the depositing of instruments of ratification and instruments of accession with the Depositary Governments and for the notification to all signatory and acceding States of the date of each signature, of deposit of each instrument of ratification or of accession, etc.

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*³⁰⁶ in respect of Article XIV stated that:

63. The Conference notes with satisfaction that eleven states have acceded to or ratified the Convention since the Fifth Review Conference.

64. The Conference calls upon signatories to ratify the Convention, and upon those states which have not signed the Convention to accede to it without delay, thus contributing to the achievement of universal adherence to the Convention.

65. The Conference encourages States Parties to take action to persuade non-parties to accede to the Convention without delay, and particularly welcomes regional initiatives that would lead to wider accession to the Convention.

3. In addition at the Sixth Review Conference, the States Parties agreed a *Section III: Decisions and Recommendations* of the *Final Document*³⁰⁷ which included the following on *Promotion of Universality*:

Promotion of Universalization

10. The Conference notes that although the Convention is a cornerstone of international security, with only 155 States Parties, membership of the Convention falls behind other major multilateral arms control, disarmament and non-proliferation treaties. The Conference agrees that a concerted effort by States Parties is needed to persuade states not party to join the Convention.

³⁰⁶ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

³⁰⁷ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

11. *The Sixth Review Conference calls upon signatories to ratify the Convention and other states not party to accede to it without delay. The States Parties reaffirm their commitment to ensuring the universalization of the Convention. To this end, the Conference:*

(a) Requests States Parties to:

- (i) promote universalization of the Convention through bilateral contacts with states not party;*
- (ii) promote universalization of the Convention through regional and multilateral fora and activities;*
- (iii) inform the Implementation Support Unit (ISU) of their designated national point of contact for facilitating information exchange of universalization efforts;*
- (iv) report, as appropriate, on their activities at annual meetings of States Parties;*
- (v) provide, as appropriate, the ISU with relevant information on activities related to the promotion of universalization of the Convention;*

(b) Agrees that the Chairs of Meetings of States Parties shall coordinate universalization activities, address states not party to the Convention, provide an annual report on universalization activities at Meetings of States Parties, and provide a progress report to the Seventh Review Conference, bearing in mind the primary responsibility of the States Parties on the implementation of this decision.

(c) Tasks the Implementation Support Unit to:

- (i) support the Chairs of Meetings of States Parties in the implementation of this decision;*
- (ii) support States Parties by maintaining a list of national points of contact;*
- (iii) consolidate and make available information on progress made by states not party towards ratification.*

Developments since the Sixth Review Conference

4. As the number of States Parties has increased in April 2011 to 164³⁰⁸, there is cause for further satisfaction whilst still encouraging all States which have not ratified or acceded to the Convention to do so without delay. This was noted in the resolution A/RES/65/92 adopted³⁰⁹ by the General Assembly without a vote on 8 December 2010 – when there were 163 States Parties – which included as its second introductory paragraph:

³⁰⁸ United Nations, Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, *Membership of the Biological Weapons Convention*, available at <http://www.unog.ch> accessed 29 May 2011.

³⁰⁹ United Nations, *Resolution adopted by the General Assembly 65/92 Convention on the on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction*, A/RES/60/96, 11 January 2011. Available at <http://www.un.org/depts/dhl/resguide/r65.shtml>

Noting with satisfaction *that there are one hundred and sixty-three States parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, including all the permanent members of the Security Council,*

and then went on in its first operative paragraph to state:

1. Calls upon all signatory States that have not yet ratified the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction to do so without delay, and calls upon those States that have not signed the Convention to become parties thereto at an early date, thus contributing to the achievement of universal adherence to the Convention;

5. There is therefore a widespread and continuing recognition by all States Parties of the importance of achievement of universal adherence to the Convention. As agreed at the Sixth Review Conference, each year's Chairman has prepared an annual report on universalization for each Meeting of States Parties. These show that the rate at which States have become Parties to the Convention has fallen off since December 2008:

	December 2006 ³¹⁰	December 2007 ³¹¹	December 2008 ³¹²	December 2009 ³¹³	December 2010 ³¹⁴	May 2011
Number of States Parties	155	159	162	163	163	164
Number of Signatory States	16	15	13	13	13	13
Number of States not-Party	24	21	20	19	19	18

This shows that there has been one accession in March 2011 when Mozambique acceded – the first such accession since the Cook Islands acceded on the final day of the 2008 Meeting

³¹⁰ United Nations, The Sixth 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 - 8 December 2006, *Background Information Document on Status of Universality of the Convention*, BWC/CONF.VI/INF.V, 28 September 2006. Available at <http://www.opbw.org>

³¹¹ United Nations, Meeting 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, 10 - 14 December 2007, *Report of the Chairman on Universalization Activities*, BWC/MSP/2007/4, 11 December 2007. Available at <http://www.opbw.org>

³¹² United Nations, Meeting 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, 1 - 5 December 2008, *Report of the Chairman on Universalization Activities*, BWC/MSP/2008/4, 28 November 2008. Available at <http://www.opbw.org>

³¹³ United Nations, Meeting 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, 7 - 11 December 2008, *Report of the Chairman on Universalization Activities*, BWC/MSP/2009/4, 24 November 2009. Available at <http://www.opbw.org>

³¹⁴ United Nations, Meeting 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, 6 - 10 December 2010, *Report of the Chairman on Universalization Activities*, BWC/MSP/2010/4, 30 November 2010. Available at <http://www.opbw.org>

of States Parties (and thus was not included in the December 2008 report on universalization).

6. As noted above, the Sixth Review Conference in its *Decisions and Recommendations* section of the *Final Document* adopted language that:

(b) Agrees that the Chairs of Meetings of States Parties shall coordinate universalization activities, address states not party to the Convention, provide an annual report on universalization activities at Meetings of States Parties, and provide a progress report to the Seventh Review Conference, bearing in mind the primary responsibility of the States Parties on the implementation of this decision.

7. The annual reports on universalization can be analysed to gain a feel for what steps have been taken in the years between the Sixth and Seventh Review Conferences:

a. BWC/MSP/2007/4³¹⁵ states that it is based on:

*(i) responses to letters **the Chairman wrote** to the foreign ministers of states not party; -- **both Signatory and States not party.***

*(ii) meetings in Geneva and New York between **the Chairman** and the permanent representatives or other officials of states not party;*

(iii) an ISU visit to The Hague in November 2007 to meet Chemical Weapons Convention (CWC) national authority representatives of the 29 states which are party to the CWC but not to the BWC (see list in Annex);

(iv) information provided to the Chairman or ISU by States Parties. [Emphasis added]

b. BWC/MSP/2008/4³¹⁶ lists the following activities:

(i) A member of the ISU participated on 5 June 2008 in a meeting in Malawi entitled "Building Stakeholdership in Support of Malawi's Ratification of the Biological Weapons Convention." The meeting was organised by the BioWeapons Prevention Project (BWPP) in partnership with the Centre for Human Rights and Rehabilitation (CHRR-Lilongwe, Malawi) and the Institute for Security Studies (ISS-Pretoria, South Africa). It was facilitated by the Malawi Ministry for Foreign Affairs and funded by the Ministry of Foreign Affairs of Norway.

(ii) The ISU held a French-language awareness raising and universalization seminar in Geneva on 12 June 2008. Chad, Cote d'Ivoire Guinea, and Haiti

³¹⁵ United Nations, Meeting 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, 10 - 14 December 2007, *Report of the Chairman on Universalization Activities*, BWC/MSP/2007/4, 11 December 2007. Available at <http://www.opbw.org>

³¹⁶ United Nations, Meeting 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, 1 - 5 December 2008, *Report of the Chairman on Universalization Activities*, BWC/MSP/2008/4, 28 November 2008. Available at <http://www.opbw.org>

participated in the event. Feedback highlighted the importance of improving interaction with states that use languages other than English.

(iii) On 1 July 2008, the ISU participated in the Geneva Forum event "Disarmament and Arms Control, an orientation for Egyptian Diplomats".

*(iv) From 15 to 17 October 2008, on the margins of the First Committee at UN headquarters in New York, **the Chairman** held meetings with permanent representatives or other officials from states not party.*

*(v) From 17 to 20 November 2008, **the Chairman** held meetings in Geneva with permanent representatives or other officials from states not party.*

*(vi) On 19 November 2008, **the Chairman wrote** to the Chemical Weapons Convention (CWC) national authorities of states that are party to the CWC but not to the Biological Weapons Convention (see Annex).*

(vii) Throughout the year the ISU has also remained in regular contact with states not party that have expressed an interest in the Convention, sought assistance to join, or requested additional information. [Emphasis added]

c. BWC/MSP/2009/4³¹⁷ lists the following activities:

(i) A member of the ISU participated in the Workshop on the Implementation of Security Council Resolution 1540 in Doha, Qatar from 8 to 11 March 2009 and engaged delegations from the region not currently parties to the Convention.

*(ii) On 21 April 2009, **the Chairman wrote** to the foreign ministers of Pacific island states not currently members of the Convention.*

(iii) A member of the ISU participated in the Workshop on the Implementation of Security Council Resolution 1540 in Port Vila, Vanuatu, from 29 April to 1 May 2009 and engaged delegations from the region not currently parties to the Convention. Support was given to the ISU by New Zealand to facilitate contacts with the states not party to the Convention.

(iv) A member of the ISU briefed participants in the United Nations Disarmament Fellowship Programme on 31 August 2009 in Geneva, Switzerland. Participants included individuals from states not party to the Convention.

*(v) In October 2009, in the margins of the First Committee at UN headquarters in New York, **the Chairman held** meetings with permanent representatives or other officials from states not party.*

(vi) On 9 November 2009, a member of the ISU participated in a Briefing for

³¹⁷ United Nations, Meeting 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, 7 - 11 December 2008, *Report of the Chairman on Universalization Activities*, BWC/MSP/2009/4, 24 November 2009. Available at <http://www.opbw.org>

Egyptian Diplomats, in Geneva.

(vii) Throughout the year the ISU has remained in regular contact with states not party that have expressed an interest in the Convention, sought assistance to join, or requested additional information.

*(viii) Mindful of Canada's special relationship with countries of the Western Hemisphere, **the Chairman worked closely with Ottawa** to ensure that a number of demarches were carried out over the course of 2009 at the highest levels, and at various venues.*

*3. From his first meeting with regional groups in February 2009 and then subsequently, **the Chairman requested the support of all States Parties** in his effort to promote universalization, especially of those countries which neighbour one or more states not yet party. The Chairman underscored the need for States Parties to build on both historic and contemporary ties within sub-regions to underscore the continuing relevance and importance of membership in the Convention. Over the course of 2009, the Chairman has been pleased to learn of support, activities and demarches undertaken by Brazil, Canada, France, Germany, Japan, New Zealand, Portugal, Spain, the United Kingdom and the United States toward the goal of universalization. [Emphasis added]*

d. MSP/2010/4³¹⁸ lists the following activities:

(a) On 28-29 January 2010, the ISU took part in the Geneva Forum orientation for diplomats in Geneva, Switzerland. Participants included representatives from states not party to the Convention.

(b) On 2-4 February 2010, the ISU participated in the Workshop on the Implementation of Security Council Resolution 1540 in Nairobi, Kenya, and held bilateral consultations with the delegations of Cameroon and the United Republic of Tanzania.

(c) The ISU was invited by the African Union (AU) to attend its meeting on 8 February 2010 to give a presentation on the Convention and on the mandate of the ISU. This meeting was a good opportunity to appeal for the AU's support for the implementation and the universalization of the BWC. The ISU reminded the AU delegates that seven members of the AU are signatories to the BWC (Burundi, Central African Republic, Cote d'Ivoire, Malawi, Liberia, Somalia, and United Republic of Tanzania) while eight members of AU have neither signed nor ratified the Convention (Angola, Cameroon, Chad, Djibouti, Eritrea, Guinea, Mozambique, and Namibia).

(d) A member of the ISU participated in the Second South Asian International Humanitarian Law Conference, in Dhaka, Bangladesh, from 14-18 February

³¹⁸ United Nations, Meeting 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, 6 - 10 December 2010, *Report of the Chairman on Universalization Activities*, BWC/MSP/2010/4, 30 November 2010. Available at <http://www.opbw.org>

2010. Representatives of two states not party – Myanmar and Nepal – participated in the workshop. The workshop was a good opportunity to increase the awareness of these states about the Convention and to discuss possible assistance and cooperation.

(e) The ISU was invited by the Organisation Internationale de la Francophonie (OIF) to attend its meeting on 27 May 2010 to make a presentation on the BWC and the mandate of the ISU. This meeting was a good opportunity to appeal for the OIF's support for the implementation and universalization of the BWC. During the discussion, the ISU highlighted the fact that ten States from OIF have not yet joined the Convention (Andorra, Burundi, Chad, Cameroon, Central African Republic, Cote d'Ivoire, Djibouti, Egypt, Haiti, Mauritania).

(f) In July 2010, the ISU had a meeting with a representative of the permanent mission of Cote d'Ivoire in Geneva to discuss the Convention and possible accession.

(g) The ISU briefed participants in the United Nations Disarmament Fellowship Programme on 30 August 2010 in Geneva, Switzerland. Participants included individuals from states not party to the Convention.

(h) From 25-27 October 2010, the ISU participated in the Regional Workshop on Implementation of the BWC in West and Central Africa in Abuja, Nigeria, organized by the European Union Joint Action in support of the Biological Weapons Convention and Nigeria National Authority on the Biological Weapons Convention. Three states not party to the Convention – Burundi, Cameroon, and Cote d'Ivoire – participated in the workshop. The workshop was used as an opportunity to increase the awareness of these states about the Convention and to discuss possible assistance and cooperation.

(i) Throughout the year, the ISU remained in regular contact with states not party that have expressed an interest in the Convention, sought assistance to join, or requested additional information.

3. Over the course of 2010, **the Chairman** and the ISU were pleased to learn of support, activities and demarches undertaken by Germany, the United Kingdom, the United States, and the European Union Joint Action in Support of the BWC, toward the goal of universalization. [Emphasis added]

8. It is evident from the above extracts that there has been a considerable variation in the action taken by the individual Chairmen with some writing to the Foreign Ministers of States not party whilst others appear to have been less directly involved.

9. More recently, the President-Designate for the Seventh Review Conference, Ambassador Paul van den IJssel, has advised³¹⁹ States Parties that Mozambique has acceded to the BTWC bringing the number of States Parties to 164. In addition, he has advised that the Minister for Foreign Affairs of The Netherlands, Mr. Uri Rosenthal, has written in April 2011 to his

³¹⁹ Ambassador Paul van den IJssel, President-designate of the Seventh Review Conference, *Letter to States Parties and Signatories to the BTWC*, 6 June 2011. Available at <http://www.unog.ch/bwc>

counterparts in states not party to the Convention urging them to join. Furthermore, the President-Designate has hosted a meeting together with the permanent representatives of the Depository Governments in Geneva on 4 May 2011 for representatives of states not party to raise awareness of the Convention.

10. In addition to the initiatives taken by the successive Chairmen of the Meetings of States Parties and the ISU, the European Union on 10 November 2008 adopted a Council Joint Action 2008/858/CFSP in support of the Biological and Toxin Weapons Convention that runs from May 2009 until 2011 which includes as one of its general objectives *Promoting the universalisation of the BWC* that offers³²⁰ the following forms of assistance to States not yet party to the BTWC:

OBJECTIVE	ASSISTANCE AVAILABLE
Increased adherence	Legal and administrative assistance to ratify, such as development of the required legal or administrative measures
Enhanced understanding	Assistance to raise awareness, understanding of, and support for the BWC among relevant national stakeholders
Strengthened networking	Financial assistance for participation of relevant national stakeholders in the BWC process as observers
Voluntary implementation	Financial grants for training and visits of relevant national stakeholders to the EU Member States to learn about BWC implementation

11. This Joint Action adopted on 10 November 2008 was one that followed on from Joint Action 2006/184/CFSP adopted on 27 February 2006³²¹ earlier in the same year in which the Sixth Review Conference took place in November – December 2006. The 2006 Joint Action had the objective of *promotion of the universality of the BTWC* and involved the carrying out of regional workshops for states not party to the BTWC in a. West and Central Africa, b. Eastern and Southern Africa, c. the Middle East, d. Central Asia and the Caucasus, e. Asia and the Pacific islands, and f. Latin America and the Caribbean.

12. The Joint Action 2008/858/CFSP provides the following description of the project and of its planned implementation:

Project description

In 2006 and 2007 the EU carried out regional outreach to almost all those States which are not parties to the BTWC with the intention of encouraging the ratification of or accession to the BTWC. Seven States have subsequently adhered to the BTWC.

³²⁰ European Union, Council Joint Action 2008/858/CFSP in support of the Biological and Toxin Weapons Convention. See [http://www.unog.ch/80256EE600585943/\(httpPages\)/F3C85A0F411931EFC12575E4004B0492?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/F3C85A0F411931EFC12575E4004B0492?OpenDocument) Also see item listed under BTWC on <http://www.consilium.europa.eu/showpage.aspx?id=718&lang=en#Bookmark7>

³²¹ European Union, Council Joint Action 2006/184/CFSP in support of the Biological and Toxin Weapons Convention. See item listed under BTWC on <http://www.consilium.europa.eu/showpage.aspx?id=718&lang=en#Bookmark7>

As a next step, this project provides for an outreach to up to seven States not parties to the BTWC, either in the form of targeted country assistance or sub-regional workshops, in order to achieve the objectives and results of this project.

Project implementation

The Chair of the States Parties' meetings, assisted by the ISU, will be asked to inform those States which are not parties to the BTWC of the EU assistance available for the promotion of universalisation, which can take the following forms:

(a) Country-specific or sub-regional (maximum of five countries) legal assistance related to the ratification of or accession to the BTWC. If, in a country applying for assistance, the accession to or ratification of the BTWC requires the adoption of legislative or administrative measures relating to its implementation, the legal assistance may also cover those measures;

(b) Country-specific or sub-regional (maximum of five countries) assistance to raise awareness of and support for the BTWC among political and opinion leaders and to encourage those States which are not parties to the BTWC to take the measures necessary for the implementation of the BTWC, such as setting up of points of contact, networking among key national stakeholders, and provision of training;

(c) Country-specific financial assistance allowing the participation of relevant national stakeholders, in particular the authorities responsible for the ratification of the BTWC, in the BTWC process (e.g. participation as observers at the experts' and/or States Parties' meetings). This type of assistance shall be provided for on a case-by-case basis and only when it can make a realistic difference for the prospects of a State acceding to the BTWC;

(d) Financial grants for training and awareness-raising visits of relevant national stakeholders to the authorities of EU Member States responsible for the implementation of the BTWC.

This project will enable partnerships between the EU Member States and beneficiary countries to ensure continuity of the EU's universalisation efforts and to offer a permanent point of reference for the beneficiary countries throughout the process of ratification of or accession to the BTWC. The participating EU Member States may volunteer to accompany, either individually or in groups, the selected beneficiaries throughout the ratification or accession process.

Although there are six-monthly progress reports³²² which include this Joint Action, these make no particular mention of work to promote the universalization of the BTWC. It is evident, however, that two experts have been appointed under the Joint Action to augment the Implementation Support Unit and consequently that their efforts are included in the annual reports on universality issued by the Chairman. It is, however, understood that approaches and demarches have been made to states not yet party to the Convention.

³²² Six-monthly progress reports on the implementation of the EU Strategy on WMD – which includes a section on Biological weapons and the Joint Action 2008/858/CFSP adopted on 10 November 2008 – are available at <http://www.consilium.europa.eu/showpage.aspx?id=718&lang=en#Bookmark4>

13. The slow rate of approaching universality with some 31 States yet to accede to the BTWC in June 2011 is all the more pronounced when a comparison is made with the Chemical Weapons Convention which entered into force on 29 April 1997. At its First Review Conference³²³ in April/May 2003, the States Parties in regard to universality of the CWC agreed that:

The First Review Conference recommended that the Council, with the cooperation of the Secretariat, develop and implement a plan of action to further encourage, in a systematic and coordinated manner, adherence to the Convention and to assist States ready to join the Convention in their national preparations to implement it [Emphasis added] (RC-1/5, para.7.18).

The background paper³²⁴ provided by the OPCW on adherence to the CWC for the First Review Conference provided a summary of the participation in the Convention:

Date	Number of States Parties	Number of States Parties for which Entry into Force was pending	Signatory States not Party	Non-Signatory States not Party
29 April 1997	87	0	78	28
29 April 1998	107	1	60	25
29 April 1999	121	0	48	24
29 April 2000	132	3	37	21
29 April 2001	143	0	31	19
29 April 2002	143	0	31	19

14. Since adoption of the Action Plan on Universality following the CWC First Review Conference, the number of States Parties increased significantly from 2003 through to 2006:

	May 2003	October 2003	June 2004	February 2005	March 2006
Number of States Parties	151	154	164	167	178
Signatory States not Party	25	22	18	16	8
Non-Signatory States not Party	16	15	12	11	8

15. The number of States Parties to the CWC has continued to increase since 2006:

	March 2006	November 2006	April 2007	June 2008	May 2009	September 2011
Number of	178	181	182	184	188	188

³²³ Organisation for the Prohibition of Chemical Weapons (OPCW), *Report of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference) 28 April – 9 May 2003*, RC-1/5, 9 May 2003. Available at <http://www.opcw.org>.

³²⁴ Organisation for the Prohibition of Chemical Weapons (OPCW), *Background Paper on Universal Adherence to the Chemical Weapons Convention*, RC-1/S/5, 25 April 2003. Available at <http://www.opcw.org>.

States Parties						
Signatory States not Party	8	6	6	4	2	2
Non-Signatory States not Party	8	8	7	7	5	5

The 2 Signatory States which have not yet ratified the CWC are Israel and Myanmar and the 5 States that have neither signed nor acceded to the CWC are Angola, Egypt, North Korea, Somalia and Syria.

16. The experience of the CWC Action Plan on Universality demonstrates the importance of its being organised and sustained by a secretariat under the direction of a representative body of the States Parties, in the case of the CWC by the OPCW Technical Secretariat under the direction of the Executive Council³²⁵. The latest report³²⁶ by the Director-General in September 2010 shows that the OPCW Action Plan for Universality of the CWC is being carried forward not only by the OPCW and the Executive Council but also by a facilitator, Mrs. Raja Rabia of France, and with the aid of Mr Marc Vogelaar, the former Permanent Representative of The Netherlands to the OPCW, who has served as a consultant on universality since September 2007.

17. This same report on universality of the CWC also mentions that the United Nations Secretary-General held a meeting³²⁷ on 8 January 2010 with the heads of the IAEA, OPCW and CTBTO-PrepCom at which the importance of universality was underscored to achieve the common goal of a world free of weapons of mass destruction. There is no mention in the Secretary-General's remarks of the BTWC and it appears that an opportunity was missed to promote the universality of the BTWC.

18. In 1996, at the Sixth Review Conference, the States Parties to the CWC were some 178, over twenty more than the number of States Parties to the BTWC. Now, in 2011, the States Parties to the CWC are 188, some 24 more than the number of States Parties to the BTWC. Although the successive Chairmen of the intersessional process together with the Implementation Support Unit have endeavoured to encourage ratification or accession to the Convention, as shown above, only nine States have become States Parties since the Sixth Review Conference in 2006.

Issues for the Seventh Review Conference

19. There is consequently a window of opportunity at the forthcoming Seventh Review Conference in December 2011 for the States Parties to the BTWC to mount an initiative to encourage all those States which have ratified or acceded to the CWC also to ratify or accede to the BTWC. Rather than just adopting an exhortation, as at previous Review Conferences, it would be timely to agree on concrete decisions to promote and achieve the objective of universality. Whilst this might be called an Action Plan there might be advantage in

³²⁵ Scott Spence, *Achieving Effective Action on Universality and National Implementation: The CWC Experience*, University of Bradford, Department of Peace Studies, Review Conference Paper No. 13, April 2005. Available at <http://www.brad.ac.uk/acad/sbtwc>

³²⁶ Organisation for the Prohibition of Chemical Weapons (OPCW), *Annual Report on the Implementation of the Action Plan for the Universality of the Chemical Weapons Convention during the period from 14 September 2009 to 15 September 2010*, EC-62/DG.11/C-15/DG.8, 25 September 2010.

³²⁷ United Nations Secretary-General, *Secretary-General's remarks at a meeting with the heads of the IAEA, OPCW and CTBTO-PrepCom*, 8 January 2010. Available at: <http://www.un.org/apps/sg/sgstats.asp?nid=4326>

adopting some different terminology such as an achievement timeline with, it is suggested, the interim objective of reaching 190 States Parties to the BTWC no later than the Eighth Review Conference in 2016. The States Parties at the Seventh Review Conference in agreeing this achievement timeline need to decide how the initiative is to be taken forward, and how the progress towards this interim objective will be reported regularly to the States Parties. There are several options: for example, by tasking a troika made up of the President of the Seventh Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee to do this; by tasking the Annual Meeting of States Parties to do this; or by tasking the ISU to do this.

20. It is evident that **more** is required than has been possible since the Sixth Review Conference in 2006 when the successive Chairmen in conjunction with the Implementation Support Unit have endeavoured to make progress on universalization. For this reason, the idea of a troika, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, supported by the Implementation Support Unit is attractive as it would provide continued attention throughout the period to the Eighth Review Conference and be able to report not only to the annual Meetings of States Parties but also to the Eighth Review Conference. Furthermore, such a troika could encourage a Foreign Minister to write to his/her counterparts in the states not party to the Convention – in a similar way to that in which the President-designate of the Seventh Review Conference has in April 2011 had the Foreign Minister of The Netherlands write to his counterparts in the states not party. The troika also adds the benefit of having a member from each group of States Parties which can be advantageous in promoting regional initiatives.

21. The mandate for the troika and the ISU needs to be slightly broadened so that the troika shall take steps on behalf of the States Parties to promote the universalisation of the Convention and to take opportunities to address states not party at the highest level.

22. The proposed troika should be seen as an extension of the continuing role which the President of a BTWC Review Conference has always held, through the years following the conference at which he presided, acting in close cooperation with the Depositaries. That role goes back to 1980-86 when Norway, holding the Presidency of the First Review Conference, took responsibility in the years that followed in caring for the Convention, for example introducing draft resolutions concerning the review of the BTWC into the UN General Assembly and its First Committee in 1980 and 1984, and in 1984 chairing the protracted consultations which eventually produced agreement on the date of the Second Review Conference, to be held in 1986. Such a responsible role for the President in the years following a Review Conference continues unchanged, but for practical purposes it is proposed here that the President would find it helpful to have the continuing assistance through those years of the principal office-holders of the Review Conference – the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee – who share the same comprehensive outlook on the Convention as a whole throughout the intersessional period rather than being responsible for just a single aspect (such as chairing a standing working group) or just one year (such as chairing an annual Meeting of States Parties).

23. It is also evident, whatever the mechanism to take forward and lead the universality initiative, that the Implementation Support Unit needs to liaise closely with the OPCW as the initial priority should be to encourage all those States which are Parties to the CWC but not yet Parties to the BTWC to become Parties to the BTWC. The experience of the OPCW in achieving ratifications and accessions to the CWC will be invaluable in opening up promising approaches to encourage the same States to ratify or accede to the BTWC.

24. In addition, capacity-building assistance is likely to be required for those States that have yet to ratify or accede to the BTWC and existing States Parties to the BTWC should be encouraged to provide such resources to facilitate the universalization initiative. As already noted, the European Union adopted a Council Joint Action 2008/858/CFSP on 10 November 2008 in support of the Biological and Toxin Weapons Convention that runs from May 2009 until 2011 which includes as one of its general objectives *Promoting the universalisation of the BWC* that offers³²⁸ the following forms of assistance to States not yet party to the BTWC:

OBJECTIVE	ASSISTANCE AVAILABLE
Increased adherence	Legal and administrative assistance to ratify, such as development of the required legal or administrative measures
Enhanced understanding	Assistance to raise awareness, understanding of, and support for the BWC among relevant national stakeholders
Strengthened networking	Financial assistance for participation of relevant national stakeholders in the BWC process as observers
Voluntary implementation	Financial grants for training and visits of relevant national stakeholders to the EU Member States to learn about BWC implementation

There is much to be said for the extension of this European Union Joint Action in respect of the universalization activities so that such support is available for any States not party to the BTWC.

Points for the *Final Document*

25. It is probable at the Seventh Review Conference, if it follows the precedent of the Sixth Review Conference, that language on universalization will be agreed both in regard to Article XIV in the Article by Article *Final Declaration* and also in a *Decisions and Recommendations* section of the *Final Document*. Points for both of these are set out here.

Article XIV in the Article by Article *Final Declaration*

26. It is recommended that the Seventh Review Conference should adopt more concrete language for Article XIV than that in the *Final Declaration* of the Sixth Review Conference. The language for Article XIV should start with similar points to those for 2006:

- a. To note with satisfaction that nine states have acceded to or ratified the Convention since the Sixth Review Conference.

³²⁸ European Union, Council Joint Action 2008/858/CFSP in support of the Biological and Toxin Weapons Convention. See [http://www.unog.ch/80256EE600585943/\(httpPages\)/F3C85A0F411931EFC12575E4004B0492?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/F3C85A0F411931EFC12575E4004B0492?OpenDocument)

b. To call upon signatories to ratify the Convention, and upon those states which have not signed the Convention to accede to it without delay, thus contributing to the achievement of universal adherence to the Convention.

c. To encourage States Parties to take action to persuade non-parties to accede to the Convention without delay, and to welcome, in particular, regional and other initiatives that include the provision of assistance that would lead to wider accession to the Convention.

27. The Conference could also usefully agree to set a target of achieving 190 States Parties by the Eighth Review Conference by making the following points:

d. To note that although the Convention is a cornerstone of international security, with only 164 States Parties, the Convention falls behind other major multilateral arms control, disarmament and non-proliferation treaties.

e. To consequently reaffirm their commitment to ensuring the universalization of the Convention and agree an interim target of achieving 190 States Parties by the Eighth Review Conference.

f. To appoint the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee to serve as a troika to lead and oversee the efforts of States Parties and of the Implementation Support Unit to achieve this target.

g. To request the troika, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, to take steps on behalf of the States Parties to promote the universalization of the Convention and to take opportunities to address states not party at the highest level.

h. To request the troika to focus their attention on achieving the ratification or accession of all States who are already party to the Chemical Weapons Convention to become parties to the Biological and Toxin Weapons Convention.

i. To request that the Implementation Support Unit liaise closely with the Organisation for the Prohibition of Chemical Weapons to achieve the ratification or accession to the Biological and Toxin Weapons Convention of all States that are already party to the Chemical Weapons Convention.

j. To agree that the troika shall provide an annual report on universalization activities to the Annual Meeting of States Parties and to the Eighth Review Conference.

k. To task the Implementation Support Unit to support the troika in the implementation of this decision, to support States Parties by maintaining a list of national points of contact within all States not Party to the Convention, and to consolidate and make available information on progress made by states not party towards ratification or accession.

l. To request the troika and the Implementation Support Unit to be involved as appropriate in any initiatives undertaken by the United Nations to achieve a world free of weapons of mass destruction.

Decisions and Recommendations section of the Final Document

28. The same points need to be made in the language adopted for *the Decisions and Recommendations* section of the *Final Document*. The assumption is made that the Seventh Review Conference will follow the precedent of the Sixth Review Conference and have a section entitled *Promotion of Universalization* in the *Decisions and Recommendations* section of the *Final Document*. This should make the following points:

- a. To note that although the Convention is a cornerstone of international security, with only 164 States Parties, the Convention falls behind other major multilateral arms control, disarmament and non-proliferation treaties. The Conference decides that a concerted effort by States Parties is needed to persuade states not party to join the Convention.
- b. To call upon signatories to ratify the Convention and other states not party to accede to it without delay.
- c. To reaffirm their commitment to ensuring the universalization of the Convention and to achieving an interim target of 190 States Parties by the Eighth Review Conference.
- d. To this end, to agree that the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee shall form a troika to lead, oversee and promote the efforts of States Parties and of the Implementation Support Unit to achieve this target.
- e. To request the troika, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, to take steps on behalf of the States Parties to promote the universalization of the Convention and to take opportunities to address states not party at the highest level.
- f. To request the troika to focus their attention on achieving the ratification or accession of all States who are already party to the Chemical Weapons Convention to become parties to the Biological and Toxin Weapons Convention.
- g. To request that the Implementation Support Unit liaise closely with the Organisation for the Prohibition of Chemical Weapons to achieve the ratification or accession to the Biological and Toxin Weapons Convention of all States that are already party to the Chemical Weapons Convention.
- h. To agree that the troika shall provide an annual report on universalization activities to the Annual Meeting of States Parties and to the Eighth Review Conference.
- i. To task the Implementation Support Unit to support the troika in the implementation of this decision, to support States Parties by maintaining a list of national points of contact within all States not Party to the Convention, and to consolidate and make available information on progress made by states not party towards ratification or accession.

j. To request the troika and the Implementation Support Unit to be involved as appropriate in any initiatives undertaken by the United Nations to achieve a world free of weapons of mass destruction.

ARTICLE XV: LANGUAGES AND DEPOSITS OF THE CONVENTION

by Graham S Pearson

Consideration of Article XV at the Sixth Review Conference

1. Article XV of the Convention states that:

This Convention, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of the Convention shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

2. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*³²⁹ in respect of Article XV stated that:

66. The Conference decides that as well as the five languages listed in this Article, Arabic shall be considered an official language for the purposes of any meetings of the States Parties and other formal communications concerning the operation of the Convention.

3. At the Fourth Review Conference in 1996, the *Final Declaration*³³⁰ in respect of Article XV had stated that:

The Conference notes the importance of this Article as well as the importance of the legal status of the languages of the Convention and United Nations system in the work of the Ad Hoc Group established by the Special Conference in 1994.

which had been a further development from the *Final Declaration* of the Third Review Conference³³¹ in 1991 which had simply noted the provisions of Article XV:

The Conference notes the provisions of Article XV.

Developments since the Sixth Review Conference

4. As there have been no developments in respect of Article XV since the Sixth Review it is suggested that the Seventh Review Conference should adopt similar language to that in the first clause only on Article XV in the *Final Declaration* of the Fourth Review Conference so as to show that the Seventh Review Conference noted the importance of this Article.

³²⁹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

³³⁰ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

³³¹ United Nations, The Third 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, 9–27 September 1991, *Final Document*, BWC/CONF.III/23, Geneva 1992. Available at <http://www.opbw.org>

Issues for the Seventh Review Conference

5. It is recommended that the Seventh Review Conference in the Article XV section of the *Final Declaration* should:

Note the importance of this Article.

**AGENDA ITEM 10c: PREAMBULAR PARAGRAPHS AND
PURPOSES OF THE CONVENTION**

by Graham S Pearson & Nicholas A. Sims

Solemn Declaration at the Sixth Review Conference

1. At the Sixth Review Conference of the BTWC held from 20 November to 8 December 2006, the *Final Declaration*³³² contained a Solemn Declaration as follows:

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, WHICH MET IN GENEVA FROM 20 NOVEMBER TO 8 DECEMBER 2006 TO REVIEW THE OPERATION OF THE CONVENTION, SOLEMNLY DECLARE:

(i) Their conviction that the Convention is essential to international peace and security;

(ii) Their determination also to act with a view to achieving effective progress towards general and complete disarmament under strict and effective international control including the prohibition and elimination of all types of weapons of mass destruction and their conviction that the prohibition of the development, production and stockpiling of chemical and bacteriological (biological) weapons and their elimination will facilitate the achievement of that goal;

(iii) Their reaffirmation of their firm commitment to the purposes of the Preamble and all the provisions of the Convention;

(iv) Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time;

(v) Their continued determination, for the sake of humankind, to exclude completely the possibility of the use of bacteriological (biological) weapons, and their conviction that such use would be repugnant to the conscience of humankind;

(vi) Their reaffirmation that under any circumstances the use, development, production and stockpiling of bacteriological (biological) and toxin weapons is effectively prohibited under Article I of the Convention.

³³² United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

(vii) Their conviction that terrorism in all its forms and manifestations and whatever its motivation, is abhorrent and unacceptable to the international community, and that terrorists must be prevented from developing, producing, stockpiling, or otherwise acquiring or retaining, and using under any circumstances, biological agents and toxins, equipment, or means of delivery of agents or toxins, for nonpeaceful purposes, and their recognition of the contribution of full and effective implementation of United Nations Security Council Resolution 1540 by all states to assist in achieving the objectives of this Convention;

(viii) Their conviction that the full implementation of all the provisions of the Convention should facilitate economic and technological development and international cooperation in the field of peaceful biological activities;

(ix) Their reiteration that the effective contribution of the Convention to international peace and security will be enhanced through universal adherence to the Convention, and their call on signatories to ratify and other states not party to accede to the Convention without delay;

(x) Their recognition that achieving the objectives of the Convention will be more effectively realized through greater public awareness of its contribution, and through collaboration with relevant regional and international organizations, in keeping within their respective mandates, and their commitment to promote this;

(xi) Their recognition of their consideration of the issues identified in reviewing the operation of the Convention as provided for in Article XII, as well as their consensus on the follow-up actions contained herein.

2. This Solemn Declaration was developed from that in the *Final Declaration*³³³ of the Fourth Review Conference that contained a Solemn Declaration followed by a paragraph on the Preamble to the Convention:

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, WHICH MET IN GENEVA FROM 25 NOVEMBER TO 6 DECEMBER 1996 TO REVIEW THE OPERATION OF THE CONVENTION, SOLEMNLY DECLARE:

- Their conviction that the Convention is essential to international peace and security;

- Their reaffirmation of their determination to act with a view to achieving effective progress towards general and complete disarmament, including the prohibition and elimination of all types of weapons of mass destruction, and their conviction that the prohibition of the development, production and

³³³ United Nations, The Fourth 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, 25 November - 6 December 1996, *Final Document*, BWC/CONF.IV/9, Geneva 1996. Available at <http://www.opbw.org>

stockpiling of chemical and bacteriological (biological) weapons and their elimination, through effective measures, will facilitate the achievement of general and complete disarmament under strict and effective international control;

- Their reaffirmation that under any circumstances the use, development, production and stockpiling of bacteriological (biological) and toxin weapons is effectively prohibited under Article I of the Convention.

- Their continued determination, for the sake of mankind, to exclude completely the possibility of the use of bacteriological (biological) agents and toxins as weapons, and their conviction that such use would be repugnant to the conscience of mankind;

- Their reaffirmation of their firm commitment to the purposes of the Preamble and the provisions of the Convention, and of their belief that universal adherence to the Convention would enhance international peace and security;

- Their determination to enhance the implementation and effectiveness of the Convention and to further strengthen its authority, including through the confidence-building measures and agreed procedures for consultations agreed by the Second and Third Review Conferences, and through the fulfilment of the mandate entrusted to the Ad Hoc Group established by the Special Conference in 1994;

- Their recognition that effective verification could reinforce the Convention;

- Their conviction that the full implementation of the provisions of the Convention should facilitate economic and technological development and international cooperation in the field of peaceful biological activities;

- Their recognition that purposes of this Convention include the prohibition of the use of biological weapons as contrary to the purpose of the Convention.

The States Parties recognize that the important principles contained in this Solemn Declaration can also serve as a basis for further strengthening of the Convention.

Preamble

The Conference reaffirms the importance of the elements in review of the Preamble to the Convention contained in the Final Declaration of the Second 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.

3. The Solemn Declaration at the Sixth Review Conference usefully numbered the points (i) to (xi) and contained an additional two points over and above those of the Fourth Review Conference whilst there was no paragraph on the Preamble.

Preamble paragraph

4. The paragraph in the Preamble that had appeared at the Fourth Review Conference in 1996 was essentially identical to that at the Third Review Conference in 1991 with the omission of the word "the" from the phrase "in the review" in the first line. The reference in the 1996 paragraph under the heading of *Preamble* is to the elements in the review of 1986 and refers back to the Final Declaration agreed at the Second Review Conference³³⁴ in which included **no** Solemn Declaration but instead contained similar language under the single heading of *Preamble* as follows:

PREAMBLE

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, having met in Geneva 8-26 September 1986 in accordance with a decision by the First Review Conference 1980 and at the request of a majority of States Parties to the Convention with a view to assuring that the purposes of the Preamble and the provisions of the Convention are being realised.

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

Recognising the continuing importance of the Convention and its objectives and the common interest of mankind in the elimination of bacteriological (biological) and toxin weapons,

Affirming their belief that universal adherence to the Convention would enhance international peace and security, would not hamper economic or technological development and, further, would facilitate the wider exchange of information for the use of bacteriological (biological) agents for peaceful purposes,

Confirming the common interest in strengthening the authority and the effectiveness of the Convention, to promote confidence and co-operation among State Parties,

Affirming the importance of strengthening international co-operation in the field of biotechnology, genetic engineering, microbiology and other related areas,

Reaffirming their adherence to the principles and objectives of the Geneva Protocol of 17 June 1925 and calling upon all States to comply strictly with them,

³³⁴ United Nations, The Second 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, 8–26 September 1986, *Final Document*, BWC/CONF.II/13/II, Geneva 1986. Available at <http://www.opbw.org>

Recalling that the General Assembly of the United Nations has repeatedly condemned all actions contrary to the said principles and objectives,

Recognising the importance of achieving as a matter of high priority an international convention on the complete and effective prohibition of the development, production and stockpiling of chemical weapons and on their destruction,

Noting the relevant provisions of the Final Document of the first special session of the General Assembly devoted to disarmament,

Appealing to all States to refrain from any action which might place the Convention or any of its provisions in jeopardy,

Declare their strong determination, for the sake of all mankind, to, exclude completely the possibility of microbial, or other biological agents, or toxins being used as weapons and reaffirm their strong support for the Convention, their continued dedication to its principles and objectives and their legal obligation under international law to implement and strictly comply with its provisions.

5. A simple reaffirmation of the language of 1986 as it stood would have been impossible in 1996 because the Chemical Weapons Convention had been concluded in the meantime and was about to enter into force, thereby rendering the eighth preambular paragraph redundant. The reaffirmation instead of *the importance of the elements* – a formulation introduced in 1991 – avoided the need to reopen and update the 1986 language paragraph by paragraph. It enabled the Third and Fourth Review Conferences to concentrate instead on the Solemn Declaration. The latter drew on the 1986 language but included new language in a new structure, no longer following the arrangement of preambular paragraphs which the Second Review Conference had inherited, and slightly expanded, from the First Review Conference.

Solemn Declaration

6. The changes in the Solemn Declaration at the Sixth Review Conference were as follows. The first two points are essentially the same as the first two at the Fourth Review Conference. The third point, reaffirming *their firm commitment to the purposes of the Preamble and all the provisions of the Convention*, is the same as the first part of the fifth point at the Fourth Review Conference and also effectively replaces the *Preamble* paragraph. The fourth point is new expressing their *determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time*. The final clause about use reflected the language in the eighth point of the Fourth Review Conference. The fifth and sixth points are the same as the fourth and third points respectively at the Fourth Review Conference. The seventh point dealing with terrorism is new. The eighth point is the same as the eighth point at the Fourth Review Conference with the addition of the word *all* in front of the words *the provisions*. The ninth point on universal adherence to the Convention is the same as the second part of the fifth point at the Fourth Review Conference. The tenth point is new and recognises the importance of *greater public awareness* and of *collaboration with relevant regional and international organizations*. The eleventh point replaces the previous sentence at the end of the Solemn Declaration that said *The States Parties recognize that the important principles contained in this Solemn Declaration can also serve as a basis for further strengthening of the Convention*. Two points made in the Solemn Declaration of the

Fourth Review Conference were not reiterated at the Sixth Review Conference – the seventh point that recognized that effective verification could reinforce the Convention and the sixth point relating to the Confidence-Building Measures, consultations and the then ongoing Ad Hoc Group.

Developments since the Sixth Review Conference

7. Since the Sixth Review Conference there have been a number of significant developments relevant to the Biological and Toxin Weapons Convention. Each in turn is considered individually in paragraphs 8 to 21 below.

8. The **Chemical Weapons Convention (CWC)** has made considerable progress towards the complete elimination of chemical weapon stockpiles through their internationally verified destruction with, in August 2011, 44,131 tonnes, or 61.99%, of the world's declared stockpile of 71,194 metric tonnes of chemical agent having been destroyed. The CWC has also moved yet closer to universality from the 181 States Parties, 6 Signatory States and 8 States not party in December 2006 to 188 States Parties, 2 Signatory States and 5 States not party in August 2011.

9. The **scientific and technological developments** relevant to the Convention. There have been major developments – indeed the 21st Century has been declared as the age of biotechnology and genomics. These developments are of particular relevance not only to Article I – the basic prohibition – but also to the other Articles of the Convention.

10. The increased concern world-wide **about the use of biological agents and toxins by non-State actors** which underlines the importance of taking further the steps that were taken at the Sixth Review Conference to ensure that individuals or subnational groups are effectively prevented from acquiring or using such agents for other than peaceful purposes. There is rightly concern that such attacks could be against animals and plants as well as against humans. It is noted that in July 2011, the UK Home Secretary introduced the revised UK strategy³³⁵ for countering terrorism which states that more work will be done to *counter the highest impact terrorist risks and to reduce the threat and mitigate the consequences of mass impact attacks using biological agents, and of radiological or nuclear weapons.*

11. The successful Intersessional Programme with annual **Meetings of States Parties** to the BTWC in 2007, 2008, 2009 and 2010 prepared for by one week Meetings of Experts to consider six specific topics as agreed by the Sixth Review Conference. These have led to enhanced common understandings between the States Parties.

12. **Workshops to revise the CBM regime.** In parallel with the Intersessional Programme, the Geneva Forum in collaboration with the BIOS Centre of the London School of Economics, together with the Governments of Switzerland, Norway and Germany, hosted a series of three workshops to examine options and proposals to revise the CBM regime. The first of these was held in Jongny-sur-Vevey, Switzerland on 22-23 August 2009, the second in Geneva on 12 December 2009, and the third in Berlin on 26-27 April 2010. This has led to

³³⁵ Home Office, *CONTEST The United Kingdom's Strategy for Countering Terrorism*, July 2011. Available at <http://www.homeoffice.gov.uk/publications/counter-terrorism/counter-terrorism-strategy/?view=Standard&pubID=907671>

widespread discussion, through an e-platform, of proposals which might be adopted to amend the CBM regime at the Seventh Review Conference.

13. The **Security Council** on 20 April 2011 adopted **Resolution 1977 (2011)** that reaffirmed its Resolution 1540 (2004) with its first operating paragraph in which the Security Council:

Acting under Chapter VII of the Charter of the United Nations:

1. *Reiterates* its decisions in and the requirements of resolution 1540 (2004), and *re-emphasizes* the importance for all States to implement fully that resolution;

It is recalled that the Security Council in the key operating paragraphs of Resolution 1540 (2004)

1. *Decides that all States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery;*

2. *Decides also that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;*

3. *Decides also that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall*

14. Consequently, every State – whether or not a State Party to the BTWC – is required to *shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or **biological** weapons and their means of delivery, in particular for terrorist purposes,* [Emphasis added]

15. Of particular relevance to the Seventh Review Conference are the reports that have been prepared by the 1540 committee which the Security Council established under SCR 1540 to report to the Council on the implementation of the resolution. The first report³³⁶ was presented in April 2006 and a second report³³⁷ in July 2008. A further comprehensive review was carried out by the 1540 Committee in 2009³³⁸. The 1540 Committee has prepared, as of June 2011, matrices for 179 of the 192 Member States of the United Nations which following

³³⁶ United Nations Security Council, *Letter dated 25 April 2006 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2006/257, 25 April 2006. Available at <http://www.un.org/Docs/journal/asp/ws.asp?m=S/2006/257>

³³⁷ United Nations Security Council, *Letter dated 8 July 2008 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2008/493, 30 July 2008. Available at <http://www.un.org/Docs/journal/asp/ws.asp?m=S/2008/493>

³³⁸ United Nations Security Council, *Letter dated 29 January 2010 from the Chairman of the Security Council Committee established pursuant to resolution 1540 (2004) addressed to the President of the Security Council*, S/2010/52, 1 February 2010.

approval by the Committee in November and December 2010 are available at <http://www.un.org/sc/1540/1540matrix.shtml>. This in *OP 2 - Biological Weapons (BW)* requests States to answer the question: *Does national legislation exist which prohibits persons or entities to engage in one of the following activities? Can violators be penalized?*

16. The Final Document of the **XV Summit of the Heads of State and Government of the Non-Aligned Movement** at Sharm el Sheikh, Egypt on 11 to 16 July 2009³³⁹ *'reaffirmed that the possibility of any use of bacteriological (biological) agents and toxins as weapons should be completely excluded, and the conviction that such use would be repugnant to the conscience of humankind. They recognised the particular importance of strengthening the Convention through multilateral negotiations for a legally binding Protocol and universal adherence to the Convention. They reiterated their call to promote international cooperation for peaceful purposes, including scientific-technical exchange. They underlined the importance to maintain close coordination among the NAM States Parties to the Convention and highlighted that the Convention on Biological and Toxin Weapons forms a whole and that, although it is possible to consider certain aspects separately, it is critical to deal with all of the issues interrelated to this Convention in a balanced and comprehensive manner.'* [Emphasis in original]. In addition, they further encouraged the BTWC States Parties to provide information, as set forth in paragraph 54 of the *Final Document* of the Sixth BTWC Review Conference, on how Article X of the BTWC on the issue of international assistance and cooperation is being implemented.

17. The **G8 Summit** at Deauville, France on 26-27 May 2011 which agreed a Declaration on Non-Proliferation and Disarmament that called *upon all States still not Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Chemical Weapons Convention (CWC) and the Biological and Toxin Weapons Convention (BTWC) to accede without delay.* It also noted that *On 14-15 March 2010, the G8 Foreign Affairs ministers adopted a Statement on the Seventh Review Conference for the Biological and Toxin Weapons Convention (BTWC). We welcome this declaration and look forward to a successful 7th BTWC Review Conference dedicated to the effective review of the operation of the Convention.*

18. The **G8 Foreign Ministers** statement in Paris on 14-15 March 2011 on the Seventh Review Conference of the BTWC which stated:

The 7th BTWC Review Conference to be held in December 2011 in Geneva provides an opportunity to reaffirm the authority and increased relevance of this vital instrument for our collective security in an ever changing context. Tangible progress with respect to increasing mutual confidence in compliance is very much needed for the BTWC as one of the most important global arms control treaties.

This statement went on to specifically address the BTWC stating that:

We intend to pursue our consultations with all BTWC States Parties to establish a consensus on the major issues of the Review Conference and on the necessary actions to address these issues. We will support the efforts of the appointed President of this

³³⁹ Non-Aligned Movement, XV Summit of Heads of State and Government of the Non-Aligned Movement, *Final Document*, NAM/2009/FD/Doc.1, 16 July 2009, Sharm El Sheikh, Egypt. Available at <http://www.namegypt.org/en/relevantdocuments/pages/default.aspx>

Review Conference, Ambassador van den IJssel, to succeed in adopting a balanced and substantive final declaration, which will pave the way for tangible progress with respect to implementation of and compliance with the provisions of the Convention.

Full and effective implementation of the provisions of the Convention by all States Parties is required to achieve its objectives. Aware of the importance of the intersessional work of the Convention to achieve this objective, we are determined to engage in discussions with all States Parties on a new and substantive work programme addressing the central issues of the Convention, including looking at more effective ways to enhance assurance of compliance with the BTWC as well as the implications of relevant scientific and technological developments for all appropriate articles of the Convention.

We commend the quality of the work conducted by the Implementation Support Unit over the past five years. We pledge our full support to renewing the ISU's mandate and, if necessary, to consolidating it, following an assessment of its tasks and resources by the Review conference.

Transparency among States Parties is an essential condition for confidence. With this in mind, it is necessary to ensure confidence building measures of the Convention remain relevant and useful in order to reflect recent scientific and technical developments. We are determined to pursue with all States Parties work to improve transparency and to step up efforts to increase participation in the confidence building measures. We call upon States that have not yet submitted their confidence-building measures to do so on a regular basis so that their initial objective can be met.

The involvement of civil society, particularly the academic and industrial sectors, is essential to the effective implementation of the provisions of the Convention. We will therefore step up such engagement to fully take account of scientific and technical developments in the biological area. We will likewise work on better awareness raising among those involved in the development of life sciences in order to limit the possibilities of misuse of technical developments, including supporting dual-use education programs on bioethics.

The universality of the Convention is indispensable. We will make every effort to achieve this objective and urge all States that have not already done so, to accede to the Convention.

19. The **European Union Council Decision** 2011/429/CFSP on 18 July 2011 regarding the EU position for the Seventh Review Conference said that the EU would work to ensure that the States Parties address the following priorities:

- (a) building confidence in compliance with the BTWC;*
- (b) supporting its national implementation; and*
- (c) promoting its universality.*

20. The decision went on to state that the EU shall *build consensus for the successful outcome of the Seventh Review Conference, on the basis of the framework established by the previous conferences, and promote, inter alia, the following key issues:*

(i) working towards identifying and strengthening effective mechanisms to build confidence in compliance within the BTWC;

(ii) States Parties should be able to demonstrate compliance by means of information exchange and enhanced transparency about their capabilities and actions for implementation and intentions towards compliance. This can be achieved by means of declarations, consultations and on-site activities, representing increasing levels of transparency and scrutiny, but also by information exchange and review during the intersessional process. While recognising that there is currently no consensus on verification, which remains a central element of a complete and effective disarmament and non-proliferation regime, the Union is willing to work towards identifying options that could achieve similar goals;

(iii) effective implementation and full compliance with all obligations under the BTWC by all States Parties; supporting and strengthening, where necessary, national implementation measures, including criminal legislation, and control over pathogenic micro-organisms and toxins in the framework of the BTWC, inter alia, by increasing the capacity of the Implementation Support Unit of the UN Office for Disarmament Affairs (ISU) to support national implementation and taking it up as an intersessional topic. Further action could be considered and decisions taken on ways and means to enhance national implementation. The Union will encourage discussions on possible options in this regard, especially in the area of national legislation, coordination among national stakeholders and regional and sub-regional cooperation; and implementation of appropriate biosafety and biosecurity management standards for life science institutions;

(iv) universal adherence of all States to the BTWC, including calling on all States not party to the BTWC to adhere to it without further delay and to commit legally to the disarmament and non-proliferation of biological and toxin weapons; and, pending adherence of those States to the BTWC, encouraging them to participate as observers in the meetings of the States Parties and to implement, on a voluntary basis, the provisions of the BTWC. Working towards the ban on biological and toxin weapons being declared a universally binding Rule of International Law, including through universalisation of the BTWC; and therefore recommending the adoption of an action plan on universalisation, coordinated by the ISU, and evaluated during dedicated sessions during the intersessional process;

(v) efforts to enhance transparency and build confidence in compliance include the confidence building measures (CBM) mechanism. The Union is willing to work on the enhancement of this mechanism by identifying measures to increase the participation, quality and comprehensiveness of the CBM mechanism;

....

21. Although the size of the three-person **Implementation Support Unit** is in sharp contrast to the 500 staff of the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons responsible for the implementation of the Chemical Weapons Convention, the Implementation Support Unit (ISU) has been very successful and there is a growing acceptance of the need for the ISU to be renewed at the Seventh Review Conference in 2011, and also of the need for additional institutional developments to nurture and sustain

the regime against biological weapons. The ISU and its activities have been a very welcome development since 2006.

22. Developments since 2006 show that the Seventh Review Conference is of especial importance to **all** States Parties as it is taking place at a time of particular opportunity. The Intersessional Programme carried out since 2006 has enabled the States Parties to meet and exchange information on a range of relevant topics and has enabled them to reach improved common understandings. The Implementation Support Unit has been extremely effective in fostering the development of the regime. The workshops on the Confidence-Building Measures have successfully identified common ground that should enable the CBM regime to be modified and improved at the Review Conference. Expectations are thus high that the Seventh Review Conference will achieve successful ambitious outcomes including an agreed Article by Article *Final Declaration* and *Part III: Decisions and Recommendations* with agreed follow-up action in a number of areas to strengthen the Convention regime and improve its implementation.

Issues for the Seventh Review Conference

23. There would be significant benefit in extending the fifth point (e) in which the States Parties express their determination, for the sake of humankind, to exclude completely the possibility of the use of biological weapons so as to make it explicit that this covers use against humans, animals or plants.

24. There would be particular advantage in the Solemn Declaration including language that reaffirms the value of the Convention in preventing any person whatsoever acquiring, developing, producing, retaining, stockpiling, transferring, or using biological or toxin weapons for purposes prohibited under the Convention. This is addressed in the sixth point (g) below.

25. In regard to the seventh point (h), whilst the language in point (vii) in the 2006 *Final Declaration* states that *terrorists must be prevented ... for nonpeaceful purposes* the latter words are redundant as terrorists are not engaged in peaceful purposes. Accordingly it is recommended that *for nonpeaceful purposes* should be omitted in 2011 as in point (h) below. In addition, point (vii) is made as two points (h) and (i) below for greater clarity.

26. A new twelfth point (l) is included so that the Solemn Declaration adopts language which recognizes that the Convention has been enhanced and strengthened through the extended understandings agreed by successive Review Conferences by consensus and recorded in their Final Declarations.

27. The penultimate point (m) should be strengthened to emphasise the determination of the States Parties to promote greater public awareness of the Convention as this will help to ensure the effective implementation of the Convention.

28. A new final fourteenth point (n) is added that looks forward from this and the previous Review Conferences and commits the States Parties to carry out the follow-on actions that have been agreed at the Seventh Review Conference by consensus on the basis of the principles contained in this Solemn Declaration and through the extended understandings, decisions and recommendations set out in the *Final Document*.

Points for the *Final Declaration*

29. The language to be adopted by the Seventh Review Conference for the Solemn Declaration in its *Final Declaration* might be similar to that adopted at the Sixth Review Conference but augmented in significant respects. The States Parties should make the following points:

- a. Their conviction that the Convention is essential to international peace and security.
- b. Their determination to act with a view to achieving effective progress towards general and complete disarmament under strict and effective international control including the prohibition and elimination of all types of weapons of mass destruction and their conviction that the prohibition of the development, production and stockpiling of chemical and bacteriological (biological) weapons and their elimination will facilitate the achievement of that goal.
- c. Their reaffirmation of their firm commitment to the purposes of the Preamble and all the provisions of the Convention.
- d. Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time.
- e. Their continued determination, for the sake of humankind, to exclude completely the possibility of the use of bacteriological (biological) weapons against humans, animal or plants, and their conviction that such use would be repugnant to the conscience of humankind.
- f. Their reaffirmation that under any circumstances the use, development, production and stockpiling of bacteriological (biological) and toxin weapons is effectively prohibited under Article I of the Convention.
- g. Their reaffirmation of their firm commitment through the adoption of national measures to prevent the acquisition, development, production, retention, stockpiling, transfer or use of biological and toxin weapons by any person whatsoever, including in terrorist or other criminal activity;
- h. Their conviction that terrorism in all its forms and manifestations and whatever its motivation, is abhorrent and unacceptable to the international community, and that terrorists must be prevented from developing, producing, stockpiling, or otherwise acquiring or retaining, and using under any circumstances, biological agents and toxins, equipment, or means of delivery of agents or toxins.
- i. Their recognition of the contribution of full and effective implementation of United Nations Security Council Resolution 1540 and Resolution 1977 by all states to assist in achieving the objectives of this Convention.

j. Their conviction that the full implementation of all the provisions of the Convention should facilitate economic and technological development and international cooperation in the field of peaceful biological activities.

k. Their reiteration that the effective contribution of the Convention to international peace and security will be enhanced through universal adherence to the Convention, and their call on signatories to ratify and other states not party to accede to the Convention without delay.

l. Their recognition that the Convention has been enhanced and strengthened through the extended understandings agreed by successive Review Conferences by consensus and set out in their Final Declarations.

m. Their recognition that achieving the objectives of the Convention will be more effectively realized through greater public awareness of its contribution, and through collaboration with relevant regional and international organizations, in keeping within their respective mandates, and their determination to promote this.

n. Their commitment to carry out the follow-up actions they have agreed by consensus and to pursue the further strengthening of the Convention on the basis of the principles contained in this Solemn Declaration and through the extended understandings, decisions and recommendations set out in the Final Document.

AGENDA ITEM 11: CONSIDERATION OF ISSUES IDENTIFIED IN THE REVIEW OF THE OPERATION OF THE CONVENTION AS PROVIDED FOR IN ITS ARTICLE XII AND ANY POSSIBLE CONSENSUS FOLLOW-UP ACTION

by Graham S. Pearson & Nicholas A. Sims

Introduction

1. At the Preparatory Committee Meeting held on 13 – 14 April 2011 for the Seventh Review Conference of the BTWC, the Provisional Agenda³⁴⁰ agreed for the Seventh Review Conference included as Agenda Item 11

11. Consideration of issues identified in the review of the operation of the Convention as provided for in its Article XII and any possible consensus follow-up action

This agenda item was identically worded to Agenda Item 11 for the Sixth Review Conference in 2006.

2. At the Sixth Review Conference the issues identified in the review of the operation of the Convention as provided for in its Article XII on which consensus follow-up action was agreed were very usefully brought together in *Part III: Decisions and Recommendations of the Final Document*³⁴¹.

3. The *Part III: Decisions and Recommendations* of the Sixth Review Conference had the following headings:

Work of the 2003-2005 Meetings of States Parties

Implementation Support Unit

Intersessional Programme 2007-2010

Confidence-building Measures

Promotion of Universalization

4. In this chapter, consideration is given to the possible consensus follow-up action arising from the Seventh Review Conference. As the Provisional Agenda agreed in April 2011 also has an Agenda Item 12:

12. Follow-up to the recommendations and decisions of the Sixth Review Conference and the question of future review of the Convention

³⁴⁰ United Nations, Seventh 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, Preparatory Committee, Geneva, 13 - 14 April 2011, *Report of the Preparatory Committee*, BWC/CONF.VII/PC/2, 26 April 2011. Available at <http://www.opbw.org>

³⁴¹ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

which specifically refers to a *Follow-up to the recommendations and decisions of the Sixth Review Conference* – and is thus different from Agenda Item 12 at the Sixth Review Conference³⁴² which simply stated:

12. Other matters, including the question of future review of the Convention.

– these *Key Points for the Seventh Review Conference* address the *Follow-up to the recommendations and decisions of the Sixth Review Conference* in the chapter on Agenda Item 12.

Issues and Follow-up Action agreed at the Seventh Review Conference

5. It is envisaged that the headings for the *Part III: Decisions and Recommendations* section at the Seventh Review Conference will be similar to but slightly different from those in that section at the Sixth Review Conference. Thus at the Sixth Review Conference the headings as already mentioned were:

Work of the 2003-2005 Meetings of States Parties

Implementation Support Unit

Intersessional Programme 2007-2010

Confidence-building Measures

Promotion of Universalization

For the Seventh Review Conference it is recommended that the following headings be used:

Implementation Support Unit

Intersessional Programme 2012-2015

Action Plan for National Implementation

Confidence-building Measures

Accountability Framework

Promotion of Universalization

The recommendations in respect of these headings are set out in the final section of this chapter following the consideration of the individual Articles.

6. In this section, the points identified in the individual chapters of these *Key Points for the Seventh Review Conference* relating to the Articles of the Convention as meriting inclusion in

³⁴² United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

the *Part III: Decisions and Recommendations* section of the *Final Document* for the Seventh Review Conference are set out for convenience Article by Article. In the subsequent section (paragraphs 31 to 38) they are organized by headings within the *Decisions and Recommendations* section.

Article by Article recommendations for the *Decisions and Recommendations* section

Article I

7. It is recommended in regard to Article I that the *Part III: Decisions and Recommendations* section of the *Final Document* should include an item entitled the *Intersessional Programme 2012 – 2015* that should include the following points:

- a. A standing working group of scientific and technical experts to meet to consider the scientific and technological developments in a particular scientific/technical area relevant to the BTWC and to consider their applications and implications for the whole of the Convention and to report its findings to the annual Meetings of States Parties.
- b. The topic to be considered in the first year to be to assess the implications for all aspects of the Convention of recent and likely future developments in *synthetic biology*.
- c. The standing working group of scientific and technical experts to invite representatives from scientific academies and associations as well as individual experts who have demonstrated their competence in regard to the particular scientific/technical area to participate as observers and to contribute to the discussion
- d. The topic for the following year or whether additional work is required on a previously selected scientific/technical area to be determined by the annual Meeting of States Parties.

Article II

8. No recommendations are made in regard to Article II for the *Part III: Decisions and Recommendations* section of the *Final Document*.

Article III

9. It is recommended in regard to both Article III and Article IV that the *Part III: Decisions and Recommendations* section of the *Final Document* should include an item entitled the *Implementation Support Unit* that should include specific mention of liaising as appropriate with the 1540 Committee in the context of the comprehensive implementation of the BTWC by including the following point:

- a. to promote the comprehensive implementation of the Convention by liaising as appropriate with the 1540 Committee.

Article IV

10. As already noted under Article III, it is also recommended in regard to Article IV that in the *Part III: Decisions and Recommendations* section the item entitled the *Implementation Support Unit* should include specific mention of liaising as appropriate with the 1540 Committee in the context of the comprehensive implementation of the BTWC by including the following point:

a. to promote the comprehensive implementation of the Convention by liaising as appropriate with the 1540 Committee of the United Nations Security Council.

11. A similar specific mention should also be made on liaising as appropriate with the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons in regard to national implementation:

b. to promote the effective national implementation of the Convention by liaising as appropriate with the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons.

12. In addition, it is recommended that the *Part III: Decisions and Recommendations* section should include a section headed *Action Plan for National Implementation* that would include the following points:

Action Plan for National Implementation

a. To agree on an Action Plan on National Implementation with the goal of achieving the enactment and effective implementation of legislative and other measures in accordance with the obligations of Article IV, including penal legislation, by all States Parties without further delay.

b. To agree an interim target for the Action Plan that two-thirds of the States Parties to the BTWC should have adopted effective national implementation legislation by the time of the Eighth Review Conference.

13. Elements within such an Action Plan should include the following:

c. Each State Party to provide the Implementation Support Unit, not later than [15 April 2012], with detailed information on the measures it has taken to implement its Article IV obligations;

d. Each State Party that requires assistance of any kind in meeting its national implementation obligations to inform the Implementation Support Unit of its needs and point of contact not later than [15 April 2012];

e. Each State Party that is able to provide assistance of any kind towards national implementation in other States Parties to inform the Implementation Support Unit of the assistance available and its point of contact no later than [15 April 2012];

f. Each State Party to keep the Implementation Support Unit informed on its efforts to meet national obligations under Article IV and, if applicable, to assist other States Parties.

14. In addition, the section entitled *Implementation Support Unit* within the *Decisions and Recommendations* section should include the following points:

- g. The Implementation Support Unit to compile and analyse official information available to it on measures taken by each State Party pursuant to Article IV, including any relevant clarifications received from States Parties, and to promptly distribute the analysis to all States Parties;
- h. The Implementation Support Unit to compile and disseminate to all States Parties information on assistance needed and assistance provided;
- i. The Implementation Support Unit to maintain close contacts with national points of contact, as well as international and non-governmental organizations that already provide assistance to States in meeting their Article IV obligations;
- j. The Implementation Support Unit to periodically update information on the progress of States Parties in meeting their Article IV obligations, maintain lists of points of contact, facilitate communication among States Parties needing and providing assistance, and coordinate outreach activities;
- k. The Implementation Support Unit to provide an annual report to all States Parties on activities undertaken under the action plan and including an analysis of the progress made towards full and effective implementation of Article IV.

15. In regard to *Article IV: Education, Outreach and Codes of Conduct* it is recommended that the *Part III: Decisions and Recommendations* section of the *Final Document* should include an item entitled *Confidence-Building Measures* that should include the following two decisions:

- a. *CBM E Declaration of legislation, regulations and other measures.* To include the provision of an annual report on the steps they have taken nationally to improve education and outreach.
- b. *CBM D Active Promotion of Contacts.* To include the provision of information on relevant educational and training activities being carried out in their countries, including points of contact for applicants wishing to apply to participate in such activities.

Article V

16. It is recommended in regard to Article V that the *Part III: Decisions and Recommendations* section of the *Final Document* should include an item entitled *Confidence-Building Measures* that should make the following points:

Confidence-Building Measures

- a. To note that the review of Article V of the Convention has shown the need to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein.

b. To decide that the Confidence-Building Measures shall be amended as detailed in Annex A. [Annex A would provide a detailed listing of the amendments indicated in paragraphs 22 to 46 in the chapter on *Article V: Confidence-Building Measures*].

c. To decide further that a Working Group on Confidence-Building Measures shall be established to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein. The Working Group shall consider whether additional types of information or alternative means would increase transparency and build confidence. The Working Group shall report throughout the intersessional process to the annual Meetings of States Parties which shall decide on any further amendments to the CBM process.

d. To decide that the ISU shall give professional support to the implementation of these decisions by providing necessary services as required by States Parties individually and collectively

(i) for the effective operation of the CBMs already agreed, and their associated modalities, including but not limited to the following tasks decided by the Sixth Review Conference and now reaffirmed:

1. The Implementation Support Unit (ISU) within the United Nations Office for Disarmament Affairs, with the assistance of interested States Parties, shall develop an electronic format of the existing CBM forms.

2. Once completed, the electronic forms shall, with the consent of the State Party submitting them, be posted on a secure Internet site and made available for the use of States Parties, to be developed under the auspices of the ISU.

3. States Parties are invited to submit forms using the electronic format. States Parties that wish to submit completed paper forms instead of electronic forms may do so. The ISU shall insert the submitted hard copy data in the secure Internet site with the consent of the State Party providing this data in order to make it electronically available to all States Parties.

4. The ISU shall centralize requests and offers of assistance regarding the submission of CBMs.

5. The ISU shall regularly inform States Parties about CBM returns and provide statistics on the level of participation at the annual Meetings of States Parties.

6. States Parties shall designate a national point of contact in charge of preparing the submission of CBMs, the contact details of which shall be sent to the ISU.

7. The ISU shall circulate to points of contact a notice informing States Parties of the deadline for submitting information under the information exchange procedure (15 April) at least three months prior to this deadline.

(ii) for the new Working Group on CBMs which is to be established by decision [15c] above, including action on any decisions arising out of its recommendations to the annual Meetings of States Parties throughout the intersessional process;

(iii) for consequential changes and any other aspects of the CBM regime as they arise over the intersessional period, under the supervision of the troika consisting of the President of the Seventh Review Conference assisted by the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee.

e. To agree that the CBM regime merits further attention at the Eighth Review Conference.

17. It is also recommended that the *Part III: Decisions and Recommendations* section should include an item entitled *Accountability Framework* along the following lines:

Accountability Framework

a. The States Parties noting their Solemn Declaration in which they have reaffirmed

(d) Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time;

recognise that an Accountability Framework would greatly enhance confidence in compliance with the Convention by all States Parties.

b. Within this framework, information provided by States Parties regarding their compliance with all provisions of the Convention shall be considered by the annual Meetings of States Parties in an accountability session or sessions at which clarification of information provided may be sought and supplied as necessary.

c. This consideration during the intersessional period prior to the next Review Conference shall be applied to approximately one quarter of the States Parties each year according to a schedule to be prepared by the ISU and approved by the President of the Seventh Review Conference, and such States Parties shall be invited to submit information regarding their compliance with all provisions of the Convention prior to their consideration at the annual Meetings of States Parties.

18. It is also recommended that the *Part III: Decisions and Recommendations* section should include in its section on the *Intersessional Programme 2012 – 2015* the following points:

a. A Compliance Working Group should be established open to all States Parties to consider through a conceptual discussion how confidence in compliance with the Convention could be enhanced recognizing the changing international security

environment with the rapid advances in the life sciences and the globalization of the biotechnology sector.

b. The Compliance Working Group should report annually to the Meetings of States Parties who would provide guidance to the Working Group on their further deliberations.

c. The Eighth Review Conference should consider the outcome of the Compliance Working Group and what further action should be taken.

Article VI

19. It is recommended in regard to Article VI that the *Part III: Decisions and Recommendations* section of the *Final Document* should include an item entitled the *Implementation Support Unit* that should include the following points:

a. To agree that the Implementation Support Unit should be directly engaged in the steps being taken by the United Nations Office for Disarmament Affairs to reinvigorate the Secretary-General's mechanism in regard to the investigation of an alleged use of biological or toxin weapons.

b. To agree that the Implementation Support Unit should be a participating entity of the United Nations Counterterrorism Implementation Task Force (UNCITF) Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks in its consideration of how best to develop interagency mechanisms in the context of chemical and biological weapons and materials.

Article VII

20. It is recommended in regard to Article VII that the item entitled the *Intersessional Programme 2012 – 2015* in the *Part III: Decisions and Recommendations* section of the *Final Document* should include the following point:

a. In recognition of the need for appropriate detailed procedures for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons, to agree that the annual Meetings of States Parties shall prepare and adopt such procedures.

21. It is also recommended that the item entitled the *Implementation Support Unit* in the *Part III: Decisions and Recommendations* section of the *Final Document* should include the following point:

a. In recognition of the value of a comprehensive range of information on sources of assistance, to agree that the Implementation Support Unit shall compile a document providing such information also including information as to how such assistance might be requested by States Parties.

Article VIII

22. In the chapter on Article VIII it is recommended that a continuing representative body (consisting of a high-level troika made up of the President of the Seventh Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee) in close association with France as the Depositary should follow up the requests that urges BTWC States Parties still outside the Geneva Protocol to accede or adhere to the Protocol and that calls upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations. As this is the same continuing representative body that is recommended to be created under Article XII to oversee the *Promotion of Universalisation*, it is recommended that the two additional points relating to Article VIII should be added to the *Promotion of Universalisation* section in the *Part III: Decisions and Recommendations* section of the *Final Document*:

- a. To request the troika, in close association with France as the Depositary, to follow up requests calling on all States Parties not yet party to the 1925 Geneva Protocol to adhere to it without delay and calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations.
- b. To agree that the troika shall provide an annual report on their follow up of these requests to the annual Meetings of States Parties and to the Eighth Review Conference.

Article IX

23. No recommendations are made in regard to Article IX for the *Part III: Decisions and Recommendations* section of the *Final Document*.

Article X

24. It is recommended in regard to Article X that the item entitled the *Implementation Support Unit* in the *Part III: Decisions and Recommendations* section of the *Final Document* should include the following points:

- a. To agree that the Implementation Support Unit should have an additional three posts to establish a Clearing House Mechanism to promote and facilitate scientific and technical cooperation and to facilitate capacity-building.
- b. To agree that States Parties shall submit regular national reports on how Article X is being implemented to the Implementation Support Unit, and to request the Implementation Support Unit to provide annual reports collating such information to the States Parties.

25. In addition, it is recommended that the section addressing the *Intersessional Programme 2012 – 2015* in the *Decisions and Recommendations* section (Part III of the *Final Document*) should include the following point:

- a. To agree that a topic to be included in the Intersessional Programme 2012 –2015 shall be the setting up and implementation of international standards for biosafety/biosecurity.

Article XI

26. No recommendations are made in regard to Article XI for the *Part III: Decisions and Recommendations* section of the *Final Document*.

Article XII

27. It is recommended in regard to Article XII that the section entitled *Intersessional Programme 2012 – 2015* in *Part III: Decisions and Recommendations* of the *Final Document* should include the following points:

- a. To decide that a Meeting of States Parties of one week's duration shall be held each year which shall make appropriate decisions by consensus and be prepared for by a Meeting of Experts or by meetings of standing working groups occupying two weeks in all as agreed by the Seventh Review Conference or subsequently by the annual Meetings of States Parties.
- b. To decide that a troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee supported by the Implementation Support Unit should promote the strengthening of the overall BTWC regime including *inter alia* the universalization of the Convention and should report to the annual Meetings of States Parties and to the Eighth Review Conference.

Article XIII

28. No recommendations are made in regard to Article XIII for the *Part III: Decisions and Recommendations* section of the *Final Document*.

Article XIV

29. It is recommended in regard to Article XIV that the *Part III: Decisions and Recommendations* section of the *Final Document* should include an item entitled the *Promotion of Universalization* that should include the following points:

- a. To note that that although the Convention is a cornerstone of international security, with only 164 States Parties, the Convention falls behind other major multilateral arms control, disarmament and non-proliferation treaties, and to decide that a concerted effort by States Parties is needed to persuade states not party to join the Convention.
- b. To call upon signatories to ratify the Convention and other states not party to accede to it without delay.
- c. To reaffirm their commitment to ensuring the universalization of the Convention and to achieving an interim target of 190 States Parties by the Eighth Review Conference.
- d. To this end, to agree that the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee shall form a troika to lead,

oversee and promote the efforts of States Parties and of the Implementation Support Unit to achieve this target.

e. To request the troika to take steps on behalf of the States Parties to promote the universalisation of the Convention and to take opportunities to address states not party at the highest level.

f. To request the troika to focus their attention on achieving the ratification or accession of all States who are already party to the Chemical Weapons Convention to become parties to the Biological and Toxin Weapons Convention.

g. To request that the Implementation Support Unit liaise closely with the Organisation for the Prohibition of Chemical Weapons to achieve the ratification or accession to the Biological and Toxin Weapons Convention of all States that are already party to the Chemical Weapons Convention.

h. To agree that the troika shall provide an annual report on universalisation activities to the annual Meetings of States Parties and to the Eighth Review Conference.

i. To task the Implementation Support Unit to support the troika in the implementation of this decision, to support States Parties by maintaining a list of national points of contact within all States not Party to the Convention, and to consolidate and make available information on progress made by states not party towards ratification or accession.

j. To request the troika and the Implementation Support Unit to be involved as appropriate in any initiatives undertaken by the United Nations to achieve a world free of weapons of mass destruction.

Article XV

30. No recommendations are made in regard to Article XV for the *Part III: Decisions and Recommendations* section of the *Final Document*.

Decisions and Recommendations section of the Final Document

31. As noted earlier, it is recommended that the following headings be used by the Seventh Review Conference for the *Part III: Decisions and Recommendations* section of the *Final Document*:

Implementation Support Unit

Intersessional Programme 2012-2015

Action Plan for National Implementation

Confidence-building Measures

Accountability Framework

Promotion of Universalization

The recommendations made in these *Key Points for the Seventh Review Conference* are set out below for each of these headings.

Implementation Support Unit

32. As noted in the chapter on Agenda Item 12: Follow-up to the recommendations and decisions of the Sixth Review Conference and the question of future review of the Convention it is evident that just to carry out its present range of tasks the ISU should be increased in size from its present 3 staff to about 6 or 7 staff and that augmented resources will be required for the ISU to perform additional tasks if its role is expanded by the Seventh Review Conference. In these *Key Points for the Seventh Review Conference*, it is recommended that an additional three posts are required for the proposed Clearing-house Mechanism for international cooperation, assistance and capacity building. It is also evident that additional staff will be required to carry out the extended responsibilities in support of the troika, the Action Plan on National Implementation and the various standing working groups. It is estimated that the support for the States Parties in the effective implementation of the Action Plan on National Implementation is likely to require five additional staff. It is accordingly recommended that the strength of the ISU should be increased to 15 to 20 staff.

33. It is recommended that the item entitled the *Implementation Support Unit* in the *Part III: Decisions and Recommendations* section of the *Final Document* should be along the following lines:

Implementation Support Unit

Taking into account the importance of providing administrative support to meetings agreed by the Review Conference and the annual Meetings of States Parties as well as comprehensive national implementation and universalization of the Convention, the exchange of confidence-building measures and operation of a clearing house on international cooperation, assistance and capacity building, the Conference decides that the Implementation Support Unit (ISU) shall continue and will consist of [fifteen to twenty] full time staff members within the Geneva Branch of the United Nations Office for Disarmament Affairs, funded by States Parties for the period from 2007-2011, to perform the following tasks:

A. Administrative support:

- (i) Providing administrative support to and preparing documentation for meetings agreed by the Review Conference and the annual Meetings of States Parties;
- (ii) Supporting the troika comprising the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee in their work, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, to lead, oversee and promote the efforts of States Parties to ensure the universalization of the Convention and to achieve an interim target of 190 States Parties by the Eighth Review Conference;
- (iii) Supporting the troika comprising the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee in their

work, in close cooperation with France as the Depositary, to follow up requests calling on all States Parties not yet party to the 1925 Geneva Protocol to adhere to it without delay and calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations;

(iv) Facilitating communication among States Parties and, upon request, with international organizations;

(v) Establishing close contact with and liaising with

1. the 1540 Committee of the United Nations Security Council in order to promote the comprehensive implementation of the Convention;

2. the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons in order to promote the effective national implementation of the Convention;

(vi) Becoming directly engaged in the steps being taken by the United Nations Office for Disarmament Affairs to reinvigorate the Secretary-General's mechanism in regard to the investigation of an alleged use of biological or toxin weapons;

(vii) Becoming a participating entity of the United Nations Counterterrorism Implementation Task Force (UNCITF) Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks in its consideration of how best to develop interagency mechanisms in the context of chemical and biological weapons and materials;

(viii) Facilitating, upon request, States Parties' contacts with scientific and academic institutions, as well as non-governmental organizations;

(ix) Serving as a focal point for submission of information by and to States Parties related to the Convention;

(x) Compiling a document providing a comprehensive range of information on sources of assistance also including information as to how such assistance might be requested by States Parties;

(xi) Supporting, as appropriate, the implementation by the States Parties of the decisions and recommendations of this Review Conference and of the annual Meetings of States Parties.

B. Confidence Building Measures:

(i) Receiving and distributing confidence-building measures (CBMs) to/from States Parties;

(ii) Sending information notices to States Parties regarding their annual submissions;

- (iii) Supporting the Working Group in its activities to enhance the effectiveness of the Confidence-Building Measures (CBM) regime and to increase participation therein;
- (iv) Compiling, analyzing and distributing data on CBMs and informing on participation at each Meeting of States Parties;
- (v) To the extent possible, and with the assistance of States Parties able to do so, making the CBM data available in more than one of the UN languages;
- (vi) Developing and maintaining a secure website on CBMs to be accessible only to States Parties;
- (vii) Serving as an information exchange point for assistance related to preparation of CBMs;
- (viii) Facilitating activities to promote participation in the CBM regime, as agreed by the States Parties.

C. Clearing-house Mechanism on international cooperation, assistance and capacity building:

- (i) To agree that the Implementation Support Unit shall include an additional [three] posts to establish a Clearing House Mechanism to promote and facilitate scientific and technical cooperation and to facilitate capacity-building;
- (ii) To agree that States Parties shall submit regular national reports on how Article X is being implemented to the Implementation Support Unit, and to request the Implementation Support Unit to provide annual reports collating such information to the States Parties.

D. Action Plan for National Implementation:

- (i) The Implementation Support Unit to compile and analyse official information available to it on measures taken by each State Party pursuant to Article IV, including any relevant clarifications received from States Parties, and to promptly distribute the analysis to all States Parties;
- (ii) The Implementation Support Unit to compile and disseminate to all States Parties information on assistance needed and assistance provided;
- (iii) The Implementation Support Unit to maintain close contacts with national points of contact, as well as international and non-governmental organizations that already provide assistance to States in meeting their Article IV obligations;
- (iv) The Implementation Support Unit to periodically update information on the progress of States Parties in meeting their Article IV obligations, maintain lists of points of contact, facilitate communication among States Parties

needing and providing assistance, and coordinate outreach activities;

(v) The Implementation Support Unit to provide an annual report to all States Parties on activities undertaken under the action plan and including an analysis of the progress made towards full and effective implementation of Article IV.

The Unit's mandate will be limited to the above-mentioned tasks unless amended by the Meeting of States Parties. The Unit will submit a concise annual written report to all States Parties on its activities to implement this mandate. The Unit's performance will be evaluated and its mandate reviewed by States Parties at the Eighth Review Conference.

Intersessional Programme 2012-2015

34. It is recommended that the item entitled the *Intersessional Programme 2012-2015* in the *Part III: Decisions and Recommendations* section of the *Final Document* should include the following points:

Intersessional Programme 2012 – 2015

a. To decide that a Meeting of States Parties of one week's duration shall be held each year which shall make appropriate decisions by consensus and be prepared for by a Meeting of Experts or by meetings of standing working groups occupying two weeks in all as agreed by the Seventh Review Conference or subsequently by the annual Meetings of States Parties.

b. In recognition of the need for appropriate detailed procedures for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons, to agree that the annual Meetings of States Parties shall prepare and adopt such procedures.

c. To agree that a topic on the setting up and implementation of international standards for biosafety/biosecurity shall be included in the Intersessional Programme for 2012 –2015.

Standing working group of scientific and technical experts

d. A standing working group of scientific and technical experts to meet to consider the scientific and technological developments in a particular scientific/technical area relevant to the BTWC and to consider their applications and implications for the whole of the Convention and to report its findings to the annual Meetings of States Parties.

e. The topic to be considered in the first year to be to assess the implications for all aspects of the Convention of recent and likely future developments in *synthetic biology*.

f. The standing working group of scientific and technical experts to invite representatives from scientific academies and associations as well as individual experts who have demonstrated their competence in regard to the particular scientific/technical area to participate as observers and to contribute to the discussion.

g. The topic for the following year or whether additional work is required on a previously selected scientific/technical area to be determined by the annual Meeting of States Parties.

Compliance Working Group

h. A Compliance Working Group to be established open to all States Parties to consider through a conceptual discussion how confidence in compliance with the Convention could be enhanced recognizing the changing international security environment with the rapid advances in the life sciences and the globalization of the biotechnology sector.

i. The Compliance Working Group to report annually to the Meeting of States Parties who would provide guidance to the Working Group on their further deliberations.

j. The Eighth Review Conference to consider the outcome of the Compliance Working Group and what further action should be taken.

Action Plan for National Implementation

35. It is recommended that the item entitled *Action Plan for National Implementation* in the *Part III: Decisions and Recommendations* section of the *Final Document* should include the following points:

Action Plan for National Implementation

a. To agree on an Action Plan on National Implementation with the goal of achieving the enactment and effective implementation of legislative and other measures in accordance with the obligations of Article IV, including penal legislation, by all States Parties without further delay.

b. To agree an interim target for the Action Plan that two-thirds of the States Parties to the BTWC should have adopted effective national implementation legislation by the time of the Eighth Review Conference.

Elements within such an Action Plan should include the following:

c. Each State Party to provide the Implementation Support Unit, not later than [15 April 2012], with detailed information on the measures it has taken to implement its Article IV obligations;

d. Each State Party that requires assistance of any kind in meeting its national implementation obligations to inform the Implementation Support Unit of its needs and point of contact not later than [15 April 2012];

e. Each State Party that is able to provide assistance of any kind towards national implementation in other States Parties to inform the Implementation Support Unit of the assistance available and its point of contact no later than [15 April 2012];

f. Each State Party to keep the Implementation Support Unit informed on its efforts to meet national obligations under Article IV and, if applicable, to assist other States Parties.

Confidence-building Measures

36. It is recommended that the item entitled *Confidence-Building Measures* in the *Part III: Decisions and Recommendations* section of the *Final Document* should include the following points:

Confidence-Building Measures

a. To note that the review of Article V of the Convention has shown the need to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein.

b. To decide that the Confidence-Building Measures shall be amended as detailed in Annex A. [Annex A would provide a detailed listing of the amendments indicated in paragraphs 22 to 46 in the chapter on *Article V: Confidence-Building Measures*].

c. In regard to *CBM E Declaration of legislation, regulations and other measures* to include the provision of an annual report on the steps they have taken nationally to improve education and outreach.

d. In regard to *CBM D Active Promotion of Contacts* to include the provision of information on relevant educational and training activities being carried out in their countries, including points of contact for applicants wishing to apply to participate in such activities.

e. To decide further that a Working Group on Confidence-Building Measures shall be established to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein. The Working Group shall consider whether additional types of information or alternative means would increase transparency and build confidence. The Working Group shall report throughout the intersessional process to the annual Meetings of States Parties which shall decide on any further amendments to the CBM process.

f. To decide that the ISU shall give professional support to the implementation of these decisions by providing necessary services as required by States Parties individually and collectively

(i) for the effective operation of the CBMs already agreed, and their associated modalities, including but not limited to the following tasks decided by the Sixth Review Conference and now reaffirmed:

1. The Implementation Support Unit (ISU) within the United Nations Office for Disarmament Affairs, with the assistance of interested States Parties, shall develop an electronic format of the existing CBM forms;

2. Once completed, the electronic forms shall, with the consent of the State Party submitting them, be posted on a secure Internet site and made available for the use of States Parties, to be developed under the auspices of the ISU;

3. States Parties are invited to submit forms using the electronic format. States Parties that wish to submit completed paper forms instead of electronic forms may do so. The ISU shall insert the submitted hard copy data in the secure Internet site with the consent of the State Party providing this data in order to make it electronically available to all States Parties;

4. The ISU shall centralize requests and offers of assistance regarding the submission of CBMs;

5. The ISU shall regularly inform States Parties about CBM returns and provide statistics on the level of participation at the annual Meetings of States Parties;

6. States Parties shall designate a national point of contact in charge of preparing the submission of CBMs, the contact details of which shall be sent to the ISU;

7. The ISU shall circulate to points of contact a notice informing States Parties of the deadline for submitting information under the information exchange procedure (15 April) at least three months prior to this deadline.

(ii) for the new Working Group on CBMs which is to be established by decision [16c] above, including action on any decisions arising out of its recommendations to the annual Meetings of States Parties throughout the intersessional process;

(iii) for consequential changes and any other aspects of the CBM regime as they arise over the intersessional period, under the supervision of the troika consisting of the President of the Seventh Review Conference assisted by the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee.

g. To agree that the CBM regime merits further attention at the Eighth Review Conference.

Accountability Framework

37. It is recommended that the item entitled the *Accountability Framework* in the *Part III: Decisions and Recommendations* section of the *Final Document* should be along the following lines:

Accountability Framework

a. The States Parties noting their Solemn Declaration in which they have reaffirmed

(d) Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time;

recognise that an Accountability Framework would greatly enhance confidence in compliance with the Convention by all States Parties.

b. Within this framework, information provided by States Parties regarding their compliance with all provisions of the Convention shall be considered by the annual Meetings of States Parties in an accountability session or sessions at which clarification of information provided may be sought and supplied as necessary.

c. This consideration during the intersessional period prior to the next Review Conference shall be applied to approximately one quarter of the States Parties each year according to a schedule to be prepared by the ISU and approved by the President of the Seventh Review Conference, and such States Parties shall be invited to submit information regarding their compliance with all provisions of the Convention prior to their consideration at the annual Meetings of States Parties.

Promotion of Universalization

38. It is recommended that the item entitled the *Promotion of Universalization* in the *Part III: Decisions and Recommendations* section of the *Final* should include the following points:

Promotion of Universalization

a. To note that although the Convention is a cornerstone of international security, with only 164 States Parties, the Convention falls behind other major multilateral arms control, disarmament and non-proliferation treaties, and to decide that a concerted effort by States Parties is needed to persuade states not party to join the Convention.

b. To call upon signatories to ratify the Convention and other states not party to accede to it without delay.

c. To reaffirm their commitment to ensuring the universalization of the Convention and to achieving an interim target of 190 States Parties by the Eighth Review Conference.

d. To this end, to agree that the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee shall form a troika, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, to lead, oversee and promote the efforts of States Parties and of the Implementation Support Unit to achieve this target.

e. To request the troika to take steps on behalf of the States Parties to promote the universalisation of the Convention and to take opportunities to address states not party at the highest level.

- f. To request the troika to focus their attention on achieving the ratification or accession of all States who are already party to the Chemical Weapons Convention to become parties to the Biological and Toxin Weapons Convention.
- g. To request that the Implementation Support Unit liaise closely with the Organisation for the Prohibition of Chemical Weapons to achieve the ratification or accession to the Biological and Toxin Weapons Convention of all States that are already party to the Chemical Weapons Convention.
- h. To agree that the troika shall provide an annual report on universalisation activities to the annual Meetings of States Parties and to the Eighth Review Conference.
- i. To task the Implementation Support Unit to support the troika in the implementation of this decision, to support States Parties by maintaining a list of national points of contact within all States not Party to the Convention, and to consolidate and make available information on progress made by states not party towards ratification or accession.
- j. To request the troika and the Implementation Support Unit to be involved as appropriate in any initiatives undertaken by the United Nations to achieve a world free of weapons of mass destruction.
- k. To request the troika, in close association with France as the Depositary, to follow up requests calling on all States Parties not yet party to the 1925 Geneva Protocol to adhere to it without delay and calling upon States Parties which continue to maintain pertinent reservations to the Protocol to withdraw such reservations.
- l. To agree that the troika shall provide an annual report on their follow up of these requests to the annual Meetings of States Parties and to the Eighth Review Conference.

AGENDA ITEM 12: FOLLOW-UP TO THE RECOMMENDATIONS AND DECISIONS OF THE SIXTH REVIEW CONFERENCE AND THE QUESTION OF FUTURE REVIEW OF THE CONVENTION

by Graham S. Pearson & Nicholas A. Sims

Introduction

1. At the Preparatory Committee Meeting held on 13 – 14 April 2011 for the Seventh Review Conference of the BTWC, the Provisional Agenda³⁴³ agreed for the Seventh Review Conference included as Agenda Item 12

12. Follow-up to the recommendations and decisions of the Sixth Review Conference and the question of future review of the Convention

This agenda item is slightly different from Agenda Item 12 at the Sixth Review Conference³⁴⁴ which simply stated:

12. Other matters, including the question of future review of the Convention

2. At the Sixth Review Conference the issues on which consensus follow-up action was agreed were very usefully brought together in *Part III: Decisions and Recommendations of the Final Document*³⁴⁵. This had the following headings:

Work of the 2003-2005 Meetings of States Parties

Implementation Support Unit

Intersessional Programme 2007-2010

Confidence-building Measures

Promotion of Universalization

3. In this chapter, we consider each of the five topics and summarise the material relevant to each topic contained in the individual chapters of these *Key Points for the Seventh Review Conference* and recommend what follow up decisions should be taken by the Seventh Review Conference. We then go on to consider the second part of the agenda item – namely *the question of future review of the Convention*.

³⁴³ United Nations, Seventh 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, Preparatory Committee, Geneva, 13 - 14 April 2011, *Report of the Preparatory Committee*, BWC/CONF.VII/PC/2, 26 April 2011. Available at <http://www.opbw.org>

³⁴⁴ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

³⁴⁵ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

Follow-up to the Recommendations and Decisions of the Sixth Review Conference

4. Each of the five topics in *Part III: Decisions and Recommendations* of the *Final Document*³⁴⁶ of the Sixth Review Conference is considered in turn.

Work of the 2003-2005 Meetings of States Parties

5. The Sixth Review Conference in its consideration of the *Work of the 2003-2005 Meetings of States Parties* in *Part III: Decisions and Recommendations* simply listed each of the topics considered at each of these meetings and noted:

2. *The Conference notes that the Meetings of States Parties and Meetings of Experts functioned as an important forum for exchange of national experiences and in-depth deliberations among States Parties. The Meetings of the States Parties engendered greater common understanding on steps to be taken to further strengthen the implementation of the Convention.*

3. *The Conference notes the contribution by the WHO, FAO, OIE and other relevant international organizations, as well as scientific and academic institutions and non-governmental organizations, to the Meetings of States Parties and Meetings of Experts.*

4. *The Conference endorses the consensus outcome documents from the Meetings of States Parties (BWC/MSP/2003/4, BWC/MSP/2004/3 and BWC/MSP/2005/3).*

6. Although the mandate for the 2003 – 2005 meetings agreed at the Fifth Review Conference in 2002 had stated³⁴⁷:

(e) The Sixth Review Conference will consider the work of these meetings and decide on any further action.

no specific decision on further action was recorded by the Sixth Review Conference.

Implementation Support Unit

7. The *Implementation Support Unit* (ISU) was officially launched on Monday 20 August 2007. It consists of three staff members – Richard Lennane, Dr. Piers Millett and Ms. Ngoc Phuong Huynh. It has produced an annual report on its activities for the annual Meeting of States Parties each year in 2007³⁴⁸, 2008³⁴⁹, 2009³⁵⁰ and 2010³⁵¹. The contributions made by

³⁴⁶ United Nations, The Sixth 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 - 8 December 2006, *Final Document*, BWC/CONF.VI/6, Geneva 2006. Available at <http://www.opbw.org>

³⁴⁷ United Nations, 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 – 7 December 2001 and 11 – 22 November 2002, *Final Document*, BWC/CONF.V/17, Geneva 2002. Available at <http://www.opbw.org>

³⁴⁸ United Nations, Meeting 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, 10 - 14 December 2007, *Report of the Implementation Support Unit*, BWC/MSP/2007/3, 4 December 2007. Available at <http://www.opbw.org>

the ISU in regard to the national implementation of the Convention are summarised in the chapter of these *Key Points on Article IV: National Implementation: Legislative and Regulatory Aspects*. Likewise, the contributions made by the ISU in regard to the universalization of the Convention are summarised in the chapter on *Article XIV: Universal Adherence to the Convention*, those in regard to the CBM regime in the chapter on *Article V: Confidence-Building Measures*, and those in regard to Article X in the chapter on *Article X: Exchange of Equipment, Materials and Scientific and Technological Information: International Cooperation and Development*.

8. The contributions made by the ISU to the BTWC during the past four years are widely acknowledged by States Parties as being immensely valuable. Indeed, at the workshop held in Montreux immediately prior to the Preparatory Committee meeting on 13 – 14 April 2011 for the Seventh Review Conference, it was reported³⁵² that Richard Lennane had said:

that the ISU had been helping States Parties to prepare and submit CBMs and had also been assisting in national implementation. The ISU had undertaken a clearing house role in regard to information about the Convention. Much of its work had been greatly helped by generous voluntary contributions from States Parties which had enabled the ISU to provide assistance in capitals on drafting and in other ways. In future, he hoped that the ISU would have more flexibility and discretion to act.

In the subsequent discussion, clarification was provided about the role of financial contributions by donors: such contributions enabled the ISU to carry out more of the activities under its mandate and to fill some of the gaps that would otherwise occur. The idea of a voluntary trust fund to which States Parties could contribute was welcomed as being a way in which the ISU could have additional flexibility to carry out its mandate effectively. In further discussion about shortfalls in the capability of the ISU, it was said that the ISU has to turn down between one-third and one-half of the invitations that it receives to provide assistance to States Parties because of the lack of staff numbers. There was general agreement that, for the success of the BWC, the ISU needed to continue and that it should increase in size to about 6 or 7 staff members in order to carry out the present range of tasks. If the Review Conference agreed to extend the role of the ISU, then additional resources would be needed.

³⁴⁹ United Nations, Meeting 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, 1 - 5 December 2008, *2008 Report of the Implementation Support Unit*, BWC/MSP/2008/3, 28 November 2008. Available at <http://www.opbw.org>

³⁵⁰ United Nations, Meeting 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, 7 - 11 December 2009, *2009 Report of the Implementation Support Unit*, BWC/MSP/2009/2, 10 November 2009. Available at <http://www.opbw.org>

³⁵¹ United Nations, Meeting 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, 6 - 10 December 2010, *2010 Report of the Implementation Support Unit*, BWC/MSP/2009/2, 23 November 2010. Available at <http://www.opbw.org>

³⁵² Graham S. Pearson, *Developing Practical Proposals for the BWC Seventh Review Conference in 2011*, Special HSP Report from Montreux, May 2011. Available at: <http://www.sussex.ac.uk/Units/spru/hsp/Reports%20from%20Geneva.html>

It is thus evident that to carry out its present range of tasks but not yet fully realized for want of resources, the ISU should be increased in size from its present 3 staff to about 6 or 7 staff and that augmented resources will be required for the ISU to perform additional tasks if its role is expanded by the Seventh Review Conference.

Intersessional Programme 2007-2010

9. The Intersessional Programme 2007 – 2010 has considered the six topics assigned by the Sixth Review Conference:

- (i) Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.*
- (ii) Regional and sub-regional cooperation on implementation of the Convention.*
- (iii) National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.*
- (iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.*
- (v) With a view to enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, promoting capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases: (1) for States Parties in need of assistance, identifying requirements and requests for capacity enhancement; and (2) from States Parties in a position to do so, and international organizations, opportunities for providing assistance related to these fields.*
- (vi) Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.*

As agreed by the Sixth Review Conference, items (i) and (ii) were considered in 2007; items (iii) and (iv) in 2008; item (v) in 2009; and item (vi) in 2010.

10. In the same way as for the previous *Intersessional Programme 2003 – 2005*, the mandate established by the Sixth Review Conference stated that:

- (e) The Seventh Review Conference will consider the work and outcome of these meetings and decide on any further action.*

It is, however, recommended that the Seventh Review Conference should actually take the opportunity to decide on appropriate actions to take forward the work carried out by the Intersessional Programme 2007 – 2010 and not, as at the Sixth Review Conference, limit itself to simply stating in *Part III: Decisions and Recommendations* that:

- 4. The Conference endorses the consensus outcome documents from the Meetings of States Parties (BWC/MSP/2003/4, BWC/MSP/2004/3 and BWC/MSP/2005/3).*

11. In order to facilitate taking further actions on the topics considered in 2007 – 2010, these *Key Points for the Seventh Review Conference* have considered the substantive paragraphs

from each of the Meetings of States Parties in the appropriate chapter and have recommended how key elements in those substantive paragraphs should be carried forward by the Seventh Review Conference. Thus:

a. The substantive paragraphs on the two topics considered in 2007 on:

- (i) Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.*
- (ii) Regional and sub-regional cooperation on implementation of the Convention.*

are considered in the chapter on *Article IV: National Implementation: Legislative and Regulatory Aspects* and *Article III: Non-Transfer*.

b. The substantive paragraphs on the two topics considered in 2008 on:

- (iii) National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.*
- (iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.*

are considered in the chapter on *Article IV: National Implementation: Legislative and Regulatory Aspects* and the second topic is considered in the chapter on *Article IV: National Implementation: Education, Outreach and Codes of Conduct*.

c. The substantive paragraphs on the single topic considered in 2009 on:

- (v) With a view to enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, promoting capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases: (1) for States Parties in need of assistance, identifying requirements and requests for capacity enhancement; and (2) from States Parties in a position to do so, and international organizations, opportunities for providing assistance related to these fields.*

are considered in the chapter on *Article X: Exchange of Equipment, Materials and Scientific and Technological Information: International Cooperation and Development*.

d. The substantive paragraphs on the single topic considered in 2010 on:

- (vi) Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.*

are considered in the chapters on *Article VI: Lodging of Complaints with and their Investigation by the Security Council* and *Article VII: Assistance to States Parties*..

Confidence-Building Measures

12. The Sixth Review Conference in its consideration of *Confidence-building Measures in Part III: Decisions and Recommendations* said that:

8. The Conference notes that the review of Article V of the Convention has shown the need for enhancing participation of States Parties in the confidence-building measures (CBM) process.

and went on to record a number of decisions relating to the CBM regime. It concluded by noting that:

9. Furthermore, the Conference reviewed the implementation of the CBMs during its session and agrees that the issue merits further and comprehensive attention at the Seventh Review Conference.

13. The annual reports³⁵³⁻³⁵⁴⁻³⁵⁵⁻³⁵⁶ prepared by the Implementation Support Unit on its activities have included a section on the Confidence-Building Measures. In addition, the unog.ch/bwc website has a page that lists by year the States Parties that have submitted their Confidence-Building Measures and also indicates those that are publicly available.

Year	Number of CBM submissions	Number publicly available
2007	65	11
2008	62	11
2009	64	11
2010	72	15
2011	60 (as of 21 August 2011)	18

From this tabulation, it can be seen that the annual number of submissions was around 65 for 2007 to 2009 and increased to 72 in 2010. The number of those made publicly available increased significantly from 11 in 2007 to 2009 to 18 thus far in 2011. The making of the CBM submissions publicly available is greatly welcomed as it encourages all those engaged in the life sciences to feel that they are part of the international community – government,

³⁵³ United Nations, Meeting 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, 10 - 14 December 2007, *Report of the Implementation Support Unit*, BWC/MSP/2007/3, 4 December 2007. Available at <http://www.opbw.org>

³⁵⁴ United Nations, Meeting 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, 1 - 5 December 2008, *2008 Report of the Implementation Support Unit*, BWC/MSP/2008/3, 28 November 2008. Available at <http://www.opbw.org>

³⁵⁵ United Nations, Meeting 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, 7 - 11 December 2009, *2009 Report of the Implementation Support Unit*, BWC/MSP/2009/2, 10 November 2009. Available at <http://www.opbw.org>

³⁵⁶ United Nations, Meeting 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, 6 - 10 December 2010, *2010 Report of the Implementation Support Unit*, BWC/MSP/2009/2, 23 November 2010. Available at <http://www.opbw.org>

academia and industry – that is working together to build confidence in the international implementation of the Convention.

14. The Implementation Support Unit are also to be commended for preparing a *Guide to Participating in the Confidence-Building Measures of the Biological Weapons Convention*³⁵⁷ which is available as a pre-production version dated December 2009 on the unog.ch/isu website. The aim of the guide is to provide practical advice and guidance to officials responsible for preparing submissions for the Confidence-building Measures (CBMs) and includes:

- *Background information on the CBM process,*
- *General advice for preparing to participate in the CBMs, and*
- *Detailed guidance on gathering the specific information required for each form.*

15. In regard to the conclusion in the *Part III: Decisions and Recommendations* section of the *Final Document* of the Sixth Review Conference mentioned above *that the issue merits further and comprehensive attention at the Seventh Review Conference*, this is addressed in the chapter in these *Key Points for the Seventh Review Conference* entitled *Article V: Confidence-Building Measures* where recommendations are made for how the Seventh Review Conference should improve the Confidence-Building Measures regime.

Promotion of Universalization

16. The Sixth Review Conference in its consideration of *Promotion of Universalization in Part III: Decisions and Recommendations* said that:

10. The Conference notes that although the Convention is a cornerstone of international security, with only 155 States Parties, membership of the Convention falls behind other major multilateral arms control, disarmament and non-proliferation treaties. The Conference agrees that a concerted effort by States Parties is needed to persuade states not party to join the Convention.

11. The Sixth Review Conference calls upon signatories to ratify the Convention and other states not party to accede to it without delay. The States Parties reaffirm their commitment to ensuring the universalization of the Convention.

It then went on to record a number of requests to States Parties and then agreed:

... that the Chairs of Meetings of States Parties shall coordinate universalization activities, address states not party to the Convention, provide an annual report on universalization activities at Meetings of States Parties, and provide a progress report to the Seventh Review Conference, bearing in mind the primary responsibility of the States Parties on the implementation of this decision.

and concluded by giving a number of tasks to the Implementation Support Unit.

³⁵⁷ United Nations Implementation Support Unit, *Guide to Participating in the Confidence-Building Measures of the Biological Weapons Convention*, Pre-production version, December 2009. Available at: <http://www.unog.ch/bwc>

17. In the chapter in these *Key Points for the Seventh Review Conference* entitled *Article XIV: Universal Adherence to the Convention* a summary is provided of the steps taken on universalization as recorded in the annual reports³⁵⁸⁻³⁵⁹⁻³⁶⁰⁻³⁶¹ submitted by the Chairmen to the Meeting of States Parties. These show that the rate at which States have become Parties to the Convention has fallen off since December 2008:

	December 2006 ³⁶²	December 2007	December 2008	December 2009	December 2010	August 2011
Number of States Parties	155	159	162	163	163	164
Number of Signatory States	16	15	13	13	13	13
Number of States not-Party	24	21	20	19	19	18

This shows that there has been one accession in March 2011 when Mozambique acceded – the first such accession since the Cook Islands acceded on the final day of the 2008 Meeting of States Parties (and thus was not included in the December 2008 report on universalization).

18. It is evident from the Chairmen’s reports that there has been a considerable variation in the action taken by the individual Chairman with some writing to the Foreign Ministers of States not party whilst others appear to have been less directly involved. As is noted in the chapter on Article XIV:

There is consequently a window of opportunity at the forthcoming Seventh Review Conference in December 2011 for the States Parties to the BTWC to mount an initiative to encourage all those States which have ratified or acceded to the CWC also to ratify or accede to the BTWC. Rather than just adopting an exhortation, as at previous Review Conferences, it would be timely to agree on concrete decisions to promote and achieve the objective of universality.

³⁵⁸ United Nations, Meeting 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, 10 - 14 December 2007, *Report of the Chairman on Universalization Activities*, BWC/MSP/2007/4, 11 December 2007. Available at <http://www.opbw.org>

³⁵⁹ United Nations, Meeting 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, 1 - 5 December 2008, *Report of the Chairman on Universalization Activities*, BWC/MSP/2008/4, 28 November 2008. Available at <http://www.opbw.org>

³⁶⁰ United Nations, Meeting 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, 7 - 11 December 2009, *Report of the Chairman on Universalization Activities*, BWC/MSP/2009/4, 24 November 2009. Available at <http://www.opbw.org>

³⁶¹ United Nations, Meeting 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, 6 - 10 December 2010, *Report of the Chairman on Universalization Activities*, BWC/MSP/2010/4, 30 November 2010. Available at <http://www.opbw.org>

³⁶² United Nations, The Sixth 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 - 8 December 2006, *Background Information Document on Status of Universality of the Convention*, BWC/CONF.VI/INF.V, 28 September 2006. Available at <http://www.opbw.org>

Given that the CWC currently has 188 States Parties, it is proposed that the States Parties should adopt the interim objective of reaching 190 States Parties to the BTWC no later than the Eighth Review Conference in 2016. It is also noted in the chapter on Article XIV that:

*It is evident that **more** is required than has been possible since the Sixth Review Conference in 2006 when the successive Chairmen in conjunction with the Implementation Support Unit have endeavoured to make progress on universalization. For this reason, the idea of a troika, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, supported by the Implementation Support Unit is attractive as it would provide continued attention throughout the period to the Eighth Review Conference and be able to report not only to the annual Meetings of States Parties but also to the Eighth Review Conference.*

19. It is consequently recommended that the Seventh Review Conference should agree that the President, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee shall form a troika to lead, oversee and promote, in close cooperation with the Russian Federation, United Kingdom and United States as Depositaries, the efforts of States Parties and of the Implementation Support Unit to achieve universalization of the Convention.

The Question of Future Review of the Convention.

20. The second part of Agenda Item 12 is *the question of future review of the Convention*. In these *Key Points for the Seventh Review Conference* in the chapter entitled *Article XII: Review Conferences* it is recommended that the Review Conference should:

extend its review of Article XII and the corresponding section of the Final Declaration so as to ensure

- a. the continuation, and ideally the perpetuation, of the review process, and*
- b. the continuation of the annual Meetings of States Parties in the intersessional period from 2012 to 2015, and*
- c. that the momentum demonstrated in the years leading up to the Seventh Review Conference is maintained during the period between the Seventh and the Eighth Review Conferences by the creation of a troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee which would be responsible for promoting the development of the BTWC regime on behalf of the States Parties during the years between the Seventh and the Eighth Review Conferences.*

21. The continuation, and ideally the perpetuation, of the review process could be achieved by the States Parties at the Seventh Review Conference agreeing:

To reaffirm that Review Conferences constitute an effective method of reviewing the operation of the Convention with a view to assuring that the purposes of the Preamble and the provisions of the Convention are being realized and should continue to be held at least every five years.

22. In regard to the intersessional period, it is recommended that the States Parties should move to a fuller intersessional process with more continuous activity by the States Parties both individually and collectively. This would be facilitated and led by the troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee assisted by the Implementation Support Unit all acting on behalf of the States Parties. Thus after the Seventh Review Conference, a comprehensive programme for strengthening the Convention regime would comprise the following elements:

a. A troika consisting of the President of the Review Conference, the Chairman of the Committee of the Whole and the Chairman of the Drafting Committee supported by the Implementation Support Unit that would, on behalf of the States Parties, lead, oversee and promote the building up and strengthening of the regime including *inter alia* accelerating the progress of the Convention towards universality in close cooperation with the Depositaries and with the assistance of the Implementation Support Unit.

b. An Action Plan on national implementation with the goal of achieving the enactment and effective implementation of legislative and other measures in accordance with the obligations of Article IV, including penal legislation, by all States Parties without further delay, an interim target for the Action Plan being that two thirds of the States Parties to the BTWC shall have adopted effective national implementation legislation by the time of the Eighth Review Conference

c. Meetings of States Parties of one week's duration held each year making appropriate decisions by consensus and prepared for by a Meeting of Experts or by meetings of standing working groups occupying two weeks in all (as agreed by the Seventh Review Conference or subsequently by the annual Meeting of States Parties).

d. Standing working groups, reporting to the annual Meeting of States Parties and to the Eighth Review Conference to address the following topics:

i. **Science and Technology:** To assess the scientific and technological developments in a particular scientific/technical area relevant to the BTWC and consider their applications and implications for the whole of the Convention and report to the annual Meeting of States Parties.

ii. **Confidence-Building Measures:** to enhance the effectiveness of the Confidence-Building Measures (CBM) process and to increase participation therein.

iii. **Compliance:** to consider by means of a conceptual discussion how confidence in compliance with the Convention could be enhanced recognizing the changing international security environment with the rapid advances in the life sciences and the globalization of the biotechnology sector.

e. Establishment of an Accountability Framework to enhance confidence in compliance with the Convention by all the States Parties based on the submission by States Parties of reports on their compliance with all provisions of the Convention for

consideration in accountability sessions at the annual Meetings of States Parties during the intersessional period.

f. An augmented Implementation Support Unit that is tasked and resourced, in addition to carrying forward all the elements of the original mandate agreed in 2006, to carry out an extended mandate that includes:

i. Operation of a Clearing House Mechanism in regard to international cooperation, assistance and capacity-building.

ii. To

- be a participating entity of the United Nations Counterterrorism Implementation Task Force (UNCITF) Working Group on Preventing and Responding to Weapons of Mass Destruction Attacks in its consideration of how best to develop interagency mechanisms in the context of chemical and biological weapons and materials.

- be directly engaged in the steps being taken by the United Nations Office for Disarmament Affairs to reinvigorate the Secretary-General's mechanism in regard to the investigation of an alleged use of biological or toxin weapons.

- liaise closely with the 1540 Committee of the United Nations Security Council.

- liaise closely with the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons.

iii. To support States Parties in their implementation of all Articles of the Convention, notably through assistance in the Action Plan for national implementation by effective legislation and regulation, including penal legislation, and through assistance in education, outreach and codes of conduct and thus in awareness-raising throughout the scientific communities and the wider public within each State Party.

APPENDIX I

THE BIOLOGICAL AND TOXIN WEAPONS CONVENTION

Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction.

Signed at London, Moscow and Washington on 10 April 1972.

Entered into force on 26 March 1975

Depositaries: U.K., U.S. and Soviet Union [succeeded in December 1991 by the Russian Federation].

The States Parties to this Convention,

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

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

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

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

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

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

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

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

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

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

Have agreed as follows:

Article I

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

- (1) Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;
- (2) Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

Article II

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

Article III

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

Article IV

Each State Party to this Convention shall, in accordance with its constitutional processes, take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of the agents, toxins, weapons, equipment and means of delivery

specified in article I of the Convention, within the territory of such State, under its jurisdiction or under its control anywhere.

Article V

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

Article VI

(1) Any State Party to this convention which finds that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all possible evidence confirming its validity, as well as a request for its consideration by the Security Council.

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

Article VII

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

Article VIII

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

Article IX

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

Article X

(1) The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological(biological) agents and toxins for peaceful purposes. Parties to the Convention in a position to do so shall also cooperate in contributing individually or together with other States or international organizations to the further development and application of scientific discoveries in the field of bacteriology(biology) for prevention of disease, or for other peaceful purposes.

(2) This Convention shall be implemented in a manner designed to avoid hampering the economic or technological development of States Parties to the Convention or international cooperation in the field of peaceful bacteriological (biological)activities, including the international exchange of bacteriological (biological)and toxins and equipment for the processing, use or production of bacteriological(biological) agents and toxins for peaceful purposes in accordance with the provisions of the Convention.

Article XI

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

Article XII

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

Article XIII

(1) This Convention shall be of unlimited duration.

(2) Each State Party to this Convention shall in exercising its national sovereignty have the right to withdraw from the Convention if it decides that extraordinary events, related to the subject matter of the Convention, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other States Parties to the Convention and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

Article XIV

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

(2) This Convention shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.

(3) This Convention shall enter into force after the deposit of instruments of ratification by twenty-two Governments, including the Governments designated as Depositaries of the Convention.

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

(5) The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession and the date of entry into force of this Convention, and of the receipt of other notices.

(6) This Convention shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article XV

This Convention, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of the Convention shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding states.

APPENDIX II

PART II: FINAL DECLARATION AND PART III: DECISIONS AND RECOMMENDATIONS OF THE FINAL DOCUMENT OF THE SIXTH REVIEW CONFERENCE, 2006

Final Document BWC/CONF.VI/6

Part II. Final Declaration

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, WHICH MET IN GENEVA FROM 20 NOVEMBER TO 8 DECEMBER 2006 TO REVIEW THE OPERATION OF THE CONVENTION, SOLEMNLY DECLARE:

- (i) Their conviction that the Convention is essential for international peace and security;
- (ii) Their determination also to act with a view to achieving effective progress towards general and complete disarmament under strict and effective international control including the prohibition and elimination of all weapons of mass destruction and their conviction that the prohibition of the development, production and stockpiling of bacteriological (biological) weapons and their elimination, will facilitate the achievement of this goal;
- (iii) Their reaffirmation of their firm commitment to the purposes of the Preamble and all the provisions of the Convention;
- (iv) Their determination to comply with all their obligations undertaken pursuant to the Convention and their recognition that States Parties not in compliance with their Convention obligations pose fundamental challenges to the Convention's viability, as would use of bacteriological (biological) weapons by anyone at any time;
- (v) Their continued determination, for the sake of humankind, to exclude completely the possibility of the use of bacteriological (biological) weapons, and their conviction that such use would be repugnant to the conscience of humankind;
- (vi) Their reaffirmation that under any circumstances the use, development, production and stockpiling of bacteriological (biological) and toxin weapons is

effectively prohibited under Article I of the Convention;

(vii) Their conviction that terrorism in all its forms and manifestations and whatever its motivation, is abhorrent and unacceptable to the international community, and that terrorists must be prevented from developing, producing, stockpiling, or otherwise acquiring or retaining, and using under any circumstances, biological agents and toxins, equipment, or means of delivery of agents or toxins, for nonpeaceful purposes, and their recognition of the contribution of full and effective implementation of United Nations Security Council Resolution 1540 by all states to assist in achieving the objectives of this Convention;

(viii) Their conviction that the full implementation of all the provisions of the Convention should facilitate economic and technological development and international cooperation in the field of peaceful biological activities;

(ix) Their reiteration that the effective contribution of the Convention to international peace and security will be enhanced through universal adherence to the Convention, and their call on signatories to ratify and other states not party to accede to the Convention without delay;

(x) Their recognition that achieving the objectives of the Convention will be more effectively realized through greater public awareness of its contribution, and through collaboration with relevant regional and international organizations, in keeping within their respective mandates, and their commitment to promote this;

(xi) Their recognition of their consideration of the issues identified in reviewing the operation of the Convention as provided for in Article XII, as well as their consensus on the follow-up actions contained herein.

Article I

1. The Conference reaffirms the importance of Article I, as it defines the scope of the Convention. The Conference declares that the Convention is comprehensive in its scope and that all naturally or artificially created or altered microbial and other biological agents and toxins, as well as their components, regardless of their origin and method of production and whether they affect humans, animals or plants, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes, are unequivocally covered by Article I.

2. The Conference reaffirms that Article I applies to all scientific and technological developments in the life sciences and in other fields of science relevant to the Convention.

3. The Conference reaffirms that the use by the States Parties, in any way and under any circumstances, of microbial or other biological agents or toxins, that is not consistent with prophylactic, protective or other peaceful purposes, is effectively a violation of Article I. The Conference reaffirms the undertaking in Article I never in any circumstances to develop, produce, stockpile or otherwise acquire or retain weapons, equipment, or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict in order to exclude completely and forever the possibility of their use. The Conference affirms the determination of States Parties to condemn any use of biological agents or toxins for other than peaceful purposes, by anyone at any time.

4. The Conference notes that experimentation involving open-air release of pathogens or toxins harmful to humans, animals and plants that have no justification for prophylactic, protective or other peaceful purposes is inconsistent with the undertakings contained in Article I.

Article II

5. The Conference reaffirms for any state ratifying or acceding to the Convention, the destruction or diversion to peaceful purposes specified in Article II would be completed upon accession to, or upon ratification of, the Convention.

6. The Conference emphasises that states must take all necessary safety and security provisions to protect populations and the environment when carrying out such destruction and/or diversion. The Conference also stresses that these States Parties should provide appropriate information to all States Parties via the exchange of information (confidence-building measures form F).

7. The Conference welcomes statements made by States Parties, and newly acceding and ratifying States Parties, that they do not possess agents, toxins, weapons, equipment or means of delivery as prohibited by Article I of the Convention.

Article III

8. The Conference reaffirms that Article III is sufficiently comprehensive to cover any recipient whatsoever at the international, national or sub-national levels. The Conference calls for appropriate measures, including effective national export controls, by all States Parties to implement this Article, in order to ensure that direct and indirect transfers relevant to the Convention, to any recipient whatsoever, are authorized only when the intended use is for purposes not prohibited under the Convention.

9. The Conference calls for appropriate measures by all States Parties to ensure that biological agents and toxins relevant to the Convention are protected and safeguarded, including through measures to control access to and handling of such agents and toxins;

10. The Conference reiterates that States Parties should not use the provisions of this Article to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials under Article X.

Article IV

11. The Conference reaffirms the commitment of States Parties to take the necessary national measures under this Article. The Conference also reaffirms that the enactment and implementation of necessary national measures under this Article would strengthen the effectiveness of the Convention. In this context, the Conference calls upon States Parties to adopt, in accordance with their constitutional processes, legislative, administrative, judicial and other measures, including penal legislation, designed to:

- (i) enhance domestic implementation of the Convention and ensure the prohibition and prevention of the development, production, stockpiling, acquisition or retention of

the agents, toxins, weapons, equipments and means of delivery as specified in Article I of the Convention;

(ii) apply within their territory, under their jurisdiction or under their control anywhere and apply, if constitutionally possible and in conformity with international law, to actions taken anywhere by natural or legal persons possessing their nationality;

(iii) ensure the safety and security of microbial or other biological agents or toxins in laboratories, facilities, and during transportation, to prevent unauthorized access to and removal of such agents or toxins.

12. The Conference welcomes those measures taken by States Parties in this regard, and reiterates its call to any State Party that has not yet taken any necessary measures to do so without delay. The Conference encourages States Parties to provide appropriate information on any such measures they have taken, as well as any other useful information on their implementation, to the United Nations Department for Disarmament Affairs.

13. The Conference reaffirms the commitment of States Parties to take the necessary national measures to strengthen methods and capacities for surveillance and detection of outbreaks of disease at the national, regional and international levels.

14. The Conference urges the inclusion in medical, scientific and military educational materials and programmes of information on the Convention and the 1925 Geneva Protocol. The Conference urges States Parties to promote the development of training and education programmes for those granted access to biological agents and toxins relevant to the Convention and for those with the knowledge or capacity to modify such agents and toxins, in order to raise awareness of the risks, as well as of the obligations of States Parties under the Convention.

15. The Conference encourages States Parties to take necessary measures to promote awareness amongst relevant professionals of the need to report activities conducted within their territory or under their jurisdiction or under their control that could constitute a violation of the Convention or related national criminal law. In this context, the Conference recognises the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and calls upon States Parties to support and encourage their development, promulgation and adoption.

16. The Conference urges States Parties with relevant experience in legal and administrative measures for the implementation of the provisions of the Convention, to provide assistance on request to other States Parties. The Conference also encourages such initiatives on a regional basis.

17. The Conference recalls United Nations Security Council Resolution 1540 (2004) that places obligations on all states and is consistent with the provisions of the Convention. The Conference notes that Resolution 1540 affirms support for the multilateral treaties whose aim is to eliminate or prevent proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability. The Conference also notes that information provided to the United Nations by states in accordance with Resolution 1540 may provide a useful resource for States Parties in fulfilling their obligations under this Article.

18. The Conference encourages States Parties to designate a national focal point for coordinating national implementation of the Convention and communicating with other States Parties and relevant international organizations.

19. The Conference reaffirms that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the Convention.

Article V

20. The Conference reaffirms that:

(i) this article provides an appropriate framework for States Parties to consult and cooperate with one another to resolve any problem and to make any request for clarification which may have arisen in relation to the objective of, or in the application of, the provisions of, the Convention;

(ii) any State Party which identifies such a problem should, as a rule, use this framework to address and resolve it;

(iii) States Parties should provide a specific, timely response to any compliance concern alleging a breach of their obligations under the Convention.

21. The Conference reaffirms that the consultation procedures agreed at the Second and Third Review Conferences remain valid to be used by States Parties for consultation and cooperation pursuant to this Article. The Conference reaffirms that such consultation and cooperation may also be undertaken bilaterally and multilaterally, or through other appropriate international procedures within the framework of the United Nations and in accordance with its Charter.

22. The Conference stresses the need for all States Parties to deal effectively with compliance issues. In this connection, the States Parties had agreed to provide a specific, timely response to any compliance concern alleging a breach of their obligations under the Convention. Such responses should be submitted in accordance with the procedures agreed upon by the Second Review Conference and further developed by the Third Review Conference. The Conference reiterates its request that information on such efforts be provided to the Review Conferences.

23. The Conference emphasises the importance of the exchange of information among States Parties through the confidence-building measures (CBMs) agreed at the Second and Third Review Conferences. The Conference welcomes the exchange of information carried out under these measures, and notes that this has contributed to enhancing transparency and building confidence.

24. The Conference notes that only a limited number of States Parties make an annual CBM submission. The Conference recognises the urgent need to increase the number of States Parties participating in CBMs. In this regard, the Conference also recognises the technical difficulties experienced by some States Parties in completing full and timely declarations. In order to update the mechanism of transmission of information, the Conference has agreed on several measures. [See Part III: Decisions and Recommendations]

25. The Conference reaffirms that the data submitted in the framework of the annual exchange of information should be provided to the United Nations Department for

Disarmament Affairs and promptly forwarded by it to all States Parties according to existing modalities. The information supplied by a State Party must not be further circulated or made available without the express permission of that State Party.

Article VI

26. The Conference notes that the provisions of this Article have not been invoked.

27. The Conference emphasizes the provision of Article VI that such a complaint should include all possible evidence confirming its validity. It stresses that, as in the case of the implementation of all the provisions and procedures set forth in the Convention, the procedures foreseen in Article VI should be implemented in good faith within the scope of the Convention.

28. The Conference invites the Security Council:

(i) to consider immediately any complaint lodged under this Article and to initiate any measures it considers necessary for the investigation of the complaint in accordance with the Charter;

(ii) to request, if it deems necessary and in accordance with its resolution 620 of 1988, the United Nations Secretary-General to investigate the allegation of use, using the technical guidelines and procedures contained in Annex I of United Nations Document A/44/561;

(iii) to inform each State Party of the results of any investigation initiated under this Article and to consider promptly any appropriate further action which may be necessary.

29. The Conference reaffirms the agreement of States Parties to consult, at the request of any States Party, regarding allegations of use or threat of use of biological or toxin weapons. The Conference reaffirms the undertaking of each State Party to cooperate in carrying out any investigations which the Security Council initiates.

30. The Conference notes that the Secretary-General's investigation mechanism, set out in A/44/561 and endorsed by the General Assembly in its resolution 45/57, represents an international institutional mechanism for investigating cases of alleged use of biological or toxin weapons. The Conference notes in this regard General Assembly resolution 60/288 (2006).

31. The Conference notes that the procedure outlined in this Article is without prejudice to the prerogative of the States Parties to consider jointly the cases of alleged non-compliance with the provisions of the Convention and to make appropriate decisions in accordance with the Charter of the United Nations and applicable rules of international law.

Article VII

32. The Conference notes with satisfaction that these provisions have not been invoked.

33. The Conference takes note of desires expressed that, should a request for assistance be made, it be promptly considered and an appropriate response provided. In this context,

pending consideration of a decision by the Security Council, timely emergency assistance could be provided by States Parties if requested.

34. The Conference considers that in the event that this Article might be invoked, the United Nations could play a coordinating role in providing assistance, with the help of States Parties as well as the appropriate intergovernmental organizations such as the World Health Organization (WHO), the World Organisation for Animal Health (OIE), the Food and Agricultural Organization of the United Nations (FAO), and the International Plant Protection Convention (IPPC).

35. The Conference notes that State Parties' national preparedness contributes to international capabilities for response, investigation and mitigation of outbreaks of disease, including those due to alleged use of biological or toxin weapons.

36. The Conference takes note of the proposal that States Parties may need to discuss the detailed procedure for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons.

37. The Conference reaffirms the undertaking of States Parties to provide or support assistance to any State Party which so requests, if the Security Council decides that such State Party has been exposed to danger as a result of a violation of the Convention.

38. The Conference takes note of the willingness of States Parties, where appropriate, to provide or support assistance to any State Party which so requests, when that State Party has been exposed to danger or damage as a result of the use of bacteriological (biological) agents and toxins as weapons by anyone other than a State Party.

Article VIII

39. The Conference appeals to all States Parties to the 1925 Geneva Protocol to fulfill their obligations assumed under that Protocol and urges all states not yet party to the Protocol to ratify or accede to it without delay.

40. The Conference acknowledges that the 1925 Geneva Protocol, which prohibits the use in war of asphyxiating, poisonous or other gases, and of bacteriological methods of warfare, and the Convention complement each other. The Conference reaffirms that nothing contained in the Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any state under the 1925 Geneva Protocol.

41. The Conference stresses the importance of the withdrawal of all reservations to the 1925 Geneva Protocol related to the Convention.

42. The Conference welcomes the actions which States Parties have taken to withdraw their reservations to the 1925 Geneva Protocol related to the Convention, and calls upon those 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.

43. The Conference notes that reservations concerning retaliation, through the use of any of the objects prohibited by the 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.

Article IX

44. The Conference reaffirms that this Article identifies the recognized objective of the effective prohibition of chemical weapons.

45. The Conference welcomes the fact that the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction entered into force on 29 April 1997 and that 181 instruments of ratification or accession have now been deposited with the United Nations. The Conference calls upon all states that have not yet done so to accede to that Convention without delay.

Article X

46. The Conference stresses the importance of implementation of this Article and recalls that the States Parties have a legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.

47. The Conference reaffirms the commitment to the full and comprehensive implementation of this Article by all States Parties. The Conference recognises that while recent scientific and technological developments in the field of biotechnology would increase the potential for cooperation among States Parties and thereby strengthen the Convention, they could also increase the potential for the misuse of both science and technology. Therefore, the Conference urges all States Parties possessing advanced biotechnology to adopt positive measures to promote technology transfer and international cooperation on an equal and non-discriminatory basis, particularly with countries less advanced in this field, while promoting the basic objectives of the Convention, as well as ensuring that the promulgation of science and technology is fully consistent with the peaceful object and purpose of the Convention.

48. The Conference reaffirms that existing institutional ways and means of ensuring multilateral cooperation among all States Parties need to be developed further in order to promote international cooperation for peaceful uses in areas relevant to the Convention, including such areas as medicine, public health, agriculture and the environment.

49. The Conference calls for the use of the existing institutional means within the United Nations system and other international organizations, in accordance with their respective mandates, to promote the objectives of this Article. In this regard the Conference urges States Parties, the United Nations and its specialized agencies to take further specific measures within their competence for the promotion of the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and of international cooperation in this field.

50. The Conference also recognises that there should be efficient coordination mechanisms between the specialized agencies of the United Nations system and international and regional organizations, in order to facilitate scientific cooperation and technology transfer.

51. The Conference emphasises that in the interest of facilitating the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxin agents for peaceful purposes, States Parties should not use the provisions of the Convention to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials.

52. The Conference recognises the need to effectively implement national measures in order to further implementation of Article X. In this regard, the Conference urges States Parties to undertake to review their national regulations governing international exchanges and transfers in order to ensure their consistency with the objectives and provisions of all the articles of the Convention.

53. The Conference urges States Parties to develop frameworks for disease surveillance in humans, animals and plants, and to support programmes for effective responses at the national, bilateral, regional and multilateral levels, including through the conclusion of appropriate agreements that would promote the regular exchange of scientific and technical information in these fields.

54. The Conference encourages States Parties to provide appropriate information on how this Article is being implemented to the United Nations Department for Disarmament Affairs, and requests the Department to collate such information for the information of States Parties.

55. The Conference:

(i) encourages the States Parties to continue strengthening existing international organizations and networks working on infectious diseases, in particular those of the WHO, FAO, OIE and IPPC, within their respective mandates;

(ii) notes that the role of these organizations is limited to the epidemiological and public/animal/plant health aspects of any disease outbreak, but recognises the added value of information exchange with them;

(iii) encourages States Parties to improve communication on disease surveillance at all levels, including between States Parties and with the WHO, FAO, OIE and IPPC;

(iv) calls upon States Parties to continue establishing and/or improving national and regional capabilities to survey, detect, diagnose and combat infectious diseases as well as other possible biological threats and integrate these efforts into national and/or regional emergency and disaster management plans;

(v) urges States Parties in a position to do so to continue supporting, directly as well as through international organizations, capacity-building in States Parties in need of assistance in the fields of disease surveillance, detection, diagnosis and combating of infectious diseases and related research;

(vi) calls upon States Parties to promote the development and production of vaccines and drugs to treat infectious disease through international cooperation and, as appropriate, public-private partnerships.

56. The Conference recognises the important role of the private sector in the transfer of technology and information and the wide range of organizations within the United Nations system that are already engaged in international cooperation relevant to this Convention.

Article XI

57. The Conference notes that the Islamic Republic of Iran has formally presented a proposal to amend Article I and the title of the Convention to include explicitly the prohibition of the use of biological weapons.

58. The Conference takes note of the statement by the Government of the Russian Federation as a Depositary that it has notified all States Parties of the proposal by the Islamic Republic of Iran to amend the Convention. The Conference encourages all States Parties to convey their views to the Depositaries on the proposal by the Islamic Republic of Iran.

59. The Conference reaffirms that the provisions of this Article should in principle be implemented in such a way as not to affect the universality of the Convention.

Article XII

60. The Conference reaffirms that Review Conferences constitute an effective method of reviewing the operation of the Convention with a view to assuring that the purposes of the Preamble and the provisions of the Convention are being realized. The Conference therefore recommends that Review Conferences should continue to be held at least every five years.

61. The Conference decides that the Seventh Review Conference shall be held in Geneva not later than 2011 and should review the operation of the Convention, taking into account, inter alia:

- (i) new scientific and technological developments relevant to the Convention;
- (ii) the progress made by States Parties on the implementation of the obligations under the Convention;
- (iii) progress of the implementation of the decisions and recommendations agreed upon at the Sixth Review Conference.

Article XIII

62. The Conference reaffirms that the Convention is of unlimited duration and applies at all times, and expresses its satisfaction that no State Party has exercised its right to withdraw from the Convention.

Article XIV

63. The Conference notes with satisfaction that eleven states have acceded to or ratified the Convention since the Fifth Review Conference.

64. The Conference calls upon signatories to ratify the Convention, and upon those states which have not signed the Convention to accede to it without delay, thus contributing to the achievement of universal adherence to the Convention.

65. The Conference encourages States Parties to take action to persuade non-parties to accede to the Convention without delay, and particularly welcomes regional initiatives that would lead to wider accession to the Convention.

Article XV

66. The Conference decides that as well as the five languages listed in this Article, Arabic shall be considered an official language for the purposes of any meetings of the States Parties and other formal communications concerning the operation of the Convention.

Part III. Decisions and Recommendations

Work of the 2003-2005 Meetings of States Parties

1. In accordance with the decision taken by the resumed session of the Fifth Review Conference, these Meetings of States Parties of one week duration were held each year, commencing in 2003, to discuss, and promote common understanding and effective action on five specified topics. Each Meeting of States Parties was prepared by a two-week Meeting of Experts. The five topics were:

- (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, animals, and plants;
- (v) the content, promulgation, and adoption of codes of conduct for scientists.

2. The Conference notes that the Meetings of States Parties and Meetings of Experts functioned as an important forum for exchange of national experiences and in-depth deliberations among States Parties. The Meetings of the States Parties engendered greater common understanding on steps to be taken to further strengthen the implementation of the Convention.

3. The Conference notes the contribution by the WHO, FAO, OIE and other relevant international organizations, as well as scientific and academic institutions and non-governmental organizations, to the Meetings of States Parties and Meetings of Experts.

4. The Conference endorses the consensus outcome documents from the Meetings of States Parties (BWC/MSP/2003/4, BWC/MSP/2004/3 and BWC/MSP/2005/3).

Implementation Support Unit

5. Taking into account the importance of providing administrative support to meetings agreed by the Review Conference as well as comprehensive implementation and universalization of the Convention and the exchange of confidence-building measures, the Conference decides that an "Implementation Support Unit" (ISU) shall be established and will consist of three full time staff members within the Geneva Branch of the United Nations Department for Disarmament Affairs, funded by States Parties for the period from 2007-2011, to perform the following tasks:

A. Administrative support:

- (i) Providing administrative support to and preparing documentation for meetings agreed by the Review Conference;
- (ii) Facilitating communication among States Parties and, upon request, with international organizations;
- (iii) Facilitating, upon request, States Parties' contacts with scientific and academic institutions, as well as non-governmental organizations;
- (iv) Serving as a focal point for submission of information by and to States Parties related to the Convention;
- (v) Supporting, as appropriate, the implementation by the States Parties of the decisions and recommendations of this Review Conference.

B. Confidence Building Measures:

- (i) Receiving and distributing confidence-building measures (CBMs) to/from States Parties;
- (ii) Sending information notices to States Parties regarding their annual submissions;
- (iii) Compiling and distributing data on CBMs and informing on participation at each Meeting of States Parties;
- (iv) Developing and maintaining a secure website on CBMs to be accessible only to States Parties;
- (v) Serving as an information exchange point for assistance related to preparation of CBMs;
- (vi) Facilitating activities to promote participation in the CBM process, as agreed by the States Parties.

6. The Unit's mandate will be limited to the above-mentioned tasks. The Unit will submit a concise annual written report to all States Parties on its activities to implement this mandate. The Unit's performance will be evaluated and its mandate will be reviewed by States Parties at the Seventh Review Conference.

Intersessional Programme 2007-2010

7. The Conference decides:

(a) To hold four annual meetings of the States Parties of one week duration each year commencing in 2007, prior to the Seventh Review Conference, to be held not later than the end of 2011, to discuss, and promote common understanding and effective action on:

(i) Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.

(ii) Regional and sub-regional cooperation on implementation of the Convention.

(iii) National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.

(iv) Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

(v) With a view to enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, promoting capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases: (1) for States Parties in need of assistance, identifying requirements and requests for capacity enhancement; and (2) from States Parties in a position to do so, and international organizations, opportunities for providing assistance related to these fields.

(vi) Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.

(b) Each meeting of the States Parties will be prepared by a one week meeting of experts. The topics for consideration at each annual meeting of States Parties will be as follows: items (i) and (ii) will be considered in 2007; items (iii) and (iv) in 2008; item (v) in 2009; and item (vi) in 2010. The first meeting will be chaired by a representative of the Group of the Non-Aligned Movement and Other States, the second by a representative of the Eastern European Group, the third by a representative of the Western Group, and the fourth by a representative of the Group of the Non-Aligned Movement and Other States.

- (c) The meetings of experts will prepare factual reports describing their work.
- (d) All meetings, both of experts and of States Parties, will reach any conclusions or results by consensus.
- (e) The Seventh Review Conference will consider the work and outcome of these meetings and decide on any further action.

Confidence-building Measures

8. The Conference notes that the review of Article V of the Convention has shown the need for enhancing participation of States Parties in the confidence-building measures (CBM) process. The Conference therefore decides that:

- (i) The Implementation Support Unit (ISU) within the United Nations Department for Disarmament Affairs, with the assistance of interested States Parties, shall develop an electronic format of the existing CBM forms.
- (ii) Once completed, the electronic forms shall, with the consent of the State Party submitting them, be posted on a secure Internet site and made available for the use of States Parties, to be developed under the auspices of the ISU. The information thus supplied by a State Party must not be circulated further without the express permission of that State Party.
- (iii) States Parties are invited to submit forms using the electronic format. States Parties that wish to submit completed paper forms instead of electronic forms may do so. The ISU shall insert the submitted hard copy data in the secure Internet site with the consent of the State Party providing this data in order to make it electronically available to all States Parties.
- (iv) The ISU shall centralize requests and offers of assistance regarding the submission of CBMs.
- (v) The ISU shall regularly inform States Parties about CBM returns and provide statistics on the level of participation at the annual meetings of States Parties.
- (vi) States Parties shall designate a national point of contact in charge of preparing the submission of CBMs, the contact details of which shall be sent to the ISU.
- (vii) The ISU shall circulate to points of contact a notice informing States Parties of the deadline for submitting information under the information exchange procedure (15 April) at least three months prior to this deadline.

9. Furthermore, the Conference reviewed the implementation of the CBMs during its session and agrees that the issue merits further and comprehensive attention at the Seventh Review Conference.

Promotion of Universalization

10. The Conference notes that although the Convention is a cornerstone of international security, with only 155 States Parties, membership of the Convention falls behind other major

multilateral arms control, disarmament and non-proliferation treaties. The Conference agrees that a concerted effort by States Parties is needed to persuade states not party to join the Convention.

11. The Sixth Review Conference calls upon signatories to ratify the Convention and other states not party to accede to it without delay. The States Parties reaffirm their commitment to ensuring the universalization of the Convention. To this end, the Conference:

(a) Requests States Parties to:

(i) promote universalization of the Convention through bilateral contacts with states not party;

(ii) promote universalization of the Convention through regional and multilateral fora and activities;

(iii) inform the Implementation Support Unit (ISU) of their designated national point of contact for facilitating information exchange of universalization efforts;

(iv) report, as appropriate, on their activities at annual meetings of States Parties;

(v) provide, as appropriate, the ISU with relevant information on activities related to the promotion of universalization of the Convention;

(b) Agrees that the Chairs of Meetings of States Parties shall coordinate universalization activities, address states not party to the Convention, provide an annual report on universalization activities at Meetings of States Parties, and provide a progress report to the Seventh Review Conference, bearing in mind the primary responsibility of the States Parties on the implementation of this decision.

(c) Tasks the Implementation Support Unit to:

(i) support the Chairs of Meetings of States Parties in the implementation of this decision;

(ii) support States Parties by maintaining a list of national points of contact;

(iii) consolidate and make available information on progress made by states not party towards ratification.

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