REPORT FROM GENEVA: THE BIOLOGICAL WEAPONS CONVENTION MEETING OF EXPERTS JULY 2012

Graham S. Pearson in conjunction with Nicholas A. Sims

September 2012

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Graham S. Pearson⁺ in conjunction with Nicholas A. Sims⁺⁺

Introduction

As recorded in *Review 35* (March 2012), the Seventh Review Conference of the Biological and Toxin Weapons Convention (BWC) held in Geneva from Monday 5 December to Thursday 22 December 2011 agreed an Intersessional Programme for 2012-2015. *Part III: Decisions and Recommendations* of the *Final Document* of the Seventh Review Conference stated that:

The Conference decides that the following topics shall be Standing Agenda Items, which will be addressed at meetings of both the Meeting of Experts and Meeting of States Parties in every year from 2012–2015:

- (a) Cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X;
- (b) Review of developments in the field of science and technology related to the Convention;
- (c) Strengthening national implementation.
- 9. The Conference decides that the following other items will be discussed during the intersessional programme in the years indicated:
 - (a) How to enable fuller participation in the CBMs (2012 and 2013);

It was also agreed at the Seventh Review Conference that the Meetings in 2012 should be chaired by the Non-Aligned Movement and Other States Group and as recorded in *Review 35* (March 2012) it was announced at the Seventh Review Conference in December 2011 that Ambassador Idriss Jazaïry of Algeria, would be the Chairman for the Meeting of Experts on 16 to 20 July 2012 and for the Meeting of States Parties on 10 to 14 December 2012.

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Ambassador Idriss Jazaïry of Algeria wrote to the States Parties on 27 February 2012 to outline his plans for the Meeting of Experts and the Meeting of States Parties in 2012. He listed the three Standing Agenda items, the topic to be considered in 2012 and 2013 and recalled that the Meeting of States Parties would also consider, on an annual basis, progress towards universalization and the annual reports of the Implementation Support Unit. He pointed out that Our first challenge is to develop a strategy and a draft programme of work that would allow us to deal effectively with this broad range of topics in the very limited time available at the Meeting of Experts ... He also said that he looked forward to working with the Vice-Chairmen to be nominated by the Group of Eastern European States and the Western Group respectively.

Some two weeks later, on 15 March 2012, Ambassador Idriss Jazaïry of Algeria wrote to the States Parties to say that regrettably he would be unable to continue as Chairman of these meetings as his term as Permanent Representative to the United Nations in Geneva would conclude on 31 March 2012. He proposed that in order to minimize any disruption to the preparations for the Meeting of Experts steps should be taken as had been done in similar circumstances in 2010. He said that he would ask the Group of the Non-Aligned Movement and Other States to endorse the nomination of his successor as Ambassador of Algeria, Ambassador Boujemâa Delmi.

On 23 March 2012, the Head of the Implementation Support Unit, Richard Lennane, wrote to the States Parties to say that the Group of the Non-aligned Movement and Other States had nominated the incoming Permanent Representative of Algeria, Ambassador Boujemâa Delmi, as Chairman of the Meeting of Experts and Meeting of States Parties, in place of Ambassador Jazairy. He also advised that the Eastern European Group had nominated Dr. Cezary Lusinski of Poland as one Vice-chair and that the Western Group had nominated Ambassador Alexandre Fasel of Switzerland as the other Vice-chair. He asked for any objections to be received by Friday 30 March 2012. He added that If no State Party has objected by this date, I will notify all States Parties that the appointments are officially confirmed with effect from **Monday 2 April 2012**.

In a further letter of 13 April 2012, Richard Lennane wrote to States Parties to say that that, since no objection to the nominations had been received, the following appointments are officially confirmed, with effect from 2 April 2012:

Chairman: Ambassador Boujemâa Delmi (Algeria)

Vice-chair: Dr. Cezary Lusinski (Poland)

Vice-chair: Ambassador Alexandre Fasel (Switzerland)

Some six weeks later, on 1 June 2012, Ambassador Boujemâa Delmi wrote to States Parties to say that he intended to continue along the lines set out by his predecessor, Ambassador Jazaïry, in his letter of 27 February. He said that his first priority was to prepare an agenda and programme of work for the meeting that will allow us to deal effectively and efficiently with the large range of topics in the very limited time available. In consultation with the Vice-chairs, and taking into account the views expressed by delegations over the past months, he had prepared a provisional agenda and programme of work. He said that:

The programme of work is where I have attempted to provide some guidance on how and when the various sub-items will be considered. You will note that not every sub-item is included: my proposal is to focus on the included sub-items this year, and then focus on the remaining ones next year. We could then perhaps repeat this alternation for 2014 and 2015, if it proves satisfactory. Some sub-items will by their nature need to be considered every year:

He stressed that the programme was only indicative and was intended to help delegations prepare their participation, structure our discussions, and make the best use of our time to deal efficiently with the topics. States Parties will be free to raise any item on the agenda, and it is certainly not my intention to exclude any issue that any State Party considers important.

The letter of 1 June 2012 proposed a possible division of Standing Agenda sub-items as follows:

Cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X

Every year:

(a) reports by States Parties on their implementation of Article X, and reports by the ISU on the operation of the database system to facilitate assistance requests and offers;

(d) ways and means to target and mobilize resources, including financial resources, to address gaps and needs for assistance and cooperation, in particular from developed to developing States Parties, and from international and regional organizations and other relevant stakeholders:

(g) coordination of cooperation with other relevant international and regional organizations, and other relevant stakeholders.

2012 (and 2014):

(b) challenges and obstacles to developing international cooperation, assistance and exchange in the biological sciences and technology, including equipment and material, for peaceful purposes to their full potential, and possible means of overcoming these;

(f) capacity-building, through international cooperation, in biosafety and biosecurity, and for detecting, reporting, and responding to outbreaks of infectious disease or biological weapons attacks, including in the areas of preparedness, response, and crisis management and mitigation;

2013 (and 2015):

(c) a range of specific measures for the full and comprehensive implementation of Article X taking into account all of its provisions, including facilitation of cooperation and assistance, including in terms of equipment, materials and scientific and technological information for peaceful purposes, and identification of critical gaps and needs in these areas;

(e) education, training, exchange and twinning programmes and other means of developing human resources in the biological sciences and technology relevant to the implementation of the Convention, particularly in developing countries;

Review of developments in the field of science and technology related to the Convention

Every year:

(a) new science and technology developments that have potential for uses contrary to the provisions of the Convention;

(b) new science and technology developments that have potential benefits for the Convention, including those of special relevance to disease surveillance, diagnosis and mitigation;

(f) science- and technology-related developments relevant to the activities of multilateral organizations such as the WHO, OIE, FAO, IPPC and OPCW;

(g) any other science and technology developments of relevance to the Convention.

2012:

Advances in enabling technologies, including high-throughput systems for sequencing, synthesizing and analyzing DNA; bioinformatics and computational tools; and systems biology.

(c) possible measures for strengthening national biological risk management, as appropriate, in research and development involving new science and technology developments of relevance to the Convention;

2013:

Advances in technologies for surveillance, detection, diagnosis and mitigation of infectious diseases, and similar occurrences caused by toxins in humans, animals and plants.

- (d) voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry;
- (e) education and awareness-raising about risks and benefits of life sciences and biotechnology.

2014:

Advances in the understanding of pathogenicity, virulence, toxicology, immunology and related issues

(c) possible measures for strengthening national biological risk management, as appropriate, in research and development involving new science and technology developments of relevance to the Convention;

2015:

Advances in production, dispersal and delivery technologies of biological agents and toxins.

(d) voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry;

(e) education and awareness-raising about risks and benefits of life sciences and biotechnology.

Strengthening national implementation

Every year:

(b) ways and means to enhance national implementation, sharing best practices and experiences, including the voluntary exchange of information among States Parties on their national implementation, enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions;

2012 (and 2014)

- (a) a range of specific measures for the full and comprehensive implementation of the Convention, especially Articles III and IV;
- (c) regional and sub-regional cooperation that can assist national implementation of the Convention;

2013 (and 2015)

- (d) national, regional and international measures to improve laboratory biosafety and security of pathogens and toxins;
- (e) any potential further measures, as appropriate, relevant for implementation of the Convention.

Commentary

Whilst the aim of spreading the topics across the Intersessional Period was recognized and appeared reasonable for the Standing Agenda item on cooperation and assistance and for the Standing Agenda item on national implementation, the proposals for the Standing Agenda item on science and technology were more problematic as there is a fundamental difference in regard to the Standing Agenda item on science and technology.

Careful examination of how this Standing Agenda item was created at the Seventh Review Conference shows that the intention was that the seven topics listed in paragraph 22 of Part III: Decisions and Recommendations of the Final Document of the Seventh Review Conference are to be addressed should there be a **new** science and technology development – and it is this that is addressed by the Standing Agenda item. Ambassador Delmi's letter of 1

June 2012 noted that the Implementation Support Unit would be preparing two background papers related to the standing agenda item on science and technology: one on advances in enabling technologies, and the other on the recent H5N1 avian influenza transmissibility research and the controversy surrounding its publication. The H5N1 avian influenza transmissibility topic is a good example of a **new** development that should indeed be addressed by the Standing Agenda item on science and technology – and it would be illogical to argue that any implications from H5N1 relating to either

(d) voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry;

or

(e) education and awareness-raising about risks and benefits of life sciences and biotechnology.

should not be addressed in 2012. Consequently to deal efficiently with the topic, the inherent flexibility stressed by the Chairman's letter ought to enable any of the seven topics listed in paragraph 22 to be addressed in regard to the H5N1 issue.

A similar point arises in regard to the topical scientific subject specified in paragraph 23 of *Part III: Decisions and Recommendations* of the *Final Document* that is to be addressed each year under the Standing Agenda item on science and technology. This topical scientific subject for 2012 is to be:

advances in enabling technologies, including high-throughput systems for sequencing, synthesizing and analyzing DNA; bioinformatics and computational tools; and systems biology (to be considered in 2012);

As with the implications of the H5N1 issue, it would also be illogical to argue that any implications from consideration of the topical scientific subject for 2012 relating to either

(d) voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry;

or

(e) education and awareness-raising about risks and benefits of life sciences and biotechnology.

should not be addressed in 2012. Again, to deal efficiently with the topical scientific subject for 2012 at the 2012 meetings, the inherent flexibility stressed by the Chairman's letter ought to enable any of the seven topics listed in paragraph 22 to be addressed in regard to the topical scientific subject for 2012.

Further Developments

Some three weeks later, on 21 June 2012, Ambassador Boujemâa Delmi wrote again to States Parties to update them on preparations for the Meeting of Experts following a number of bilateral consultations and his consultations with the regional groups in the week of 11 to 15 June 2012. The Chairman in his letter proposed that the programme be slightly amended so that the opening session on the morning of Monday 11 June 2015 would be devoted to the opening formalities, an opportunity for any introductory statements and the traditional informal slot of around one hour for NGO statements.

In addition, in response to requests from delegations, the Chairman added *sub-items* on codes of conduct and education and awareness-raising to the second science and technology session on Wednesday moming. This amendment effectively ensured that all seven of the topics listed in paragraph 22 of Part III: Decisions and Recommendations section of the Final Document could be addressed at MX/2012. This development was welcomed, as it removed the illogicality of apparently only addressing some of the topics listed in paragraph 22 in 2012. However, this development understandably only addressed the situation in 2012; a similar amendment will be required in 2013 and the subsequent years unless the Chairman for 2013 makes the appropriate amendments in his letter to States Parties early in 2013.

Meeting of Experts, 16 to 20 July 2012

The Chairman in his letter of 21 June 2012 also said that he would like to distinguish more clearly between observers and guests of the meeting. He stated that Intergovernmental organizations, such as United Nations organs, WHO, OPCW and INTERPOL, are entitled to participate in the Meeting of Experts as observers.... They do not require an invitation from the Chairman, although he would write to inform them of the meeting. The letter consequently now had, as Attachment 3, a list of some nine Organizations and Experts to be invited by the Chairman as Guests of the Meeting.

Opening Plenary Session

The Meeting of Experts began on Monday 16 July 2012 with Ambassador Boujemâa Delmi in the Chair in a plenary session when he welcomed all those present before turning to procedural matters. In regard to the adoption of the Agenda, he noted that

BWC/MSP/2012/MX/1 (all official papers are available at http://www.opbw.org and at http://www.opbw.org and at http://www.unog.ch/bwc) had been circulated in all languages. This was adopted. The programme of work (BWC/MSP/2010/MX/2/Rev.1) had likewise been circulated and was adopted. The Chairman said that he proposed to adjust the programme as the Meeting progressed.

The Chairman noted that the Implementation Support Unit (ISU) had prepared four background papers (BWC/MSP/2012/MX/INF.1, INF. 2, INF. 3 and INF. 4) to provide background information on the topics being considered. MX/INF.1 is a 3 page document with a 17 page annex entitled Advances in enabling technologies that provides an overview of advances of possible relevance. It expands upon and updates the background information document on new scientific and technological developments relevant to the Convention prepared for the Seventh Review Conference (BWC/CONF.VII/INF.3 and addenda). The annex, in English only, provides a more detailed account with references to the scientific literature. MX/INF.2 is a 11 page document entitled Making avian influenza aerosol-transmissible in mammals that provides an overview of a scientific development of possible relevance in the context of new science and technology developments that have potential for uses contrary to the provisions of the Convention. In 2011, two research papers came to light detailing mechanisms to alter the highly pathogenic avian influenza virus H5N1 to enable aerosol transmission in mammals. Such research both alters the host range and increases the transmissibility of a pathogen - characteristics which are among the indicators that some States Parties may use in assessing "experiments of concern". This paper includes: background on the context of this research; a chronology of events since the research first came to light in September 2011; details of three areas of continuing technical debate; and potentially relevant common understandings reached by States Parties. MX/INF.3 is a 3 page document with a five page annex entitled Science and technology developments that have potential benefits for the Convention. It notes that during regional group consultations in June 2012 States Parties requested a background paper on new science and technology developments that have potential benefits for the Convention, including those of special relevance to disease surveillance, diagnosis and mitigation. This paper provides an overview of advances of possible relevance. It is based on the background information document on new scientific and technological developments relevant to the Convention prepared for the Seventh Review Conference (BWC/CONF.VII/INF.3). The annex, in English only, provides a more detailed account with references to the scientific literature. MX/INF.4 dated 12 July 2012 is an 8 page document entitled International channels for mobilization of resources for assistance and cooperation that provides an overview of possible international channels for mobilization of resources. INF.4 notes that during regional group consultations in June 2012 States Parties requested a background paper to assist them in the Standing Agenda item on cooperation and assistance in considering ways and means to target and mobilize resources, including financial resources, to address gaps and needs for assistance and cooperation, in particular from developed to developing States Parties, and from international and regional organizations and other relevant stakeholders.

The Chairman then moved on to consider the Rules of Procedure noting that in previous intersessional annual meetings, the Rules of Procedure of the Sixth Review Conference had been applied *mutatis mutandis*. He proposed that the meetings in 2012 should operate under the Rules of Procedure of the Seventh Review Conference applied *mutatis mutandis*. He noted that as in previous years a number of individual experts and institutions had been invited to participate as guests of the meeting. They would be able to participate in open sessions but not in closed sessions. Finally, he pointed out that formal accreditation would not be required for the annual meetings; registration would be sufficient. These Rules of Procedure were agreed.

The Chairman then went on to welcome all participants at the Meeting of Experts. He also expressed thanks that some States Parties had provided sponsorship funds that had enabled experts from States Parties to participate who would otherwise have been unable to be present.

The Chairman asked that States Parties limit their statements to 5 minutes and to limit any presentations to 15 minutes. He also said that as at previous Meetings of Experts he proposed to prepare an Annex to the Report of the Meeting listing considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the agenda items under discussion at the Meeting. As at previous Meetings of Experts this Annex would be prepared on his authority and would not be an agreed document.

Eighty-three States Parties to the Convention participated in the Meeting of Experts as follows: Algeria, Argentina, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belarus, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Croatia, Cuba, Cyprus, Czech Republic, Denmark, El Salvador, Estonia, Finland, France, Georgia, Germany, Ghana, Greece, Guatemala, Holy See, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Lao People's Democratic Republic, Libya, Lithuania, Madagascar, Malaysia, Mexico, Morocco, Netherlands, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Qatar, Republic of

Korea, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America and Uruguay. This was six fewer States Parties than the eighty-nine States Parties which had participated at the Meeting of Experts in 2010: seven States Parties participated in 2012 which did not in 2010 – Bosnia and Herzegovina, Costa Rica, El Salvador, Kazakhstan, Kuwait, Philippines and Singapore. 13 which had participated in 2010 did not in 2012 – Armenia, Benin, Burkina Faso, Cambodia, Kyrgyzstan, Lebanon, New Zealand, Panama, Republic of Moldova, Tajikistan, The former Yugoslav Republic of Macedonia, Venezuela (Bolivarian Republic of) and Yemen.

In addition, three states that had signed the Convention but had not yet ratified it participated in the Meeting of Experts: Egypt, Haiti, Myanmar. Two states, Israel and Namibia, neither parties nor signatories to the Convention, participated in the Meeting of Experts as observers. Eight intergovernmental organizations also participated as observers: the European Union, the Food and Agriculture Organization of the United Nations (FAO), the International Committee of the Red Cross (ICRC), the International Criminal Police Organization (INTERPOL), the Organisation for the Prohibition of Chemical Weapons (OPCW), the League of Arab States, the World Health Organization (WHO) and the World Organisation for Animal Health (OIE). In addition, at the invitation of the Chairman, in recognition of the special nature of the topics under consideration at this Meeting and without creating a precedent, six scientific, professional, and academic organizations and experts participated in informal exchanges in the open sessions as quests of the Meeting of Experts: Aston University, Bradford University, IAP the Global Network of Science Academies, International Federation of Pharmaceutical Manufacturers and Associations, International Gene Synthesis Consortium, and Verification Research, Training and Information Centre (VERTIC). This was a similar arrangement to that which had applied at the Meeting of Experts in 2008, 2009 and 2010.

It was also agreed that as at previous meetings, this meeting would be suspended on Monday 16 July at about midday and resume in informal session with the Chairman remaining in the Chair to hear statements from a number of NGOs. Six NGOs made statements. Some twenty-two NGOs attended the meeting either as guests of the meeting or as NGO participants.

There were close to 400 participants at the Meeting of Experts of whom over 320 came from States Parties including over 150 participants from capitals. Total numbers were less than at the Meeting of Experts in 2010 when there were close to 450 participants of whom over 385

came from States Parties including some 200 participants from capitals. The reduced participation at the Meeting of Experts in 2012 probably arose at least in part as it coincided with the UN Conference on the Arms Trade Treaty held at the United Nations in New York from 2 to 27 July 2012.

Introductory Statements

Cuba spoke first on behalf of the Group of the Non-Aligned Movement and Other States Parties saying that they note with satisfaction the successful conclusion of the Seventh Review Conference which in its final document agreed a delicate balance regarding different issues of the BWC and the structure of the 2012-15 intersessional period. We particularly welcome the decision to include cooperation and assistance as one of the standing agenda items, with a particular focus on strengthening Article X implementation, as well as the decisions to establish a database system to facilitate assistance and cooperation among States Parties and to establish a Sponsorship Programme. The statement went on to recall the objective of the 2012-15 intersessional period is to discuss, and promote common understanding and effective action on the identified issues and added that Any decisions for further action on the outcome of the meetings in the intersessional period will be taken by the next Review Conference. After noting that the NAM Group would outline its positions on the Standing Agenda items and the biennial topic later in the week, the statement said that they wished to emphasize two issues. First, a main priority of the Group continues to be the enhancement of international cooperation for the use of biological agents for peaceful purposes, which is also essential for the effective implementation of the Convention. Second, the Group reiterates that the only sustainable method of strengthening the Convention is through multilateral negotiations aimed at concluding a non-discriminatory legally binding agreement, including on verification, dealing with all Articles of the Convention in a balanced and comprehensive manner. The statement concluded by saying that We are confident that the organization of work would preserve the delicate balance reached in the 7th Review Conference outcome and we hope that it will be maintain through the whole inter-sessional program.

[The unog.ch/bwc website shows that Cuba has submitted its CBM in 2012 although this is not available on the public section of the website]

Argentina then spoke saying that they looked forward to the possibility of having topics taken up on a recurrent annual basis as this ensures that there will be a systematic and comprehensive follow up. Consequently, the intersessional period that is starting today, requires all of us to take a responsible and active part in the various debates so as not to miss

any opportunity to improve our response to the challenges constituted by the risks of biological and toxin weapons. In regard to cooperation and assistance, this meeting will be an opportunity to identify efficient ways of mobilizing resources but above all to face up to the challenges which may exist in exchanging such technology. In addition, technological cooperation, whether multilateral or bilateral, is an incentive to achieve the objective of universalization of this Convention. Argentina looked forward to the opportunity to discuss indepth cooperation and assistance in the area of biosecurity and biosafety and expect to build upon the progress already achieved and to avoid simply repeating concepts or overlapping effort. In the area of science and technology, the question of education and awareness-raising including codes of conduct are of particular importance for Argentina as we recognise that this may be one of the most daunting challenges we are facing when it comes to effectively implementing this Convention. In regard to national implementation, we would particularly like to welcome the fact that we are dealing with aspects of export monitoring in a recurrent fashion. Eight years after adopting Security Council Resolution 1540 (2004), we believe that a large number of lessons learned can be identified that can be taken up in the sphere of this Convention.

[The unog.ch/bwc website shows that Argentina has submitted its CBM in 2012 although this is not available on the public section of the website]

Morocco then spoke saying that they wanted full and effective implementation of the Convention and supported the statement made by Cuba on behalf of the Non-Aligned Movement. Morocco recognised that the proposal made regularly for several years by NAM States Parties for the implementation of an effective mechanism for the multilateral operationalization of Article X of the Convention is the best way to promote the universality of the Convention and ensure its full implementation by States Parties. The statement added that Morocco had put into place in 2005 a national committee on biosecurity for implementation of the Cartagena Protocol on Biodiversity and to monitor GMOs at the national level. It has taken other steps in line with the Biological Weapons Convention including the elaboration of a draft law related to microbiological agents and other biological agents and carried out an evaluation study of national biosecurity capacity.

[The unog.ch/bwc website shows that Morocco has submitted its CBM in 2012 although this is not available on the public section of the website]

Indonesia then spoke saying that they associated themselves with the statement made by Cuba on behalf of the Non-Aligned Movement. They said that the implementation of the Convention should be an ongoing process for each State Party in order to achieve complete

disarmament under strict and effective control. They recalled that the Seventh Review Conference had achieved a balanced outcome in regard to different issues of the Convention and the structure of the 2012 – 2015 intersessional period. The standing agenda item on cooperation and assistance is welcomed and a closer cooperation between the WHO and the BWC is needed in order to build an integrated approach on biosafety and biosecurity. The statement went on to add that We also believe in the need for a compliance and verification mechanism, which constitutes a challenge to the Convention, to ensure and verify States Parties' adherence to the Convention. We understand the difficulty in arriving at an agreement to establish the mechanism. However, such a mechanism should not be confused with Confidence Building Measures (CBMs) which serves as a tool to provide transparency and build trust among States Parties in the implementation of the Convention. We share the view on the need to increase States' participation in CBMs submission and to review the CBMs form in order to provide clarity and useful information needed to enhance transparency.

[The unog.ch/bwc website shows that Indonesia has not submitted its CBM in 2012]

China then spoke saying that in regard to scientific and technological developments, there are increasing risks that new types of biotechnology are used for hostile purposes, constituting a potential threat to human society. China has submitted WP. 14 on this issue. The statement went on to say that Timely assessment of the impacts of bio-science and technology on the Convention, sharing best practice on biological risk management will be conducive to reducing the risks of misuse of biotechnology and encountering challenges brought by the advancement of biotechnology. The Chinese government believes that , while developing bioscience and technology pursuant to the principle of the Convention, States Parties could, taking into account of their national conditions, strengthen their capacity building on biosafety and biosecurity, formulate best standard for developing bio-science and technology on a voluntary basis, and carry out biosafety and biosecurity education to relevant personnel. The statement continues to make points on the CBMs, on national implementation and on cooperation and assistance. In regard to national implementation, the statement says that Meanwhile, China always believes that the best compliance mechanism is to conclude a protocol with verification regime to enhance the effectiveness of the Convention comprehensively.

[The unog.ch/bwc website shows that China has submitted its CBM in 2012 although this is not available on the public section of the website]

Malaysia then spoke saying that they associated themselves with the statement made by Cuba on behalf of the Non-Aligned Movement. The statement went on to say that Malaysia

welcomes the agenda and programme of work of this meeting which are balanced and reflective of the decisions of the Seventh Review Conference. It then went on to say that Malaysia reiterates its views that the existence of deadly biological and toxin weapons as well as its potential misuse constitute a serious threat to international peace and security. It is also unfortunate that the threat is also growing with the rapid advancement in the field of science and technology. Malaysia has recently engaged in a cooperative programme with the USA in the field of biosecurity. In addition, Malaysia is finalizing its Biological Weapons Bill which will be part of Malaysia's national implementation of the Convention. In regard to CBMs, Malaysia supports the call to enhance wider participation in the Confidence Building Measures (CBMs) among States Parties Malaysia is of the view that further steps should be implemented to ensure universal participation in the CBMs, create greater awareness measures on the CBM requirements, and also to conduct regular training sessions to assist relevant parties in demonstrating their compliance in an open, systematic and continuous manner.

[The unog.ch/bwc website shows that Malaysia has not submitted its CBM in 2012]

India then spoke saying that they associated themselves with the statement made by Cuba on behalf of the Non-Aligned Movement. The statement then said that India attaches high priority to the further strengthening of the Biological Weapons Convention and its full implementation. The statement went on to take note of the new intersessional process with its three Standing Agenda items and added that We believe that a multilaterally agreed mechanism for verification of compliance can provide the assurance of observance of the legal obligations of the States parties and act as a deterrence against non-compliance. The statement noted in regard to Article X that we continue to attach high importance to the full and effective implementation of Article X and goes on to add There should be a balance between Article X implementation with the provisions of Article III of the Convention. The statement concluded by saying that CBMs are an important transparency measure to enhance trust in implementation of the Convention.... we should look at ways to increase the number of States Parties making CBM submissions in the agreed forms.

[The unog.ch/bwc website shows that India has not submitted its CBM in 2012]

Mexico then spoke saying that it was important to continue to strengthen the Convention. Mexico welcomed the opportunity provided at the Meeting of Experts for national experts to share their experiences and best practices in getting to know their peers and to cross-reference situations in their countries and other parts of the world. The statement welcomed the fact that the Meeting of Experts would be taking a detailed look at the implementation of Article X of the Convention. At previous Meetings of Experts the fact has

already been analyzed that its provisions constitute the basis for a commitment to exchange information knowledge, measures and experiences to push forward the objectives of the BWC and to contribute to the scientific and technological development of the parties. Mexico considered that the very nature of knowledge that is referred to in this provision means that it is essential for States Parties to take the responsibility of implementing and complying with the Convention at the national level, particularly in terms of its sending information for epidemiological monitoring purposes and early warning. Mexico noted that it is participating in the initiative of global health security, an informal partnership with Canada, Germany, France, the United Kingdom, the United States and other countries to strengthen warning systems and preparation to be able to respond to biological, chemical and terrorist, radiological, nuclear and pandemic flu threats. The statement concluded by noting several actions that had recently been taken by Mexico.

[The unog.ch/bwc website shows that Mexico has submitted its CBM in 2012 although this is not available on the public section of the website]

Chile then spoke saying that they supported the statement made by Cuba on behalf of the Non-Aligned Movement. Chile welcomed the new format and said that the idea of dealing with topics on an annual basis is an opportunity to improve productivity. In regard to cooperation and assistance, they recognized that the implementation of Article X could lead to tangible achievements. The renewal of the mandate of the ISU was welcomed as their role is increasingly important as it structures dialogue between States, fosters cooperation and gives incentives to national implementation and promotes the universalization of this Convention. The CBMs continue to be crucial issues but they are not a substitute for a verification mechanism. Realistically consideration needs to be given to how to increase confidence. Full implementation of the Convention requires national legislation and the involvement of all national authorities. Chile is in favour of strengthening the effective implementation of the Convention.

[The unog.ch/bwc website shows that Chile has submitted its CBM in 2012 although this is not available on the public section of the website]

Brazil then spoke saying that As we embark on another intersessional period up to 2015, the Meeting of Experts presents a valuable opportunity to assess the unfolding evolution of technical issues on the biological and scientific realms, but also to evaluate States Parties' initiatives and actions in order to fulfill their commitments under the BWC. The statement went on to comment on the various elements of the agenda noting in regard to cooperation that Discussions within the BWC have shown the unequivocal importance of prioritizing 'capacity

building` with a view to successfully implementing the Convention. On scientific and technological developments, Brazil noted that there have been tremendous developments in Science and Technology, with potential consequences for the Convention. Brazil believes that State Parties should facilitate the exchange of materials, equipment and scientific and technological information for peaceful purposes, as well as initiatives of capacity building. On national implementation, Each State Party should ideally be prompted to raise its necessities on national implementation and, by means of a request of cooperation, receive support from countries able to provide it. And then on CBMs, Brazil said that we encourage State Parties which have not submitted their forms to do so and, in that sense, we support initiatives such as regional or international seminars to enhance States' capacities to provide information in this regard. Despite their importance, we continue to believe that the strengthening of CBMs cannot replace the existence of an effective verification regime based on a Protocol to the BWC, to be negotiated by States Parties.

[The unog.ch/bwc website shows that Brazil has submitted its CBM in 2012 although this is not available on the public section of the website]

Iran then spoke saying that they associated themselves with the statement made by Cuba on behalf of the Non-Aligned Movement and that they fully support all the important elements of that statement. Iran then said in regard to the Seventh Review Conference that Its final document represent a delicate balance regarding, structure, modality and different issues of the BWC in the next inter-sessional period from 2012-15. Iran then noted the main elements that should be followed strictly during the entire current intersessional program which included 4- Absence of any decision making power in the inter-sessional program. The final document is clear that any decisions for further action on the outcome of the meetings in the inter-sessional program will be taken by the next Review Conference. Further points made included the following: 5- Reaffirmation of this fact that the states parties to the convention are the only players in the inter-sessional program and this program provides a platform for them to share national experiences through exchange of views between their relevant experts and entities. 6-Keeping the BWC articles as the only governing chapeau during the entire inter-sessional program. 7- Avoiding any efforts that could lead to the mixture of the mandates of this convention with other international organizations using some of the overlapping areas between activities related to this convention and other international organizations. The statement went on to say that Iran would like to re-emphasize that the only sustainable method of strengthening the Convention is through multilateral negotiations aimed at concluding a nondiscriminatory, legally binding agreement, dealing with all Articles of the Convention in a balanced and comprehensive manner. Iran concluded by emphasizing that maintaining the delicate balance reached in the 7th Review Conference outcome by organization of work is of utmost importance for this delegation. We hope that by diligent efforts of all chairmen of the inter-sessional program, this delicate balance will be preserved through the entire inter-sessional program.

[The unog.ch/bwc website shows that Iran has not submitted its CBM in 2012]

Guatemala then spoke saying that terrorism is an offence in Guatemala and criminal laws have been passed in regard to chemical, biological and nuclear weapons or munitions. Guatemala had developed a broad based infrastructure to deal with the threat of weapons of mass destruction. In addition, Guatemala said that their legislation for the control of chemicals and biological substances which are used in a number of areas, takes into account the possible diversion of the substances for illicit purposes and that they have developed, therefore, a broad useful set of norms for the implementation of the Convention. In addition, at the regional level, Guatemala is participating in the Central American Integration System Project to promote the implementation of UN Security Council Resolution 1540 which calls upon States to ensure that they have the infrastructure and have acquired the set ups to deal with the threat posed by the participation of the State actors in any aspect of the proliferation of weapons of mass destruction. The importance of the Confidence Building Measures was highlighted. Guatemala also stressed the importance of Article X to underscore better coordination between national and international actors. The role of the Implementation Support Unit was also important.

The unog.ch/bwc website shows that Guatemala has not submitted its CBM in 2012

Pakistan then spoke saying that they aligned themselves with the statement made by Cuba on behalf of the Non-Aligned Movement. Pakistan went on to note that the Seventh Review Conference had achieved a balanced outcome but had also made a step forward. For the intersessional period 2012 – 15 it was important to preserve the delicate balance achieved at the Seventh Review Conference and to see this carried forward through the intersessional period. Pakistan looked forward to practical ideas for Article X. They stressed the importance of submitting CBMs to the ISU. They concluded by noting that the Convention was an important pillar that needs to be strengthened through multilateral negotiation.

[The unog.ch/bwc website shows that Pakistan has submitted its CBM in 2012 although this is not available on the public section of the website]

Turkey then spoke saying that *Turkey* is fully aware of the positive developments in science and technology which have brought many benefits to areas such as health,

environment and agriculture. However, we are also very conscious of the adverse effects that may come with these progresses. The statement went on to add that Science and technology is also highly pertinent to Article X of the Convention. Turkey believes that the language and spirit of Article X provide a solid foundation for international cooperation. We believe that an improved implementation of this article would be essential in building confidence between the international society, and in developing the capacities that work to prevent and contain epidemics. International cooperation is equally central in achieving the goals of universalization. The statement noted that The geographical position of Turkey makes the issue of universalization an important consideration. Unfortunately, some of the non-states parties are in areas of regional instability, and this aggravates the situation. Therefore, Turkey calls upon all states not party to the BTWC to adhere to it without further delay. On CBMs, Turkey said that CBM reports are imperative tools for mutual understanding and transparency as they aim to prevent and reduce uncertainties regarding compliance. Turkey has submitted reports regularly, and last two year's data can be found online for public use. We advise all States Parties to do the same which would inevitably enable us to advance further with the Convention. The statement concluded by saying On the other hand, lack of a verification regime in the Convention weakens its purpose, and Turkey believes that an improved system like the Chemical Weapons Convention would work to strengthen the efficacy of the Convention.

[The unog.ch/bwc website shows that Turkey has submitted its CBM in 2012 and that this is available on the public section of the website]

Ghana then spoke saying that they aligned themselves with the statement made by Cuba on behalf of the Non-Aligned Movement. Ghana went on to say that they considered the agenda very insightful and relevant to the challenges posed by the rapid developments in science and technology, globalization and ICT against the effective implementation of the Convention by member states. The statement added that Ghana anticipates that the outcome of this meeting will contribute effectively to the realization of the objectives of the Convention. The Ghana delegation is particularly appreciative of the inclusion of deliberations on Article X in the Agenda. We believe that this will facilitate the provision of much needed support and assistance to enable Ghana and other developing countries to fully implement the convention nationally.

[The unog.ch/bwc website shows that Ghana has not submitted its CBM in 2012]

After the statement by Ghana the formal meeting was suspended and resumed with the Chairman remaining in the chair to hear statements – which are available at unog.ch/bwc – from six NGOs who spoke in the following order:

- a. The University of Bradford. Graham S Pearson.
- b. International Network of Engineers and Scientists. Kathryn Nixdorff.
- c. Pax Christi International. Enrique Sierra.
- d. The University of London. Statement on behalf of Filippa Lentzos and Nicholas Sims
- e. **Defence Medical College of Japan and University of Bradford**. Masamichi Minehata.
- f. Biosecurity Working Group of the InterAcademy Panel on International Issues. Andrzej Gorski.

The Chairman then thanked the NGOs who had made statements for their constructive comments and thanked the NGOs for their support.

In addition, it should be noted that, as at the Sixth and Seventh Review Conferences in 2006 and 2011 respectively and at the Meeting of Experts 2007, 2008, 2009 and 2010 and the Meeting of States Parties 2007, 2008, 2009 and 2010, Richard Guthrie in association with the BioWeapons Prevention Project provided daily reports on the Meeting of Experts that were made available in hard copy to the delegations as well as electronically. These reports are available at http://www.bwpp.org/reports.html.

The formal session then resumed when the Chairman noted that in the afternoon consideration would be given to Agenda item 5 on strengthening cooperation and assistance under Article X. He asked that any States Parties wishing to speak or to make presentations contact the ISU. He then invited the Secretary, Richard Lennane, to make any announcements. A side event entitled *Recent Developments in Science and Technology* organised by the IAP Global Network of Science Academies and the International Union of Biochemistry and Molecular Biology to be held at 1.00 pm in Salle XXIV was announced. In addition it was announced that by popular request there would be a speed networking event at 6.00 pm in Salle XXIV.

Side Events

During the Meeting of Experts there were side events at lunchtime each day from Monday to Wednesday, a scheduled evening event on Monday 16 July (which did not actually happen), as well as breakfast events at 09.00 am each day from Tuesday 17 to Thursday 19 July.

The first lunchtime event on **Monday 16 July** was an event organized by the IAP Global Network of Science Academies and the International Union of Biochemistry and Molecular Biology entitled *Recent Developments in Science and Technology*. In this a presentation *Overview of Enabling Technologies in the Life Sciences* was made by Andrew Pitt of the University of Aston which was followed by a presentation *Emerging Trends and Drivers in the Global Biotechnology Industry* made by Richard A. Johnson of Global Helix LLC. The two presentations are available on the unog.ch.bwc website. Ralf Trapp then made a few remarks on the implications of recent developments in science and technology for the BWC and the CWC.

The scheduled evening event on Monday 16 July was to have been a speed networking event but this was cancelled for lack of support. This may have arisen in part because the afternoon session finished shortly after 5.00 pm.

On **Tuesday 17 July** the morning event was organized by Ukraine and the University of Bradford entitled *Recent Developments in Education and Awareness Raising on Biosafety and Biosecurity.* Presentations were made by Dr. Olena Kysil of the Palladin Institute of Biochemistry of the National Academy of Sciences of Ukraine (NASU), Ukraine entitled *Awareness Raising & Education on Biosafety and Biosecurity in Ukraine*, Dr. Masamichi Minehata of the University of Bradford entitled *Strengthening the BTWC through the Education for Life Scientists: The National Series*, Dr. Judi Sture of the University of Bradford entitled *Report on the first delivery of the National Series Programme*, and Professor Malcolm Dando of the University of Bradford entitled *Dual-Use/Biosecurity Education for Neuroscientists*.

The lunchtime event on Tuesday 17 July was organised by the Netherlands and the United States and was entitled *Dual Use Research of Concern: The H5N1 Controversy and its Implications for Science Governance.* Ambassador Laura Kennedy of the United States introduced the speakers who made presentations. Dr. Lawrence Kerr, Deputy Director for Countering Biological Threats, Office of the Director of National Intelligence, of the United States made a presentation entitled *Factual review of H5N1 papers, involved organizations, researchers and nations.* Dr. Marianne Donker, the Netherlands Director of Public Health at the

Netherlands Ministry of Health at the Ministry of Health, Welfare, and Sports then made a presentation in which she reviewed what policy actions had been taken by the Netherlands following the H5N1 controversy. She was followed by Mr. Christopher Park, Director of the US State Department's Biological Policy Staff who outlined steps taken by the United States. Representatives of Indonesia and Japan then made brief statements. Some information on this side event is available at http://geneva.usmission.gov/2012/07/17/dual-risk-use-concerns-related-to-h5n1-research/ The presentations made by Lawrence Kerr and by Marianne Donker are available on the unog.ch/bwc website. This particular side event was of especial relevance to the Meeting of Experts. It will be recalled that the Implementation Support Unit had prepared a background information paper, INF. 2, entitled Making avian influenza aerosol-transmissible in mammals. which was described in its summary as:

This paper provides an overview of a scientific development of possible relevance. In 2011, two research papers came to light detailing mechanisms to alter the highly pathogenic avian influenza virus H5N1 to enable aerosol transmission in mammals. Such research both alters the host range and increases the transmissibility of a pathogen – characteristics which are among the indicators that some States Parties may use in assessing "experiments of concern". This paper includes: background on the context of this research; a chronology of events since the research first came to light in September 2011; details of three areas of continuing technical debate; and potentially relevant common understandings reached by States Parties.

The presentation by Marianne Donker was one of the most interesting – and relevant – presentations made during the week. She outlined how the Netherlands had addressed the question of whether the work on H5N1 should be published. She then went on to set out the issues that need to be addressed for the future both in the Netherlands and internationally. In respect of the Netherlands she made the following points:

- There are currently no legal biosecurity-requirements.
- The knowledge base on biosecurity among microbiologists could be enhanced.
- There is a limited overview of locations in the Netherlands where *Dual Use Research* of Concern (DURC)-micro-organisms are available.
- There is no legal base requiring notification of work with DURC micro-organisms.
- The policy in the Netherlands on how to address work on DURC micro-organisms in phases of application, execution, publication is inadequate.

She then set out what needed to be addressed by the national policy agenda as being:

- Reassess the Code of Conduct for Biosecurity. [The Netherlands Code of Conduct for Biosecurity was promulgated in August 2008 and is available at http://www.knaw.nl/smartsite.dws?lang=ENG&id=26101&pub=20071092]
- Strengthen the legal base for biosecurity. Goals:
 - » oversight,
 - » communication
 - » security requirements.
- Create an overview of DURC-locations.
- · Create legally binding biosecurity-requirements.

She then considered this from an international perspective making the point that the H5N1 question was a true "cross border issue" which needed to be addressed by establishing a national policy agenda – although such national policies would be ineffective without international coordination for which meetings such as the Meeting of Experts should enable the international agenda to be formulated.

It is encouraging that reference has been made to this in the summary of points in Annex 1 to the Report of the Meeting of Experts in the section entitled 2. New science and technology developments that have potential for uses contrary to the provisions of the Convention as follows:

Netherlands (a) Rapid developments in science and technology confront us all with new questions on how to deal with dual use research of concern;

- (b) It is important that we discuss these issues here because research is increasingly taking place across borders;
- (c) In the H5N1 studies presented during the US/Netherlands side-event, ground-breaking scientific research was performed. This research, whilst having been reviewed for potential dual-use implications, helps us to understand the potential transmissibility of influenza strains, which can significantly benefit public health;

(d) To weigh diverse interests and strike the right balance will always be a challenge in which we think countries could greatly benefit from sharing and establishing best practices and common guidelines;

(e) We therefore look forward to a further constructive exchange of ideas on policy options for the future.

It is to be hoped that the synthesis document to be compiled for the Meeting of States Parties will pick up on the important points made by the Netherlands and carry them forward for development under **both** the Standing Agenda items for *strengthening national implementation* and on *developments in the field of science and technology*.

The evening event at 6.00 pm was a poster session. Posters were exhibited as follows:

University of Bradford: H5N1: Some implications for education of life scientists

University of Bradford: Awareness Raising and Education Project: National Series

UK: Animal Health and Veterinary Laboratories Agency: Support to the UK Biological Engagement Programme.

USA: Dual Use Research in the Life Sciences -- Policy and Oversight

Ukraine: Awareness Raising & Education on Biosafety & Biosecurity in Ukraine

USA: United States CBM Submission Process

USA: FBI Building Relationships -- Protecting the Future: Biological Scientists & the FBI

USA: Global Partnership against Spread of WMD: Securing & Disposing of Biological Agents

On Wednesday 18 July the morning event was organized by the United States and was entitled Global Partnership bio-security activities and how they relate to the BTWC. Ambassador Laura Kennedy of the United States introduced the speakers who made presentations. These included Ambassador Bonnie Jenkins, the US Coordinator for Threat Reduction Programme at the U.S. Department of State, Ms. Kris Beardsley of the National Security Council and Chair of the Global Partnership Biological Security Sub-Working Group, Dr. Piers Millett of the Implementation Support Unit and Mr. Ludy Suryantoro, Advisor to the Assistant Director-General, Health, Security, and Environment Cluster, World Health

Organization. Some information is available at http://geneva.usmission.gov/2012/07/20/u-s-sponsors-special-events-on-global-partnership-and-dual-use-issues-at-biological-weapons-convention-meeting-of-experts/

The lunchtime event was organized by OPCW Science Advisory Board Temporary Working Group on the Convergence of Biology and Chemistry and entitled *The Convergence of Chemistry and Biology: Perspectives of the OPCW Temporary Working Group*. Bob Mathews of Australia chaired the event and also made a presentation as did two other members of the Temporary Working Group: Bill Kane and Piers Millett of the ISU. The three presentations are available on the unog.ch/bwc website.

On **Thursday 19 July** the morning event was organized by the James Martin Center for Nonproliferation Studies and was entitled *A Tested Methodology to Assess Risks of Dual-Use Technologies and Evaluate Governance Options*. Theresa Hitchens, Director of UNIDIR was in the chair with presentations being made by Amy E. Smithson and Ralf Trapp.

Standing Agenda item on Cooperation and Assistance I

Ambassador Boujemâa Delmi, Chairman of the Meeting of Experts on the afternoon of Monday 16 July 2012 chaired the first session which considered Standing Agenda item 5: cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X. Statements were made in the following order: Cuba (on behalf of the Non-Aligned Movement), Iran, Ukraine, European Union, UK, Cuba (in its national capacity), France, Australia, USA, Philippines, Russia, Switzerland, India, Chile, China, Mexico and Ghana. Iran and the USA subsequently spoke again to follow up on points made in other statements.

This session concluded with a report by Richard Lennane of the Implementation Support Unit on the data base that the Seventh Review Conference had agreed would be set up to facilitate assistance requests and offers. It was reported that whilst the framework had been ready for some time, the ISU had not had any data to put into the database. He said that the United States had now submitted an extensive list and that this would be integrated into the data base. The Chairman then closed the session noting that there would be a further opportunity to discuss cooperation and assistance in the afternoon session on Tuesday 17 July 2012. The morning session on Tuesday 17 July 2012 on the standing agenda item on science and technology would be chaired by the Vice Chair, Dr. Cezary Lusinski of Poland.

Standing Agenda item on Science and Technology I

Dr. Cezary Lusinski of Poland chaired the morning session on Tuesday 17 July 2012 which considered Standing Agenda item 6: review of developments in the field of science and technology relevant to the Convention. Statements were made in the following order: European Union, Cuba (on behalf of the NAM), Iran, Sweden, Germany, Netherlands, Spain, France, Poland, China, Chile, USA, India, UK, Australia, Italy and Mexico. The morning then concluded with a presentation by Andrew Pitt, Aston University, UK, as a guest of the meeting entitled Potential Advances in Technologies in the Life Sciences. He made the point that health care is no longer the main driver for research in the life sciences and that others are climate change and food security, energy, environment and global economy. This presentation is available on the unog.ch/bwc website. There was unfortunately no time for any discussion and the morning session concluded.

Standing Agenda item on Cooperation and Assistance II

The afternoon session on Tuesday 17 July 2012 continued consideration of Standing Agenda item 5: cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X with Ambassador Boujemâa Delmi in the chair. Statements were made by Georgia, United Kingdom, Cuba (in a national capacity), World Organization for Animal Health (OIE), Algeria, India, Brazil, Canada, USA, Iran and Interpol. The presentation made by the World Organization for Animal Health (OIE) is available on the unog.ch/bwc wesbite and is entitled Strengthening biological security through cooperation. This outlined the OIE biological threat reduction strategy which is aimed at Reducing biological threats by strengthening, enhancing, and cross-linking existing health systems [Emphasis in the original].

The afternoon session concluded with Richard Lennane of the ISU providing information about how the database on coordination and assistance would be structured in the restricted area of the unog.ch/bwc website. There was also a somewhat heated exchange between Cuba and the United States in which Cuba claimed that the United States blockade was preventing the implementation of Article X. Ultimately the Chairman terminated this exchange. The afternoon session terminated at 5.18pm and the meeting went on to the Poster session.

Standing Agenda item on Science and Technology II

The morning session on Wednesday 18 July 2012 continued consideration of Standing Agenda item 6: review of developments in the field of science and technology relevant to the Convention with Ambassador Boujemâa Delmi in the chair. Statements were made in the

following order: United Kingdom, Germany, Mexico, Japan, the Organization for the Prohibition of Chemical Weapons (OPCW), Cuba (on behalf of the NAM), China, Switzerland, India, United States, Brazil, Australia, Mexico, Spain, Iran and the Netherlands. The OPCW presentation was entitled OPCW Temporary Working Group on the Convergence of Chemistry and Biology. This was made by Robert Mathews of Australia on behalf of the OPCW and is available on the unog.ch/bwc website. The morning session concluded with two 'guest of the meeting' presentations made by guests of the meeting: Marcus Graf of the International Gene Synthesis Consortium on Synthetic Biology: Biosecurity in a Rapidly Emerging Field and Judi Sture of the University of Bradford, UK on Biosecurity Education from the University of Bradford: Openaccess and Accredited Programmes Available to All. These two presentations are available on the unog.ch/bwc website. There was unfortunately again little if any time for any discussion and the morning session concluded. The Chairman said that the afternoon session which would start consideration of the Standing Agenda item on strengthening national implementation would be chaired by Ambassador Fasel of Switzerland, the Vice Chair.

Standing Agenda item on Strengthening National Implementation I

The afternoon session on Wednesday 18 July 2012 started consideration of Standing Agenda item 7: strengthening national implementation with Ambassador Alexandre Fasel in the chair. Statements were made in the following order: Cuba (on behalf of the NAM), the European Union, Malaysia, Canada, Thailand, Iran, France, Belarus, Denmark, China, Australia, Switzerland, Cuba (in a national capacity), Russia, United Kingdom, United States, Chile, India and Turkey.

Biennial Item: how to enable fuller participation in the Confidence-Building Measure

The morning session on Thursday 19 July 2012 started consideration of the biennial item to be considered in both 2012 and 2013: *How to enable fuller participation in the Confidence-Building measures*. Ambassador Boujemâa Delmi was in the chair. Statements were made by: Iran (on behalf of the NAM), Switzerland, United States, United Kingdom, Iran (in a national capacity), Australia, Belarus, Canada, Russia, South Africa, and Germany. Richard Lennane of the ISU said that 62 returns had been received so far in 2012. Four states that had not previously submitted had done so this year – Madagascar, Pakistan, Singapore and Zimbabwe.

As there was time available during the morning session, the Chairman, Ambassador Boujemâa Delmi, suspended the formal session and convened an informal session to discuss how the Meeting of Experts was proceeding. He raised a number of queries, such as had the methodology and structure achieved what was hoped for, had the sub-topics corresponded to

what the Meeting of Experts is required to consider and, was it possible to bring into the Meeting of Experts sessions the active interactions that happen in the side events? All present in the room, including NGO representatives, were able to participate in the frank discussions that ensued which were regarded as an excellent innovation. There was recognition of the value of the side events and discussion as to how any useful output of an informal session could appear in the official records of the Meeting. As might be anticipated, no mention of this informal session appears in the report of the Meeting of Experts.

Standing Agenda item on Strengthening National Implementation II

The afternoon session on Thursday 19 July 2012 continued consideration of Standing Agenda item 7: strengthening national implementation with Ambassador Boujemâa Delmi in the chair. Statements were given by: Canada, India, Algeria and China. A discussion then followed with participation by the United Kingdom, Nigeria and United States. This was then followed by a presentation entitled National Implementation of the BWC: a case study by Scott Spence of VERTIC, a guest of the meeting. This presentation is available at the unog.ch/bwc website. There was time for discussion following this presentation and a useful discussion ensued.

Friday 20 July 2012

Although the programme planned to have a second session on Agenda item 8: biennial item: how to enable fuller participation in the Confidence-Building measures on the morning of Friday 20 July 2012, this did not happen. Instead the Meeting of Experts on the Friday morning went on to consider Agenda item 9: Adoption of the factual report reflecting the deliberations of the meeting. As at previous such meetings, drafts had been circulated as Conference Room Papers:

CRP. 1 Draft elements for the compilation of the considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the topics under discussion at the Meeting. 19 July 2012.

CRP. 2 Draft elements for the compilation of the considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the topics under discussion at the Meeting. 19 July 2012.

CRP. 3 Draft Report of the Meeting. 20 July 2012.

CRP. 4 Draft elements for the compilation of the considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the topics under discussion at the Meeting. 20 July 2012.

As the drafts were acceptable to all delegations, the meeting was adjourned for a typed version of the draft report to be circulated. The meeting was reconvened and the draft report was then adopted at 11.51 am. The Chairman then made some closing remarks and the meeting closed at 12.04 pm.

Outcome of the Meeting of Experts

During the Meeting of Experts, 17 Working Papers were submitted by 10 States Parties and 1 group of States Parties (the EU) with the numbers submitted by individual States Parties ranging from one to four: Australia (15, 16), Canada (17 together with Switzerland), China (14), Cuba (7), European Union (12), France (13), Russia (8, 9, 10, 11), United Kingdom (1, 2) and United States (3, 4, 5, 6). These papers related to the Standing Agenda item on cooperation and assistance – WP. 2 (UK), WP. 3 (USA), WP. 7 (Cuba), WP. 8 (Russia) – to the Standing Agenda item on developments in science and technology – WP. 1 (UK), WP. 6 (USA), WP. 10 (Russia), WP. 12 (European Union), WP. 14 (China), WP. 16 (Australia) – to the Standing Agenda item on strengthening national implementation – WP. 5 (USA), WP. 9 (Russia), WP.13 (France), WP. 15 (Australia), WP. 17 (Canada/Switzerland) – and to the biennial item on how to enable fuller participation in the Confidence-Building measures – WP. 4 (USA), WP.11 (Russia).

In addition to the Working Papers, it should be noted that four Information papers were submitted by States Parties providing information on the implementation of Article X of the Convention – INF. 5 (USA), INF. 6 (Cuba), INF. 7 (EU) and INF. 8 (Australia).

On the Thursday and on Friday morning, preliminary compilations (CRP.1, CRP. 2 and CRP.4) of the proposals made at the Meeting of Experts was circulated. An updated version was subsequently issued as Annex 1 to the report of the meeting (MX.3). These were helpfully grouped under subheadings.

These subheadings essentially follow the proposals made in the Chairman's letter of 1 June (and amended in regard to the Standing Agenda item on science and technology in his letter of 21 June) and promulgated as the provisional programme of work in MX/2/Rev. 1. This does mean that any elements of the Standing Agenda items not included for consideration at MX/2012 will not have any proposals recorded against them. There also appears to be a

difficulty with proposals that have relevance for more than one Standing Agenda item in that they are only listed according to the element in the provisional programme when the proposal was made. As an example, proposals made by the OIE appear under the subheading:

4. Capacity-building, through international cooperation, in biosafety and biosecurity, and for detecting, reporting, and responding to outbreaks of infectious disease or biological weapons attacks, including in the areas of preparedness, response, and crisis management and mitigation

and not under the subheading:

2. Coordination of cooperation with other relevant international and regional organizations, and other relevant stakeholders

An analysis of the proposals in the tabulation below shows that they came from 30 States Parties, 2 international organizations and 2 guests of the meeting. The largest number of proposals came from the USA (74 proposals). Other major contributors were Iran (49), the United Kingdom (31), India (27), Algeria (17), China (17), Switzerland (15), Australia (12), Canada (12), Russia (11) and Netherlands (10). From the intergovernmental organizations, proposals came from OPCW (4) and OIE (2). From the guests of the meeting, proposals came from the University of Bradford (7) and the IGSC (2). In the tabulation below the numbers of proposals made by each State Party or other entity are shown for each of the five subheadings for cooperation and analysis (C & A), of the eight subheadings for science and technology (S & T), of the three subheadings for national implementation (NI) and for the biennial topic on Confidence Building Measures (CBMs).

State Party	C&A	C&A	C&A	C&A	S&T	S&T	S&T	S&T	S&T	S&T	S&T	S&T	NI	NI	NI	CBM	Total
	1	2	3	4	1	2	3	4	5	6	7	8	1	2	3		
Algeria	1		2	2										2+5			17
Australia	2			1				1			4	1		1+1		1	12
Austral/Ghana				1													1
Belarus													1				1
Brazil	1									1	1						3
Canada				1									1	1+6		3	12
China				1	5 + 7					2+1						1	17
Cuba			1	2							2 + 2			2			9
Cuba (NAM)	1	1	1	2													5
Denmark	10													1	1		2
EU			1							2 + 1			1				5
EU (UK)														3			3
France			1			2					27		3				6
Georgia	.v	2		2													4
Germany		1			1												2
India	1	1	4	3	2					1 + 2	8		1	2+1		1	27
Indonesia		1														1	2
Iran	5		9 + 4	4	3	3	3		1		1		2	5		4+5	49
Japan					6							1					7

Mexico	1																1
Netherlands					4	6		F									10
Philippines			2														2
Poland								1	1								2
Russia						7										4	11
Spain					3												3
Sweden					4												4
Switzerland								1		2	1			4		7	15
Thailand													2	2			4
UK		2	1	7		1	1	3	1	4	4	1		2		4	31
USA	6	2	2	3	1 + 5	2	3			5 + 4		7	7	8		19	74
Total	18	10	28	29	41	21	7	6	3	25	23	10	18	46	1	50	339
(No. of States Parties)	(8)	(7)	(10)	(12)	(9)	(6)	(3)	(4)	(3)	(7)	(7)	(4)	(8)	(12)	(1)	(10)	(30)
OIE				2				v			50. Tr						2
OPCW		1							3								4
																	345
IGSC					2			2									2
Univ. of Bradford												7					7
																	354

As in previous years, the Chairman has said that, for the Meeting of States Parties, he will create a synthesis paper that distills the essence of the many ideas and proposals contained in Annex I to the report of the Meeting of Experts. As the Meeting of Experts considered three Standing Agenda items and also a biennial topic (on CBMs) which will also be considered next year, attention needs to be given to how to maximize the benefits from the change in the Intersessional Process to this continued consideration of the topics. The substantive paragraphs to be adopted by the Meeting of States Parties for each of the topics will need to be looking forward not only to what the States Parties may do as a cohesive entity but also to what direction the further consideration of these topics should take in 2013.

Attention also needs to be given to the cross fertilization between the elements of the Standing Agenda items. For example, the Standing Agenda item on science and technology includes the sub-item:

8. Education and awareness-raising about risks and benefits of life sciences and biotechnology

which is closely related to the sub-item of the Standing Agenda item on national implementation which reads:

2. A range of specific measures for the full and comprehensive implementation of the Convention, especially Articles III and IV

Another example relates to the Standing Agenda item on cooperation and assistance which has a sub-item:

4. Capacity-building, through international cooperation, in biosafety and biosecurity, and for detecting, reporting, and responding to outbreaks of infectious disease or biological weapons attacks, including in the areas of preparedness, response, and crisis management and mitigation

which is closely related to the sub-item of the Standing Agenda item on national implementation which reads:

(d) national, regional and international measures to improve laboratory biosafety and security of pathogens and toxins;

The solution is probably for the substantive paragraphs in the report of the Meeting of States Parties to avoid any reference to the sub-items and to focus on what is relevant to the totality of each of the Standing Agenda items as well as to how these inter-relate as an

integrated approach is vital for maximizing and realizing the benefits in the strengthening of the Convention. Likewise in regard to the biennial topic on CBMs, consideration needs to be given to how the ideas for enabling fuller participation are actually taken forward to achieve significant increases in the participation year on year.

Reflections

The Meeting of Experts made a successful start on the new Intersessional Process for the period between the Seventh Review Conference in December 2011 and the Eighth Review Conference in five years time. As at previous Meetings of Experts, the 2012 meeting included an informal session when six NGOs made short statements of direct relevance to the Meeting of Experts. In addition, as at previous Meetings of Experts, the 2012 meeting was open throughout enabling NGOs to gain a better appreciation of the concerns expressed by States Parties.

For the **first** time, the Intersessional Process consists of **three** Standing Agenda items – on cooperation and assistance, on science and technology, and on strengthening national implementation – as well as a single biennial topic which for 2012 and 2013 is how to enable fuller participation in the CBMs. The Chairman for the 2012 Meetings originally selected by the Non-Aligned Movement and Other States Group at the Seventh Review Conference wrote to States Parties on 15 March to say that his term in Geneva was ending at the end of March and proposed that his replacement should chair the Meetings in his place. This was agreed and on 13 April, Richard Lennane, Head of the Implementation Support Unit, wrote to States Parties to confirm the appointment of the new Chairman and of the vice-Chairmen.

One of the vice-Chairmen – Dr. Cezary Luzinski of Poland – was asked to chair one of the two sessions at the Meeting of Experts addressing the Standing Agenda item on science and technology and the other vice-Chairman – Ambassador Alexandre Fasel of Switzerland – was asked to chair one of the two sessions at the Meeting of Experts addressing the Standing Agenda item on national implementation. The opportunity to delegate one Standing Agenda to one vice-Chairman and another to the second vice-Chairman was not taken – such delegation might have helped to promote continuity during the Intersessional Process on the assumption that the vice-Chairman would be appointed Chairman in successive years.

It was noted that the problems which had affected the participation of the European Union at the Seventh Review Conference (see *Review 35* (March 2012)) had been solved at the Meeting of Experts with the EU making statements at the start of the consideration of various

sub-items of the Agenda in a similar way to the NAM statements and statements made by individual States Parties.

Although a number of specialized agencies and other international organizations were invited and participated, it is noted that proposals recorded in the Annex to the report of the Meeting of Experts were only made by the OIE (World Animal Health) and the OPCW (Organisation for Prohibition of Chemical Weapons). No proposals were recorded as being made by the FAO, ICRC, Interpol or the WHO. This is especially unfortunate given the emphasis in the programme under the Standing Agenda item on cooperation and assistance to

2. Coordination of cooperation with other relevant international and regional organizations, and other relevant stakeholders

and under the Standing Agenda item on developments in science and technology to

4. Science- and technology-related developments relevant to the activities of multilateral organizations such as the WHO, OIE, FAO, IPPC and OPCW

Although the Chairman, Ambassador Delmi, in his letter of 21 June 2012 to all States Parties said that:

Intergovernmental organizations, such as United Nations organs, WHO, OPCW and INTERPOL, are entitled to participate in the Meeting of Experts as observers, in accordance with the rules of procedure. They do not require an invitation from the Chairman, although I will as a matter of courtesy write to inform them of the meeting.

it is presumed that he would in his letter have encouraged them to participate and to make presentations and statements in support of the appropriate topics in the programme for the meeting. It is recommended that for future Meetings – and particularly, the Meetings of Experts – the letters of invitation to such intergovernmental organizations should request that appropriate contributions be made. It is especially important to have inputs from the WHO and the FAO as well as from the OIE.

There was a good programme of side events during the Meeting of Experts. Whilst such events undoubtedly benefit the members of the States Parties delegations and other participants, consideration should be given, especially by States Parties engaged in such side events, to ensuring that significant information presented in the side events that is of particular relevance to the topics being considered by the Meeting of Experts is also made available to States Parties in the Meeting of Experts. A particular example is the excellent presentation

made by Dr. Marianne Donker of the Netherlands in the side event at Tuesday lunchtime summarised earlier in this report.

A point that is **evident** is that it is important to enhance and maximize the efficacy of the Meetings of Experts and the Meetings of States Parties by all the participants – whether States Parties, International Organizations or 'Guests of the Chair' – considering how best to ensure that their contributions are recorded in the information relating to the Meeting. It is particularly beneficial if States Parties provide their statements and presentations to the Implementation Support Unit for posting on the unog.ch/bwc website.

This is illustrated by considering the proposals in regard to the Standing Agenda item on developments in science and technology on the morning of Tuesday 17 July 2012 as recorded in the Annex to the Meeting of Experts and comparing these to the statements and presentations on the unog.ch/bwc website. The proposals made and shown as S 17/7 in the Annex are summarised below:

Standing Agenda Item sub-item	State Party	Number of proposals	Any statement at unog.ch/
1	Sweden	4	No
	Spain	3	No
	USA	1	No
	Germany	1	No
	Netherlands	4	No
	China	5	No
	India	2	No
	Iran	2	Yes
2	Netherlands	6	No
	France	2	Yes
	Iran	2	Yes
3	USA	3	No
	Iran	2	Yes
4	Poland	1	No

5	Poland	1	No
	Iran	1	Yes
6	EU	2	Yes
	China	1	No
7	Cuba	2	No
	Iran	1	Yes

Interestingly, there is a statement at unog.ch/bwc on the morning of Tuesday 17 July 2012 by Switzerland but no proposals have been included in the Annex as being made by Switzerland. Thus of the 12 countries identified in the Annex as having made proposals on the morning of Tuesday 17 July 2012, statements are only available in unog.ch/bwc for three of them.

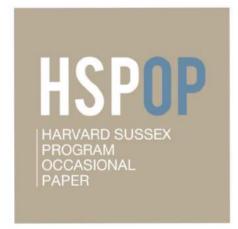
Overall, a particular reflection is that, as might be expected, there is considerable scope for cross fertilization between the Standing Agenda items as any particular issue area such as biosafety and biosecurity is important in considering all three Standing Agenda items: cooperation and assistance, science and technology and national implementation. There are few if any issue areas that do not have relevance to one or more Standing Agenda items.

As in previous years, the Chairman has said that, for the Meeting of States Parties, he will create a synthesis paper that distills the essence of the many ideas and proposals contained in Annex I to the report of the Meeting of Experts. As the Meeting of Experts considered three Standing Agenda items with considerable scope for cross-fertilization and also a biennial topic (on CBMs) which will be considered again next year, attention needs to be given to how to maximize the benefits from the change in the Intersessional Process to this continued consideration of the topics. The substantive paragraphs to be adopted by the Meeting of States Parties for each of the topics will need to be looking forward not only to what the States Parties may do as a cohesive entity but also to what direction the further consideration of these topics should take in 2013.

The solution is probably for the synthesis paper – and hence the subsequent substantive paragraphs in the report of the Meeting of States Parties – to avoid any reference to the sub-items and to focus on what is relevant to the **totality** of each of the Standing Agenda items and to consideration of how their **cross-fertilization** leads to an integrated and

consolidated approach that makes an effective contribution to strengthening of the Convention regime.

It is hoped that the Chairman, vice-Chairmen and the Implementation Support Unit will be successful in enabling the benefits of the detailed discussions at the Meeting of Experts to be carried forward to further **all** of the Standing Agenda items in an integrated way at **both** the Meeting of States Parties in 2012 **and** at subsequent meetings throughout the Intersessional Period so as to effectively strengthen the Convention.



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