As reported in the Bulletin 74 (December 2006), the Sixth Review Conference of the Biological and Toxin Weapons Convention (BWC) held in Geneva from Monday 20 November to Friday 8 December 2006 agreed an Intersessional Programme for 2007-2010. This required two topics to be considered in 2008 when the mandate is for the one week Meeting of States Parties prepared for by a one week Meeting of Experts to discuss, and promote common understanding and effective action 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 to prevent 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 at the Sixth Review Conference that the Meetings in 2008 should be chaired by the Eastern Group, and as reported in Bulletin 78 (December 2007) it was announced at the Meeting of States Parties in December 2007 that Ambassador Georgi Avramchev of the Former Yugoslav Republic of Macedonia would be the Chairman for the Meeting of Experts on 18 to 22 August 2008 and for the Meeting of States Parties on 1 to 5 December 2008.

Meeting of Experts, 18 to 22 August 2008: Opening Plenary Session

The Meeting of Experts began on Monday 18 August 2008 with Ambassador Georgi Avramchev in the Chair in a plenary session when he welcomed all those present and especially the experts who had travelled from many countries around the world to participate, including the many representatives from the international scientific community, professional associations, and commercial industry. He went on to welcome the three States Parties who have joined this year: Zambia, Madagascar and the United Arab Emirates. The number of States Parties has thereby risen to 162.

The Chairman then turned to procedural matters. In regard to the adoption of the Agenda, he noted that BWC/MSP/2008/MX/1 (all official papers are available 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/2008/MX/2) – which had been developed from the Chairman’s letter of 29 July 2008, following consultations with the regional groups and individual delegations – had likewise been circulated. The Chairman said that he had that morning received a request from a delegation to revise the wording of the programme of work slightly, to better reflect the fact that this is a meeting first and foremost of States Parties. He then read out the alterations which were to change the item scheduled at 15.00 on Tuesday 19 August from “Presentations from scientific and professional organizations; discussion” to read “Expert contributions and discussion, including representatives from scientific and professional organisations”. Similar changes were made to the items for 16.30 on Tuesday 19 August, at 11.30 and 15.00 on Wednesday 20 August and at 10.00 on Thursday 21 August.

The orally amended programme of work was adopted and was subsequently issued as BWC/MSP/2008/MX/2/Rev. 1.

The Chairman noted that the Implementation Support Unit (ISU) had prepared four background papers (BWC/MSP/2008/MX/INF.1, INF.2, INF.3 and INF.4), and he pointed out that the purpose of these papers is to provide background information on current circumstances relating to the topics being considered, so that the Meeting can concentrate its discussion not on what the situation is now, but rather on what States Parties might do in future. MX/INF.1 is a 17 page document entitled “Biosafety and Biosecurity” setting out previous agreements, understandings and proposals from past BWC meetings. Summary information on relevant activities undertaken by a number of international and regional organizations are included in Annex I, and additional technical information in Annex II. MX/INF.2 is a 6 page document entitled “Developments in Codes of Conduct since 2005” providing a survey of developments in codes relevant to the BWC since 2005. The document updates information contained in the background documents for the Meeting of Experts in 2005 which also addressed codes of conduct. MX/INF.3 is an 18 page document entitled “Oversight of Science” which introduces the concept of oversight of science. It outlines the need for oversight, the various problems and challenges, and several existing proposals for oversight frameworks, and examines the requirements for effective oversight. Further details on proposed oversight frameworks are in Annex I, and lists of criteria for identifying high-risk activities and resources requiring oversight are included in Annex II. MX/INF.4 is a six page document entitled “Education, Outreach and Raising Awareness” which surveys activities relating to education, outreach and raising awareness of the Convention and of biological weapons in general. It examines previous agreements and undertakings by the BWC States Parties on these topics as well as comparable activities carried out by the Organisation for the Prohibition of Chemical Weapons and the International Atomic Energy Agency in the chemical and nuclear fields respectively.

The Chairman also noted that Working Papers submitted would be reproduced in the language of submission only and would be made available on the website www.unog.ch/bwc.
As soon as possible. He then moved on to consider the Rules of Procedure noting that at the 2007 annual meetings, the Rules of Procedure of the Sixth Review Conference had been applied mutatis mutandis. He proposed that the present meetings should also operate under the Rules of Procedure of the Sixth Review Conference applied mutatis mutandis. However, he pointed out that formal accreditation would not be required for the annual meetings; registration would be sufficient. These Rules of Procedure were agreed.

It was agreed that the following four Signatory States should participate in the Meeting of Experts: Egypt, Myanmar, Nepal, and the Syrian Arab Republic. In addition, it was agreed that three States neither Party nor Signatory should participate as observers: Cameroon, Israel and Mauretania. Seven international organizations also participated as observers: The European Commission, the International Centre for Genetic Engineering and Biotechnology (ICGEB), the International Committee of the Red Cross (ICRC), the Organization for Economic Cooperation and Development (OECD), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), and the World Organization 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, 13 scientific, professional, academic and industry bodies participated as guests of the Meeting of Experts: American Biosafety Association, Asia-Pacific Biosafety Association, Astra Zeneca Plc, European Biosafety Association (EBSA), Glaxo Smith Kline, Interacademy Panel on International Issues, International Biosafety Working Group, International Network of Engineers and Scientists For Global Responsibility (INES), International Union of Biochemistry and Molecular Biology (IUBMB), International Union of Pure and Applied Chemistry (IUPAC), J. Craig Venter Institute, National Academy of Sciences (United States), and The International Council for the Life Sciences. This was a similar arrangement to that which had applied at the Meeting of Experts in 2005 when the topic being considered was codes of conduct.

It was also agreed that, as at previous meetings, this meeting would be suspended on Monday 18 August at 17.00 and resume in informal session with the Chairman remaining in the Chair to hear statements from a number of NGOs. The Chairman then concluded the procedural matters by asking any State Party that wished to make a presentation during the Meeting of Experts to contact the ISU to advise when they would wish to make such a presentation. Because of time constraints, the Chairman asked that such presentations be limited to 10 to 15 minutes so as to allow some time for discussion.

The Chairman also said that there would be three panel discussions: the first, on industry perspectives on biosafety and biosecurity, to be held on Tuesday afternoon; the second, on risk management, to be held on Wednesday morning; and the third, on education, awareness-raising and codes of conduct, to be held on Thursday morning. He said that these discussion panels are modelled on those introduced at the Meeting of States Parties in 2007. The feedback on those panels had been very positive. Many delegations thought that similar discussion panels would be a useful addition to the Meeting of Experts, as a panel is an efficient way of illustrating the various aspects and facets of issues that have both technical and policy dimensions.

Ninety-six States Parties to the Convention participated in the Meeting of Experts as follows: Albania, Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Benin, Botswana, Brazil, Brunei Darussalam, Bulgaria, Canada, China, Chile, Colombia, Costa Rica, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Ecuador, Finland, France, Georgia, Germany, Ghana, Greece, Guatemala, Holy See, Honduras, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lao People’s Democratic Republic, Libyan Arab Jamahiriya, Lithuania, Malaysia, Malta, Mexico, Moldova, Morocco, Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Swaziland, Sweden, Switzerland, Tajikistan, Thailand, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela (Bolivarian Republic of), Viet Nam, Yemen and Zambia. This was three States Parties more than the number that had participated in the Meeting of Experts in August 2007: Botswana, Brunei Darussalam, Costa Rica, Honduras, Kyrgyzstan, Lao People’s Democratic Republic, Malta, Moldova, Oman, Senegal, Slovenia, Sri Lanka, Swaziland and Tajikistan participated in MX 2008 whilst Barbados, Belarus, Bhutan, Bolivia, Bosnia and Herzegovina, Cambodia, Congo, Estonia, Latvia, Lebanon, and Rwanda, who had participated in MX 2007, did not in MX 2008.

There were just over 500 participants at the Meeting of Experts, of whom over 420 came from States Parties, including over 220 participants from capitals. This compared very well with the participation at the Meeting of Experts in 2007 when there were over 410 participants, of whom 365 came from States Parties, including over 160 participants from capitals.

The Chairman then made his introductory remarks observing that the two topics being considered have been at least partially covered before, so this Meeting was a good opportunity for review, consolidation and reinvigoration. He went on to say that the aim is to share information and expertise, to exchange experiences, to discuss options and possibilities, and generally to encourage and promote effective action to strengthen the operation of the Convention in the areas covered by our two topics. We should always keep in mind that we are looking to improve our individual and collective capacity to reduce the risk of biological weapons being developed or used. He went on to say that Our two topics are of global relevance, and involve a wide range of actors across many segments of national and international society. He added that he expected two main types of presentations to this meeting: the first being updates from States Parties on their own national efforts and regional activities, and the second type of presentation being described as thematic, dealing with particular aspects of our topics. He said that It is these presentations that I expect will provide most of the material for our outcome document, although the national updates may also contain
lesions and experiences we could usefully record. He concluded by saying that, as in previous meetings of experts, the various ideas and proposals made in the course of the meeting would be compiled into a list which would be annexed to the factual report – noting that it is not agreed – in order to provide a handy reference for preparations for the Meeting of States Parties in December. Finally he said he was looking forward to a productive and stimulating discussion. I encourage all delegations to contribute freely to the debate, and I hope we will see a continuation of the very constructive and creative spirit States Parties displayed at the Sixth Review Conference and at our meetings last year.

France then spoke on behalf of the European Union and of the Candidate and other countries, amounting to some 40 countries in all. It was noted that The potential for abuse of technological developments in the field of life sciences, as well as the risk of developmental use of a biological weapon by a State or a terrorist organization are major challenges for the international community and require both ongoing adaptation of tools and a strengthening of the sharing of experience among States Parties. The statement went on to say that The intersessional programme decided at the last Review Conference of the Biological Weapons Convention represents a clear sign of the international community’s will to strengthen the implementation and use by those called upon to apply these provisions of the Biological Weapons Convention. The European strategy to combat the proliferation of weapons of mass destruction was outlined and it was noted that the strengthening of the Biological Weapons Convention is a priority for the European Union and it is acting in a number of ways. Seeking in particular to adapt its responses to new challenges and developments in science and technology and to strengthen the effectiveness of the Convention, the European Union is cooperating with all concerned stakeholders and all States Parties, not only through standards but it is also promoting practical cooperation. In regard to this Meeting, it was noted that The themes to be discussed during our work this year are part of the questions which must be considered at regular intervals in order to maintain the level of awareness and vigilance that are essential to upholding the goals of the Convention.

Cuba then spoke on behalf of the NAM and Other States by recalling the XV Ministerial Conference of the Non Aligned Movement, held in Tehran, from 27 to 30 July 2008, at which the Ministers of the States Parties to the Biological and Toxin Weapons Convention (BWC):

- Reaffirmed that the possibility of any use of bacteriological (biological) agents and toxins as weapons should be completely excluded, and the conviction that such use would be repugnant to the conscience of humankind.
- Recognised also 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.
- Underlined further 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.

The statement went on to note that While acknowledging the significance of Article X of the Convention, the Group also underlines the importance of paragraph 54 of the Final Document of the Sixth Review Conference of the States Parties of the BWC, in which they were encouraged to provide information on how Article X is been implemented. In regard to the topics for this year’s meetings, the statement made a number of points which included the following:

- We strongly believe that the relevant national authorities should have the responsibility in defining and implementing such concept [biosafety and biosecurity], in accordance with relevant national laws, regulation and policies, consistent with the provisions of the Convention.
- While some International Organizations, for instance the World Health Organization (WHO), deal with biosafety and biosecurity issues, the adoption of decisions and recommendations on this matter within the framework of the BWC belongs exclusively to the States Parties of the Convention.
- Achieving necessary standards in the fields of biosafety and biosecurity requires and is facilitated by international cooperation and strengthening the implementation of Article X of the Convention.
- The Group would like to emphasize that Codes of Conduct by themselves are not sufficient for preventing the potential use and/or threat of use of biological agents and toxins as an instrument of war and terror. The development and adoption of such Codes would be effective and useful, when complemented with the involvement and assistance of the national scientific community. However, it remains the prerogative of the States Parties to decide on the content, promulgation and adoption of the code in accordance with relevant national laws, regulations and policies, consistent with the provisions of the Convention.
- Codes of Conduct should avoid any restrictions on exchange of scientific discoveries in the field of biology for prevention of disease and other peaceful purposes. Subjecting scientific research and the free flow of scientific information to undue restrictions may amount to violation of obligations undertaken under Article X of the BWC. Therefore, all necessary precautionary measures need to be taken 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, while devising national codes of conduct.
The statement concluded by looking forward to productive discussions next year on Article X, to which the Group attaches the highest priority.

**Pakistan** then spoke, saying that that the BWC regime is on track. It is moving forward with a measured, confident pace. The yearly meetings of experts and states parties are not formal PrepComs for the 2011 Review Conference; yet in their informal setting they create an enabling environment for exchange of views and information, networking, and preparation for the Review Conference. The smooth rhythm of these meetings is a unique strength of the BWC. It noted that The two themes for this year - biosafety and biosecurity and oversight, education, awareness raising and codes of conduct - are pertinent and pressing. They are also closely linked. The statement then went on to outline the steps that had been taken by Pakistan in regard to the two topics for this year’s meeting.

**Japan** then spoke, saying that it considered both of this year’s topics are critical for the full implementation of the BWC, particularly for preventing the development, acquisition and use of biological weapons. Since the States Parties have more or less discussed both topics in the past meetings, Japan thinks that it is important for this Meeting of Experts to conduct discussions, build upon past outcomes and make progress on these topics. The statement went on to say that Japan had submitted a working paper on the first topic (WP.22) as well as being associated with the working paper submitted by Canada in consultation with JACKSNNZ (WP.17), and that Japan in consultation with JACKSNNZ had submitted a working paper on the second topic (WP.21). The statement concluded by saying that Japan believes the involvement of all stakeholders, including the relevant international organizations, NGOs, the scientific community, industry and academia is vital. With their presence today, Japan is confident that this meeting will produce input of great worth for the meeting of States Parties in December through the active discussions among experts.

**Saudi Arabia** then spoke, outlining steps that had been taken by Saudi Arabia to implement the Convention at the national level and going on to say that Saudi Arabia calls upon all countries that have not joined the Convention yet to do so as early as possible.

The **United States of America** then spoke, saying that the agenda for this Meeting of Experts covers two important sets of issues, and noting that implementation of appropriate measures, mechanisms, and procedures in these areas will have, and indeed in some cases already have had, the important effect of contributing to the prevention of either accidental or deliberate misuse of biology and also of ensuring that the important advances in the bio-sciences are not used for prohibited and nefarious purposes. The statement went on to make a comment on the structure of the BWC intersessional meetings, and on the 2008 meetings in particular:

First, we find valuable for the specific issues under our purview, the mix of more formal expert exchanges among States Parties, and intergovernmental organizations, with the more informal opportunities to exchange information and views with interested individuals and organizations provided via the early morning and lunchtime presentations. As such, my delegation looks forward to an informative and lively exchange on the issues before us, between and amongst delegation experts, as well as with other experts in the field from Observer States, International Intergovernmental Organizations, Non-Governmental Organizations, Academic Institutions, and other Guests of the Meeting, either in the meeting room itself, or in the times set aside outside the meeting room proper for such interaction. Our experiences to date have demonstrated the value of a community effort, including as many stakeholders as possible, in moving the issues forward. For our part, we plan to contribute at all levels. Second, we welcome the creative use of poster sessions. Well known in the scientific and academic arenas, these sessions should provide additional opportunities to share information on a variety of related topics, and build on the primary contributions during the Experts meetings themselves. The United States intends to take advantage of this innovative approach ourselves, by providing poster sessions on each of the two agenda items before us.

The statement concluded by noting that it is our hope that the fruit of this week’s discussions will add further impetus to steps States Parties are taking to enhance biosafety and biosecurity processes in their own countries. We’ve come a long way, but there’s still work to be done, to cover gaps, and to keep up with the ever-evolving and exciting challenges that advances in the biosciences are posing. Education, awareness raising, oversight, encouraging ethical and responsible behavior among those in the field is also an important component in ensuring that the benefits of these advances are put to good use, not malicious use.

The **Russian Federation** then spoke, noting that the BWC is one of the cornerstones of disarmament and non-proliferation of the weapons of mass destruction. Its significance is rising in the light of the rapid growth of life sciences whose discoveries may have dual use nature and the danger of use of weaponised new and genetically modified biological agents and toxins for hostile purposes. Russia fully complies with its obligations under the Convention. The statement went on to consider codes of conduct, saying that when we examine the matter of the codes of conduct the most important challenge that we are to address is dual use. The professed purpose of such codes is to guide the scientific research in such a way that its peaceful results may not be used for malevolent purposes against the will and intention of scientists. It is believed that the codes must include inter alia such elements as the criterion to define dual use research, a list of fields of science that pose the greatest risk in terms of yielding sensitive discoveries, and - the most difficult one - a framework to monitor and administer dual use research. It was then noted that codes of conduct are not suited to preventing intentional violations of the prohibitions set forth by the Convention in the shape of state run offensive
biological programmes. It is our firm belief that this presents the greatest danger for the Convention’s regime. The only way to minimise it is to return to the multilateral negotiations leading to the adoption of a legally binding instrument of verification. That is why Russia continues to advocate the early resumption of the work of the Ad Hoc Group in line with its existing mandate. Secondly, almost all research projects conducted as part of state sponsored biodefence programmes are dual use. Their implementation is justified by national security considerations and the determination to repulse the threat posed by the hostile use of pathogens and toxins. However, bearing in mind that biodefence scientists are aware of the context and nature of their research and they better than anyone else recognise their responsibility, the adoption of codes of conduct in this setting seems to be unnecessary and superfluous. Thirdly, the codes may not serve as a means of constraining the freedom of peaceful scientific pursuits. In this light, scientists and dual use research oversight bodies face a complex challenge of balancing the likely profit from useful scientific discoveries against potential risks related to them. There is no single recipe that would be suitable for any situation, and decision to go ahead will be taken in each specific case after examining all appropriate aspects of the project and the needs and interests of this or that country.

China then spoke, noting that the Beijing Olympic Games is under way and that China was confident that the Chairman’s rich experience and diplomatic skill would make the arena of biological arms control as brilliant as the Olympic Games. The statement went on to say that the past few years have witnessed the fast development of biological technologies and information techniques. The risks of acquisition of the dangerous biological agents by terrorists and non-state actors is increasing. ... The dimension of the implementation measures of the Convention has been constantly expanded, which not only cover the traditional security issues such as prohibition of biological weapons and prevention of proliferation of such weapons, but also the non-traditional issues including bio-terrorism, biosafety and biosecurity, prevalence of epidemics. Such changes bring about a higher standard for States Parties on the full implementation of the Convention. The statement continued to say that strengthening biosafety and biosecurity and improving oversight of the life sciences have been important aspects in the implementation of the Convention and have crucial and practical significance on the prevention of acquiring biological weapons related materials and technologies by terrorists and non-state actors and preventing the life sciences from being used for malign purposes.

The Republic of Korea then spoke, welcoming the progress made by the Sixth Review Conference and at the intersessional meetings in 2007, and went on to say that at the second intersessional meetings in 2008 we should exert the utmost efforts to carry forward the momentum created last year. It is the sincere hope of my delegation that the planned intersessional work program will eventually make significant contribution to the success of the 7th Review Conference in 2011. The statement then outlined the actions being undertaken by the Republic of Korea on the two topics being considered in 2008.

Indonesia then spoke, noting that there has been an astonishing development in the fields of research and technology in biological science, including inter alia, the efforts to find a cure for infectious diseases as well as to improve human health. ... At the same time, we also realize that there are some risks associated with research in this field. The intentional and unintentional release of dangerous biological materials and toxins present great challenges, not only to the scientists and practitioners who deal with these materials on a daily basis, but also to society and the environment as a whole. The statement went on to note the importance in this respect of Article II by saying that Article II of the Convention requires States parties to observe all necessary safety precautions to protect populations and the environment in all activities not prohibited by the Convention and in regard to Article IV by saying that the States parties should take any necessary measures as stipulated in Article IV to prevent and prohibit any activities contrary to the Convention. The statement then stressed the unique and important role that those engaged in the life sciences have to play in ensuring that their work will benefit society as a whole whilst ensuring that their work is not used for activities to the Convention.

Nigeria then spoke, noting that the dual-use potential of bio-technology will always remain a minefield, requiring a careful balancing act, so as not to deprive states of the benefits of bio-technology. In this regard, my delegation will continue to support all honest and transparent measures which could help improve bio-safety and bio-security, including laboratory safety and security of pathogens and toxins. The statement went on to express appreciation to the European Union for its continuing efforts to promote the universalization of the BWC in Africa, including the very important area of capacity-building. Thanks to the EU, Nigeria successfully organised a workshop in Abuja early this year on the drafting of legislation for the domestication of the BWC. The draft legislation, which is currently being fine-tuned by government, would soon be presented to Parliament for consideration. The statement went on to say that, in relation to education and public awareness, assistance was being sought from the EU to hold a workshop in Nigeria for the sensitization of high-ranking public officials on the BWC.

Libya then spoke, setting out the activities that had been undertaken in Libya at the national level in the field of biotechnology, bioethics, biosafety and biosecurity during the intersessional period. In particular several draft pieces of legislation were mentioned.

Iran then spoke, associating Iran with the statement of Cuba on behalf of the NAM and stressing the importance of the BWC in combating the threat of biological weapons and the need to strengthen the Convention through the resumption of the negotiation of a legally binding mechanism. The statement
went on to welcome the three new accessions to the Convention and to note that there are still a number of states which have neither signed nor ratified the Convention. In this regard it should be underlined that among Non-Parties, those with advanced biotechnology which are situated in volatile regions pose a serious threat to the international and regional peace and security. We call upon them to accede to the Convention without delay. In regard to the first topic to be considered on biosafety and biosecurity, the statement said that it goes without saying that biosecurity and biosafety should not serve as a pretext to hamper peaceful cooperation enshrined in Article X of the Convention and thus leading to an unbalanced implementation of the provisions of the Convention or to unduly tightening national export controls. In fact, implementation of Article X can contribute, inter alia, to realization of necessary standards for biosafety and biosecurity in each State Party. The statement went on to say that biosafety and biosecurity procedures and practices vary enormously from country to country according to level of technological development and access to materials and technology. Therefore “one size fits all” approach should be avoided in dealing with the issue. On the second topic, the statement said that we would like to underline that raising scientific community’s awareness in either state or private sectors with respect to the objectives enshrined in the BWC could be an important and effective element in promoting the national implementation of the Convention. It went on to say that there is a general need to raise awareness and increase education among the scientific community and the public at large on the prohibitions and requirements of the Convention. In regard to codes of conduct, the statement said that given the fact that any code as devised by the States parties shall ultimately be applied to their Subjects, it remains the prerogative of States parties to decide on the content, development and/or and adoption of codes. However, the development and adoption of such codes of conduct could be effective and useful when complemented with the involvement and assistance of national scientific community.

The Chairman then closed the morning session noting that the afternoon session would resume at 3pm.

Although, as usual, there were group statements by the EU and the NAM, there was no statement on behalf of a group of Latin American States, and it was noted that although Japan and the Republic of Korea made statements in the opening morning session, neither of these spoke on behalf of the JACKSNZ group (Japan, Australia, Canada, Republic of Korea, Switzerland, Norway and New Zealand) although Japan pointed out that two of Working Papers submitted to the Meeting of Experts had been coordinated within the JACKSNZ group.

**Monday 18 August, Afternoon Session**

The afternoon session began with a statement by Peru noting that currently our political experts and authorities are working intensively on a draft law to implement the Convention. We have been able to benefit from the active participation of technical and legal experts from the European Union’s Council who paid two visits to Peru in August 2007 and, more recently, in April this year. My Government hopes that shortly this [draft bill] will go before the national parliament for consideration and this will be done before the end of the year. The statement went on to say that while primordial responsibility for complying with and ensuring that there is compliance with the provisions of the Convention and that this is incumbent upon States, our national societies and non-governmental organizations as well as the scientific circles are called upon to play a substantive role in the fullest possible implementation and universalization of this international instrument. Their actions in favour of dissemination, education and information, as also to no lesser extent the mobilization of the will of our respective Governments, as also areas such as prevention and monitoring in connection with the precepts of this Convention, should be highlighted and supported. Peru firmly believes that these activities on the part of civil society will help us come up with substance and grant legitimacy in the broader sense of the word to the action taken by States.

**Colombia** then spoke, reiterating its full commitment towards disarmament, non-proliferation and the prohibition of the development, production, stockpiling of bacteriological (biological) and toxin weapons and their destruction, as also confirming its readiness to participate in multilateral initiatives intended to ensure the elimination of these weapons of mass destruction. The statement then outlined the actions being taken in Colombia to implement the Convention, and went on to say that we are in the process of creating and adopting protocols or codes of conduct at the national level as also verification systems and/or inspection systems for the production of toxins, microbials and biological agents in order to give full implementation to the Convention. As to codes of conduct, we must ensure that these mechanisms do not restrict access to information and technology on the part of the scientific and academic community. For this purpose, for Colombia it is of great importance to promote and facilitate economic and technological development in the field of biocience and biotechnology in States Parties. In this aspect, international cooperation for the peaceful use of biological activities is of fundamental importance, not just for the exchange of experiences but also in facilitating human, technical and financial resources. The statement went on to say that in developing national strategies or programmes for campaigns to educate the public, adopt or develop codes of conduct, it is important to be able to count on the participation of civil society, particularly in the academic and scientific sector in connection with the implementation of the Convention and the peaceful use of biological substances.

**Norway** then spoke about a Norway/Indonesia seminar on biosafety and biosecurity held in Djakarta on 4/5 June 2008, that is the subject of a jointly submitted Working Paper (WP.20). The statement noted that this seminar was truly an expression of partnerships, among state parties, with the ISU and with research institutions and enterprises. ...
Indeed, we need to forge new and enhance existing partnerships among relevant stakeholders, nationally, regionally and globally. The statement went on to say that we fully recognize the importance of adequate national measures and standards. We should recognize the crucial responsibility of all those working at or with laboratories to be engaged in safety and security. Awareness raising is indispensable for promoting security and safety. In this regard codes of conduct will clearly be of great importance. Such codes must be adapted to the different sectors and institutions. There is no one size fits all, but they should all sustain the norm set by the BTWC.

India then spoke, saying in regard to the intersessional meetings that while these deliberations are useful, only a multilaterally agreed mechanism for verification of compliance can provide the assurance of observance of the legal obligations by the States Parties and can act as deterrence against non-compliance. We also believe that decisions regarding the strengthening of the Biological Weapons Convention should be taken by the Review Conferences based on the principle of consensus. The statement went on to say that Recent advances in biotechnology, genetic engineering and life sciences, and their dual use nature pose particular dangers of proliferation and the hostile use of biological agents. The possibility that non-state actors, including terrorists, could acquire and resort to the use of biological warfare agents and toxins has added a new dimension to this danger. India therefore, supports international cooperation efforts to address these challenges. We have undertaken initiatives at the United Nations General Assembly, including sponsoring a resolution on ‘Measures to prevent terrorists from Acquiring Weapons of Mass Destruction.” The statement then went on to outline legislation adopted by India and to consider the topic of biosafety and biosecurity. In regard to codes of conduct, the statement said that We also believe that while evolving Codes of Conduct cannot be a substitute for legally binding measures to ensure the strict implementation and compliance with the provisions of the Convention, an exchange of views to draw up best practices so as to increase awareness, especially with regard to the multi-faceted nature of dual use of material and technologies can be of benefit to all. Our discussions should be aimed at helping States Parties improve their national standards in the fields of bio-safety and bio-security and should be implemented on a national and voluntary basis. We believe that achieving such standards can be facilitated by international cooperation and strengthening the implementation of Article X of the Convention, to which India attaches the highest priority.

Morocco then spoke, saying that The Convention on Biological Weapons is one of the three pillars of non-proliferation of weapons of mass destruction and must be paid particular attention to because of the rapid development of life sciences and the increasing uses of threats of dual usage and in this connection my delegation is pleased [by] the two topics selected this week, reviewing national, regional and international measures designed to ensure biological safety and security, including work safety in laboratories and of pathogens and toxins and monitoring and education, awareness-raising, as well as the adoption or elaboration of codes of conduct in order to prevent the abuse of progress in biological sciences and technologies which could be abused to ends not compatible with the Convention. The statement then went on to outline steps that had been taken by Morocco in regard to the two topics being considered by the Meeting of Experts.

This completed the introductory statements by the States Parties. The Chairman then invited the World Organisation for Animal Health (OIE) to make its presentation.

Dr. Gideon Brucker, the Deputy Director-General of the World Organisation for Animal Health (OIE), then spoke, saying that he was also speaking on behalf of the Food and Agriculture Organisation (FAO) who was unable to be present. He said that OIE together with FAO and WHO had said that the most effective way of preventing bioterrorism using animal pathogens, is to strengthen the ability and capacity of the national Veterinary Services of countries to early detect, diagnose and respond to incidental or deliberate disease incursions within the guidelines, recommendations and international standards of the OIE that are mandated by the World Trade Organisation (WTO). He went on to
say that the OIE fully realizes and acknowledge the fact that 60% of human pathogens are zoonotic; that 80% of animal pathogens are multi-host; that 80% of pathogenic agents having a potential bioterrorist use are zoonotic and that animal diseases can today with the effects of globalization and the speed of international traffic, spread faster across the globe than the average incubation period of most diseases. The OIE therefore also accepts the obligation and responsibility of the veterinary profession to create an effective buffer between the animal source of the disease and the need for human and animal safety and health. The prevention of zoonoses, ensuring food security and ensuring that the veterinary services of countries are equipped and capable to face, manage and minimize the threats and possible disastrous effects of incidental or deliberate animal disease incursions - are non-negotiable commitments of the World Organisation for Animal Health. He then made a presentation setting out the actions being taken by the OIE to counteract bioterrorism and concluded by saying that the OIE shares with all its Member Countries the common concern about the potential devastating effects inherent to any act of deliberate misuse or spread of biological pathogens that can affect human and animal health and food and animal production. The OIE is committed to take hands with its colleagues in the FAO and WHO to enhance the aims and objects of the Biological and Toxins Weapon Convention by assisting countries to acquire the ability and expertise to apply the international standards, guidelines and recommendations of the OIE to cope with not only such unfortunate emergencies but also with any major animal and zoonotic disease that might affect animal or human health.

The meeting was then suspended and resumed with the Chairman remaining in the chair to hear statements from eleven NGOs who spoke effectively in alphabetical order:

a. **The BioWeapons Prevention Project (BWPP).** Kathryn McLaughlin spoke, saying that the BWPP looked forward to seeing the States Parties take effective action by identifying common standards and practices that can be applied by each State Party in the oversight of activities that might present or be perceived to present a risk to the Convention. Risk management techniques are an important tool in mitigating and controlling the risks from dual-use science and the BWPP urged States Parties to consider how these tools and techniques can be integrated and adopted at both domestic and international levels.

b. **The Center for Arms Control and Non-Proliferation/Scientists Working Group on Biological and Chemical Weapons.** Alan Pearson spoke, saying that oversight can serve many functions, from ensuring that individuals engaged in life sciences activities adhere to national laws and guidelines and international norms, to minimizing the potential for dual-use activities to contribute to the use of biology for hostile purposes, to providing increased awareness of and insight into relevant scientific and technological advances. Oversight is also critical for ensuring that national biodefence research and development programs, whether conducted by military or civilian agencies, remain compliant with the BTWC. Recent years have seen significant growth in the biodefence efforts of many states. These include activities aimed at gaining or maintaining cutting-edge bioweapons-relevant knowledge and capabilities.

c. **Center for International and Security Studies at Maryland.** Elisa Harris spoke about a multi-year project into the potential risks posed by advances in the biosciences and the adequacy of existing biosafety and biosecurity measures for reducing those risks. She said that awareness is growing within both the scientific and policy communities that legitimate science can create new dangers - if a cutting-edge experiment has unanticipated results or if findings from work done for benign purposes are misused by someone else. It is also clear that current biosafety and biosecurity measures, which vary greatly within and across countries, do not address this problem, as they are focused largely on preventing exposure to dangerous pathogens or controlling access to them. She concluded by identifying six features that should be included in an oversight system to make it effective.

d. **The Institute for Security Studies (South Africa).** Noel Stott spoke, pointing out that nine of the twenty states that have not yet signed the BWC and eight of the thirteen who have signed but not yet ratified the BWC are African. This is because the convention is not seen as a priority item whereas disease outbreaks are a primary concern. There is an urgent need to develop and strengthen the capacity, both human and infrastructural, for life sciences research and diagnosis across the continent and to improve the safety practices at laboratories through the formulation of policy and legislation. African governments and scientific associations need to become more involved in national, regional and international discussions and deliberations about biosecurity, and to start developing and implementing policies that promote safe, responsible science.

e. **Landau Network - Centro Volta and Bradford University.** James Revill spoke about a joint project intended to assess the extent to which biosecurity education and awareness raising is included in life science curricula in European Universities. To achieve this, a representative sample consisting of nearly 60 universities from 29 countries across Europe was identified. In an assessment of over 150 courses, the online syllabi were examined for material dealing with, inter alia, biosecurity, dual-use and/or arms control. The results show that bioethics and biosafety components are present in many of the courses identified. However, existing references to biosecurity are limited, and references to dual use issues, the BTWC, or indeed codes of conduct, are minimal. The aim over time is to construct biosecurity and dual-use education modules, supported by the professions to whom they apply.

f. **The London School of Economics.** Filippa Lentzos spoke, saying we must ask the question why is education required? It is time we moved beyond a simple acknowledgement that ‘education is good’ and consider what education would entail in practice. Other questions are what is it that we want to educate people about? Who are we
trying to educate? And how are we to educate? She went on to say that a real commitment to education requires leadership from States Parties to develop and to sustain national educational activities. Through this year’s meetings, States can provide an important signal to those associated with the life sciences regarding the need to maintain and reinforce the prohibition against the deliberate spread of disease. To build a reinforcing synergy between the disparate and fragile educational activities currently underway, States Parties need to actively promote and fund collaborations between countries, institutions and individuals so that their experiences, achievements, problems and concerns can be shared. States Parties, more than most people, are well placed to show national leadership on educational activities, as well as to take co-ordination of national efforts forward on a multilateral level. She urged that it is critically important that the States Parties use this year’s opportunity to foster concrete and effective action on education to further the aims of the BWC.

g. National Defence Medical College of Japan and Bradford University. Malcolm Dando said that Bradford Briefing Paper No. 16 and Bradford Review Conference Paper No. 18 had shown that there is a very low level awareness of the BWC and its obligations amongst many life scientists around the world. He considered that the need for widespread development of new educational modules to make life scientists in high schools, universities and industry aware of their obligations under the Convention should be a major recommendation of the 2008 Meetings. He went on to describe a joint programme to develop a web-based resource which can be used by other universities around the world to develop courses for their students. This web-based resource will cover the threat of biological weapons and the international regime totally prohibiting such weapons, the dual-use dilemma and the responsibilities of life scientists, national implementation of the BWC and the building of an effective web of prevention.

h. Pax Christi International. Enrique Sierra said that Pax Christi International welcomed this year's attention for measures to improve biosafety and biosecurity, and education, codes of conduct and other measures for preventing misuse of life sciences. He went on to set out a number of elements that should be included in such codes of conduct and added that the efforts of the Royal Dutch Academy of Sciences KNAW and other leading professional bodies such as the Inter Academy Panel and the UK Royal Society in developing and discussing codes of conduct were welcomed. It is important that these codes keep being developed and discussed and taught to all new workers in the life sciences. He concluded by noting that scientists and industrialists cannot assume the responsibility of governments, but can contribute to achieving the effective implementation of a sound and effective legal system including biosecurity and biosafety, together with education and codes of conduct.

i. University of Exeter. Brian Rappert said that his assessment was that, overall, those associated with the life sciences have given insufficient attention to date to concerns about the misuse of their work in relation to activities prohibited by the BWC. He urged that States Parties could explicitly agree, in December that:

- A fundamental principle in preventing the destructive use of the life sciences is that the benign intent of individuals is not a sufficient response to preventing misuse.
- All those graduating from higher education in fields associated with the life sciences should be familiar with the international prohibition against biological weapons.
- All those undertaking professional research careers should have received effective training or instruction related to preventing the misuse of their research.
- Each government represented at the current meeting should commit itself to initiating a dialogue with their respective national science academies about how the present low level of awareness can swiftly be corrected.
- The inclusion of those in the life sciences and other professionals within the BWC would be facilitated by increasing the openness of the Convention to non-state actors.

j. VERTIC (Verification Research, Training and Information Centre). Rocio Escauriza said that VERTIC considers biosafety and biosecurity, including laboratory safety and security of pathogens and toxins, are strengthened and sustained by robust legislative and regulatory frameworks at the national level. National measures in turn complement regional and international initiatives to ensure that pathogens and toxins are only used for legitimate scientific pursuits. She went on to outline the National Implementing Measures Project, under which VERTIC has taken major steps towards assisting States to strengthen laboratory and research facility security through tailored national measures, in tandem with the implementation of their other obligations arising from the BWC. In order to provide legislative drafting assistance to States, VERTIC has finalized two drafting tools which are intended to be used as a starting point and tailored to each State’s particular circumstances: the ICRC-ERTIC Model Law which is available in Arabic, English and Spanish, and the VERTIC Sample Act for National Implementation of the Biological Weapons Convention and Related Requirements of UN Security Council Resolution 1540, which is available in Arabic, English, French and Spanish. Both models are available in print copy and on the VERTIC website [www.vertic.org/NIM]. She noted that the VERTIC Sample Act includes a number of provisions specifically related to establishing robust biosafety and biosecurity frameworks.

k. Asia Pacific Centre for Military Law (APCML). Paramdeep Mtharu said that APCML is a collaborative initiative between the Legal Division of Australia’s Department of Defence and the University of Melbourne Law School, set up in 2001 to facilitate cooperation in the Asia Pacific Region in research, training and the implementation of laws governing military operations. With respect to the BWC, the APCML has played a key role in organizing and convening the first BWC Regional Work-
shop co-hosted by the governments of Australia and Indonesia, held at the University of Melbourne in February 2005, and the second BWC Workshop held in Bali in March 2006. These discussions led to the recognition that while all BWC States Parties have the same basic obligations under the BWC, the most useful approach will be for each State Party to develop a ‘tailor-made’ solution to its national approach to ensure full implementation of the BWC - it is not a case of “one size fits all”. She concluded by saying that the APCML is presently assisting in the further development of an ‘Implementation Toolbox’ which includes: (i) A checklist of legislation requirements and ‘drafting elements’ covering the various BWC legislative requirements, including biosafety and biosecurity; and (ii) Guidelines on outreach to relevant scientific communities, including drafting elements for codes of conduct for scientists working in the biological sciences and biotechnology.

The Chairman then closed the afternoon session, thanking all speakers for their contributions. He announced that the poster session for the first topic of the Meeting of Experts would start on Tuesday morning at 9 am in the Escargot Bar two levels above the Conference Room, and that the Meeting of Experts would commence its consideration of the first topic — biosafety and biosecurity, including laboratory safety and security of pathogens and toxins — at 10 am.

In addition, as at the Sixth Review Conference, the Meeting of Experts 2007 and the Meeting of States Parties 2007, Richard Guthrie in association with the BioWeapons Prevention Project provided daily reports on the Meeting of States Parties that were made available in hard copy to the delegations as well as electronically. These reports are available at http://www.bwpp.org/2008MX/MX2008Resources.

Side Events

During the Meeting of Experts there were side events at lunchtime each day, as well as a morning event at 9 am on Wednesday 20 August 2008. The first lunchtime side event was a Geneva Forum meeting on Monday 18 August to consider Synthetic Biology: Engineering Life Science, at which Piers Millet of the ISU introduced a series of audiovisual interventions on synthetic biology (these are available at http://www.unog.ch/bwc). This was followed by a presentation on The implications of synthetic biology by Robert Friedman, Director of West Coast Operations and Vice President for Public Policy of the J Craig Venter Institute, USA. On Tuesday 19 August, the lunchtime event was a discussion on Dual-Use at the Cutting Edge: What to do about Oversight, introduced by Ambassador Georgi Avramchev (Macedonia) with contributions by Malcolm Dando (Bradford), Alexander Kelle (Bath), Kathryn Nixdorff (Darmstadt), David Friedman (Tel Aviv) and Elisa Harris (Maryland). On Wednesday 20 August, the morning event, entitled Biosafety and Biosecurity, was organized by the International Biosafety Working Group with contributions by Heather Sheele, President of the European Biosafety Association (EBSA), Ursula Jenal (EBSA), Christina Thompson of the American Biosafety Association (ABSA), Marie-Louise Graham (ABSA-Canada), and Gary Burns of the Pharmaceutical Biosafety Group. The lunchtime event was a BioWeapons Prevention Project discussion entitled BWPP: Meet the Networks with contributions by Kathryn McLaughlin (BWPP), Kathryn Nixdorff (INES), Alan Pearson (Scientists Working Group, Center for Arms Control and Non-Proliferation), Gert Harigel (GIPRI) and Sergey Batsanov (Pugwash International).

On Thursday 21 August, the lunchtime event was a U.S. National Academies of Sciences meeting entitled 2nd International Forum on Biosecurity: Summary if an International Meeting, which was co-chaired by Sergio Pastrana (Cuban Academy of Sciences) and Barbara Schaal (US National Academy of Sciences), with contributions by Alastair Hay (Leeds), Ben Rusek (US National Academy) and Ralf Trapp (independent consultant). On Friday 22 August the lunchtime event was a VERTIC meeting entitled National Implementation Measures for Effective Biosecurity and Biosafety, chaired by Angela Woodward, with introductory statements by Ambassador Johannes C. Landman (Netherlands) and Miss Jacqueline Daley (UK), followed by a presentation by Scott Spence.

Tuesday 19 August 2008

The Meeting of Experts resumed on the morning of Tuesday 19 August 2008 with a Poster Session, focused on the first topic — biosafety and biosecurity — being considered at the Meeting of Experts. It was held in the Escargot Bar, two floors above the meeting room. The Chairman, Ambassador Avramchev, welcomed all present to the poster session noting that this was the first time that there has been such a session at a BWC meeting. He said that the background to the session was that feedback had been received from several delegations that previous BWC meetings of experts had been rather frustrating for the experts. These experts had travelled long distances to participate in the meeting, but had then found themselves trapped in a big conference room along with their colleagues, listening to diplomats making speeches. There was no organised way for the experts to meet each other and talk in detail, and so we were not making the most of the valuable opportunity of having so many knowledgeable experts in the same place. To remedy the situation, we introduced the idea of holding poster sessions. This idea was greeted with some bemusement by our diplomatic colleagues in Geneva, who are unfamiliar with the concept. But it was taken up enthusiastically by experts around the world, who knew exactly what a poster session was, and what it could provide. And now here we are, ready for what I hope will be a meeting of diplomatic and scientific minds.

There were 21 posters (available at http://www.unog.ch/bwc) on the following topics:

i. Is biodefense research regulation meeting its goal of protecting public health and national security? Dr Vickie Sutton, Center for Biodefense, Law and Public Policy, Texas Tech. University.


iii. Canada’s biosafety association: A key in Canada’s capacity building in biosafety and biosecurity. ABSA Canada.


vi. National implementation measures for effective biosafety and biosecurity. VERTIC


ix. Biosafety and biosecurity in the BSL3 Laboratory of the Centre d’Etudes du Bouchet. French delegation.


xiii. Laboratory Biorisk Management Standard and its applicability under the BWC. DNV (Den Norske Veritas).


xvi. Enhancing national biopreparedness. European Union.


The Meeting of Experts then resumed at 10 am to consider the first topic: National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins. The morning session focused on concepts and approaches with presentations and statements first from the four intergovernmental organizations – the World Health Organisation (WHO), the Organisation for Economic Cooperation and Development (OECD), the United Nations Environment Program (UNEP) and the European Commission DG-SANCO. These were then followed by presentations and statements by States Parties: Canada, USA, Switzerland, Indonesia and Germany (on behalf of the European Union to introduce WP.13 and WP.19). After each presentation or statement the Chairman invited any questions or comments from participants in the room; there were usually a few such queries raised by representatives of States Parties, of the intergovernmental organisations and by the guests of the meeting, which enabled some of the points made by the speakers to be elaborated and clarified. Most of the presentations and statements made during the Meeting of Experts are available at http://www.unog.ch/bwc.

The afternoon session at 3pm continued with further presentations and statements by States Parties: Nigeria, Denmark, Cuba, United Kingdom (introducing WP.7), Pakistan, Bulgaria, USA, Norway, and India. At 4.30 pm, the Chairman introduced the first panel discussion on biosafety and biosecurity with representatives of industry, by noting that the biological sciences have become big business. The biotechnology sector is, or could be in the future, an important economic driver for many of our countries. Both technology and know-how is spreading around the globe. As we consider issues of biosafety and biosecurity at our meeting here in Geneva, we must not forget that, out there these businesses are pushing at the boundaries of human knowledge. This panel is an acknowledgement of the important role that the private sector has to play – in both the biological sciences and the BWC. I hope that this panel will be another small milestone in our efforts to build an ever more fruitful relationship between the BWC and commercial operations. The panel members were Gary Burns from Astra Zeneca, John Keddie from GlaxoSmithKline plc, Robert Friedman from the Venter Institute and Shrikumar Suryanarayana from the Association of Biotechnology Led Enterprises of India (ABLE). The panel discussion was followed by further presentations and statements from States Parties: South Africa, Argentina, Australia, Ukraine and Morocco. The Chairman concluded the Tuesday session by expressing apologies to the guests of the meeting who had originally been expected to make their presentations and statements on Tuesday afternoon but would now do so on the Wednesday morning.

Wednesday 20 August 2008

The Meeting of Experts resumed at 10 am with a further presentation and statement by a State Party: Germany introducing WP. 13. Presentations and statements were then made by a number of guests of the meeting from the American Biological Safety Association (ABSA), the Asia-Pacific Biosafety Association (A-PBA), the European Biological Safety Association (EBSA), the InterAcademy Panel on International Issues, the International Network of Engineers and Scientists for Global Responsibility (INES), International
Thursday 21 August 2008

This day also began at 9 am in the Escargot Bar two floors above the meeting room, with a poster session focused on oversight, education, raising awareness and codes of conduct. There were 11 posters (some available at http://www.unog.ch/bwc) on the following topics:


ii. The Aum Shinrikyo’s biological weapons programs and Japan’s response. Katsuhisa Furukawa, Research Institute of Science and Technology for Society, Japan.


v. Biosafety / biosecurity officer’s curriculum. Swiss delegation. [although listed as an education and outreach poster, this appears to be the same as that listed for the biosafety and biosecurity poster session].

vi. Strengthening the BTWC through the development of an educational model for life scientists. National Defense College, Japan & University of Bradford, UK.

vii. Awareness raising, education and outreach. BWPP.

viii. Multiple uses of chemicals and chemical weapons: the role of science education in raising ethical awareness. IUPAC.

ix. Life Sciences Awareness and Education. US DOE.

x. Biosecurity in the Life Sciences. US NSABB.


The meeting resumed at 10 am with further presentations and statements by States Parties on capacity building for biosafety and biosecurity: Canada, Kyrgyzstan, France, Cameroon (a State not yet party to the Convention) and France again. This concluded the consideration of the first topic – biosafety and biosecurity – and the Meeting of Experts then moved on to start to consider the second topic – Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim to prevent misuse in the context of advances in bio-science and biotechnology research with the potential of use for purposes prohibited by the Convention. Attention was first given to oversight of science. One presentation and statement on oversight had been made on the Wednesday afternoon as the representative of France would not be there on Thursday. On the Thursday morning the presentations and statements were made by States Parties, by a guest of the meeting, and by an intergovernmental organization: USA, Japan, Germany (introducing WP.6), Indonesia, Cuba, Australia, Turkey, Malaysia, Argentina, Sudan and France.
Inclusions and proposals marked **draft, as at 12.00 on 21 August** was also circulated with the request that any errors or omissions should be advised to the Secretariat.

The afternoon session continued the consideration of the oversight of science with a presentation and statement by a guest of the meeting, the US National Academy of Sciences, followed by presentations and statements by the following States Parties: Pakistan, Cuba and Brazil. After these, the Chairman said that the meeting would now go on to consider education and awareness raising after considering two presentations and statements relating to codes of conduct. The first was by Germany introducing WP.12 and the second by France. On moving to education and awareness raising, presentations and statements were made by three States Parties: United Kingdom introducing WP.10, Switzerland, and the USA. This was then followed by a presentation and statement by an intergovernmental organization; the UN Security Council Resolution 1540 Committee. This was followed by a panel discussion on education, awareness raising and codes of conduct. The Chairman introduced the four experts on the panel: Robin Coupland (ICRC), John Crowley (UNESCO Ethics of Science and Technology), Decio Ripandelli (ICGB) and Terry Taylor (International Council for the Life Sciences).

**Friday 22 August 2008**

The Friday morning session opened with the Chairman noting that the first draft of the compilation document (CRP.1, 21 August 2008), consisting of a list of considerations, lessons, perspectives, recommendations, conclusions and proposals, had been issued together with a draft of the report of the meeting (CRP.2, 22 August 2008). In moving on to consider education, awareness raising and codes of conduct, he noted that Dr. Robin Coupland in a personal capacity had put up a prize of $2,000 for the winner of a competition for undergraduate students engaged in the life sciences to draft a letter to their University Dean explaining why the 1972 Biological and Toxin Weapons Convention (BTWC) should be included as a mandatory component in the curricular of undergraduate courses pertaining to the life sciences. The letter must be no more than 800 words long, written in English, and submitted to BWPP before 31 October 2008. The Chairman said that this was an excellent initiative making a practical contribution, and the winner would be announced at the Meeting of States Parties in December.

The meeting then continued with presentations and statements by the following States Parties: Australia, Argentina, India, Georgia, Pakistan and Australia again. The Chairman than said that the focus would move on to codes of conduct with presentations and statements made by the following States Parties: Netherlands, USA, Ukraine, China, Bulgaria, Brazil, Republic of Korea, and Sweden. The morning session ended at 12.15 when the Chairman said that the afternoon session would be held at 3 pm to consider the draft report and its annexes and to hear closing statements.

The afternoon session began at 3 pm, with an interim report from the Chairman on universalization. In this he noted that **as we have heard earlier this week, three new members have joined the Convention this year: Madagascar, Zambia and the United Arab Emirates. With the four who joined last year, this makes a total of seven additions since the Sixth Review Conference, and brings the number of States Parties to 162. This is pleasing progress, and is due to the efforts of several States Parties to encourage and persuade these states to join. I would like to acknowledge in particular the efforts of the Depositaries – the Russian Federation, the United Kingdom, and the United States – as well as the recently-concluded Joint Action of the European Union. I would also like to commend the work of the Implementation Support Unit, which is in regular contact with several states not party and is providing advice and encouragement for accession. Among other things, the ISU organized in June of this year an introductory seminar in the French language on the BWC, aimed at better informing francophone states – especially those in Africa – about the Convention and the benefits of joining. I am also grateful to the ISU for its efforts to facilitate Cameroon’s participation in this Meeting of Experts, which I am confident will give a boost to the accession process in that country. I am hopeful that we will have at least two more accessions this year. As well as Cameroon, I understand that Mozambique is also advanced in the accession process. Other possibilities over the next twelve months include Myanmar, Nepal, Comoros and Côte d’Ivoire. He went on to say that we cannot afford to sit back and wait for the accessions to come in. We must continue and intensify our efforts. If we average four new States Parties per year, we will still be around 15 states short of universal membership by the time of the Seventh Review Conference in late 2011. So acceleration is what we need. All States Parties can play a part, by raising the issue of BWC accession with states not party, by placing the issue on ministerial agendas, by exploiting contacts at different levels and in different agencies, by using regional forums, and in general by seizing every possible opportunity. Coordination in this effort is vital. I would urge States Parties to use the Implementation Support Unit’s secure website to check on the latest news on contacts with states not party, so that contacts and lobbying can be better harmonized and targeted. And I appeal to States Parties to report their own efforts and contacts promptly to the ISU, so that other States Parties can benefit in planning their efforts.**

The Chairman then moved on to the consideration of the report of the meeting (CRP.2) and also the addition to the compilation document (CRP.1/Add.1) which contained additional material compiled from the presentations and statements made on Thursday afternoon and Friday morning. He pointed out that all corrections and additions would be incorporated into the final versions of the compilation which will form Annex I to the report of the meeting. Corrections and additions could be submitted to the ISU up until 6 pm on Tuesday 26 August 2008.

The Chairman then went through the draft report (CRP.2) section by section, and noted that there would be two annexes,
one the compilation document as Annex I, and the other the list of documents of the meeting. There were no comments and the report was adopted. The Chairman then invited any closing statements before he made his closing remarks. One guest of the meeting took the opportunity to express his thanks to the Chairman for allowing the guests of the meeting to participate in the Meeting of Experts. They valued the opportunity to make their presentations and contributions to the meeting and their participation had been especially valuable as they had benefited greatly from the presentations made by the many experts, as this had enabled them to better understand the challenges faced in the common goal of strengthening the implementation of the Convention.

The Chairman then closed the meeting by saying, I think it is fair to say that we have had a very useful and constructive meeting. We have heard a huge range of material related to our two topics. Participation in the meeting has been impressively broad: 96 States Parties were represented, and just under 500 delegates participated in the meeting. Of these, around 180 were experts who had travelled from capitals. This is an excellent result, and demonstrates both the wide relevance of our topics and the utility of the intersessional work program. He went on: as I have said right from the beginning of my preparations, it was always going to be a challenge to do justice to our two very broad topics in just one week. We could quite easily have devoted one full week to biosafety and biosecurity, and another full week to oversight, education, awareness-raising and codes of conduct. As we have heard, there are many aspects and considerations to both these topics. We have heard many perspectives, from States Parties, from international organizations, from scientific and professional associations, and from NGOs. We have heard broad policy approaches, technical details, and everything in between. Alas, with only one week, we often found ourselves short of time. Some presentations were longer than others, but all were highly relevant and focused on the topic, and made an important contribution to our work. We had no option but to let the discussions run their course, and this led to some intensive and sometimes rather messy rearranging of the schedule. I would like to thank all delegations for their flexibility and graciousness in allowing us to adjust the schedule to accommodate those who had to leave Geneva at particular times.

He went on to say that we have enjoyed some very positive interaction, both here in the room, and – just as importantly – on the margins, in the corridors, in the coffee lounge, and over lunches and dinners. This blend of formal and informal interaction among experts is one of the great benefits of the intersessional work programme. The poster sessions – a new innovation for this meeting – proved to be a great success, and the feedback I have received suggests that the sessions were an excellent solution to the challenge of developing greater detailed interaction among experts. The only complaint was that the sessions were too short, so perhaps next time we could look at allowing a more generous timeslot. He noted that in the course of the week we have heard a range of ideas, advice and proposals, and certain themes have consistently emerged. Indeed, it is striking that there was very little in the way of disagreement or contradiction. One clear theme that ran through both topics was that of balance: we heard that again and again of the need for proportional measures, for carefully assessing risks, for balancing security concerns against the need for nurturing research and ensuring the peaceful development of biological science and technology. Another central theme was that of ‘no one size fits all’: no matter whether we are talking about standards for biosafety and biosecurity, or codes of conduct, it is clear that States Parties and other actors recognize that individual and local circumstances must be taken into account when addressing these issues.

Looking ahead to the Meeting of States Parties in December, he said that as in previous years, I will prepare a synthesis paper that distills the essence of the many ideas and proposals we have annexed to our report. I think it is important that the Meeting of States Parties produces an outcome that is of practical assistance to States Parties in their efforts on biosafety and biosecurity and education, awareness-raising and codes of conduct. In particular, it should be of practical assistance to those States Parties which are not able to participate in our meetings. The States Parties which participate in our meetings gain significant benefit from the interaction and exchange of information, and would benefit even if the meeting produced no report at all. But we must keep in mind the interests and needs of the entire membership of the Convention, especially the smaller States Parties which are often those most in need of assistance and encouragement. For this reason, a substantive outcome encapsulating our work and collective wisdom is very important.

Outcome of the Meeting of Experts

During the Meeting of Experts, 35 Working Papers were submitted by 16 States Parties with the numbers submitted by individual States Parties ranging from one to seven: Argentina (33), Australia (26, 30, 31, 32), Brazil (28), Canada (17), China (18, 19), Cuba (29), France on behalf of the EU (27), Germany (12, 14, 15), Germany on behalf of the EU (13, 16), Indonesia (20), Japan on behalf of JACKSNNZ (21), Japan (22), Lithuania (9), Netherlands (8), Norway (20, 34), Switzerland (5, 35), United Kingdom (6, 7, 10, 11), and the United States (1, 2, 3, 4, 23, 24, 25). About two thirds of the working papers address the first of the two topics, biosafety and biosecurity.

On the Thursday afternoon and Friday afternoon, a preliminary compilation (CRP.1 and CEP.1/Add.1) of the proposals made at the Meeting of Experts was circulated. The updated versions were subsequently issued as Annex 1 to the report of the meeting (MX.3). The proposals were grouped under the headings of the two topics considered by the Meeting of Experts.

An analysis of the proposals in the tabulation below shows that for the first topic – biosafety and biosecurity – they came from 27 States Parties, 1 Observer State, 4 international organizations and 4 guests of the meeting; and for the second topic – oversight, education and codes of conduct – they came from 22 States Parties, 2 international organizations and 5 guests of the meeting.
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<tr>
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<tr>
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</tr>
<tr>
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<td>26</td>
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<tr>
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<td>South Africa</td>
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<td>Ukraine</td>
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<td>7</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
<td><strong>176</strong></td>
</tr>
<tr>
<td>(from 28 States)</td>
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<td>(from 22 States)</td>
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</table>
As already noted, 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.

Reflections

The Meeting of Experts had a splendid participation with over 500 participants from 96 States Parties, 4 Signatory States, and 3 States non-Party, as well as from IGOs, guests of the meeting and NGOs. It was, however, a one-week meeting addressing two topics, and as the Chairman noted in his concluding remarks it had been necessary to let the discussions run their course, and this led to some intensive and sometimes rather messy rearranging of the schedule.

The poster sessions were a valuable innovation on the Tuesday and Thursday mornings from 0900 to 1000 prior to the morning sessions; with the benefit of hindsight it would have been better to have all the posters available on both days rather than initially calling for posters for biosafety and biosecurity for the Tuesday morning, and for oversight, education and codes of conduct for the Thursday morning – and then announcing that the posters put up for Tuesday would still be available on Thursday. It would also have been helpful if there had been a listing available of all the posters.

There were three panel discussions – the first on Tuesday afternoon on biosafety and biosecurity with guests of the meeting from industry; the second on Wednesday morning on risk management with representatives from international organisations (WHO, OECD, OIE), a guest of the meeting (King’s College) and a representative of Norway (DNV (Den Norske Veritas)); and the third on Thursday afternoon on education, awareness raising and codes of conduct with representatives from international organizations (ICRC, UNESCO, ICGEB) and a guest of the meeting (ICLS). It appears that the panel discussions were regarded as informal sessions, and they are not mentioned in the report of the meeting, although the Chairman in his opening remarks stated that the panel discussions would take place in open sessions. However, unlike the suspension of the formal meeting prior to the statements by NGOs, there was no similar suspension prior to the discussion panels. In addition, the points made in the panel discussions are not recorded in the list in Annex I. The panel discussions nevertheless provided useful wider insights and will have helped the States Parties to appreciate some additional issues relating to both of the topics. The points made in the discussion panels should nevertheless be available to be drawn upon by the Chairman in drawing up his synthesis document.

It was noted that the JACKSNNZ group (Japan, Australia, Canada, Republic of Korea, Switzerland, Norway and New Zealand) had coordinated some of their working papers in a similar way to the EU, which had coordinated working papers as well as working papers by individual members of the EU. However, the JACKSNNZ group did not have a group statement, as they had had at MSP 2007, although three member States had made opening statements (Japan, Republic of Korea and Norway).

An opportunity was missed at the Meeting of Experts in that it is regretted that the group of twelve Latin American States (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Peru and Uruguay) did not continue the practice that they had successfully adopted at the Sixth Review Conference of having a group statement, and of coordinating their working papers. Such group statements are valuable, as they show that the issues being considered are being addressed both nationally and within the group.

It is noted that in the opening statements two countries, Pakistan and the Republic of Korea, looked ahead to the

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Topic 1: Biosafety &amp; Biosecurity</th>
<th>Topic 2: Oversight, Education, Codes of Conduct</th>
</tr>
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<tbody>
<tr>
<td>OECD</td>
<td>4</td>
<td>-</td>
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<tr>
<td>WHO</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>OIE</td>
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<td>-</td>
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<td>1540 Committee</td>
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<tr>
<td>(Sub-total)</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>ABSA</td>
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<td>-</td>
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<tr>
<td>A-PBA</td>
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</tr>
<tr>
<td>IAP</td>
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</tr>
<tr>
<td>NAS</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>(Sub-total)</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Overall Total (incl. States)</td>
<td>177</td>
<td>200</td>
</tr>
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Seventh Review Conference in 2011. Pakistan noted that The yearly meetings of experts and states parties are not formal PrepComs for the 2011 Review Conference; yet in their informal setting they create an enabling environment for exchange of views and information, networking, and preparation for the Review Conference. The smooth rhythm of these meetings is a unique strength of the BWC; and the Republic of Korea said that It is the sincere hope of my delegation that the planned intercessional work program will eventually make significant contribution to the success of the 7th Review Conference in 2011. In addition, Switzerland in its two Working Papers (WP.5 National Data Collection Processes for CBM Submissions and WP. 35 Preparing the Ground for the CBM Content Debate: What Information Builds Confidence) showed that it is carrying out constructive work towards improving the Confidence-Building Measure regime by preparing the ground for the Seventh Review Conference in 2011.

Such an approach of preparing and submitting Working Papers during the intersessional period is to be highly commended. There is much to be said for other States Parties – who in their statements refer to developments that they would like to see occurring at the Seventh Review Conference – taking a similar approach of preparing and submitting Working Papers during the intersessional period, a procedure which can only help to prepare the ground for the Review Conference and to achieving a successful outcome. It would be particularly helpful if Cuba (on behalf of the NAM), Iran and the Russian Federation were each to prepare such Working Papers preparing the ground for consideration at the Seventh Review Conference of resuming consideration of a legally binding instrument.

One point – which embraced both the topic of biosafety and biosecurity and that of education and awareness raising, and which was evident from the statements and presentations during the week – is that there are essentially three international initiatives with closely similar goals; the first being the BWC and its implementation nationally around the world, the second the WHO initiative on laboratory biosafety and biosecurity, and the third the Cartagena Protocol on Biosafety initiative on risk assessment and capacity building in regard to genetically modified organisms. In all three cases, it was evident that effort is being put into education and awareness raising in essentially the same community – those engaged in the life sciences – but it appeared that each of these initiatives rarely mentioned the other two. There would appear to be significant benefits in a coordinated comprehensive approach being adopted in all three initiatives and in approaches to the life sciences community such as that being pursued by the Inter Academy Panel.

In looking ahead to the Meeting of States Parties in December 2008, the Chairman has undertaken to prepare a synthesis paper that distills the essence of the many ideas and proposals in Annex I to the report of the Meeting of Experts. This paper is likely to include language that can be incorporated into the substantive paragraphs of the report of the Meeting of States Parties. As the ideas and proposals captured in the Annex embrace national implementation and regional cooperation in the broadest sense, the synthesis can likewise be expected to include all aspects of national implementation, including those that are being considered at subsequent intersessional meetings, thereby providing a useful impetus to their consideration. In addition, the Meeting of States Parties can be expected to give some consideration to the promotion of universality, as well as to the second annual report on the Implementation Support Unit. The Chairman for the intersessional meetings in 2009 should be advised by the Western Group to the Meeting of States Parties, and the dates for those meetings should be decided. It would be very helpful if the Chairman for the 2009 intersessional meetings could take the opportunity at the Meeting of States Parties in December 2008 to set out his/her approach to the topic for 2009:

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; so that the States Parties could start their preparations then, instead of having to wait until they receive a letter sometime in 2009. Overall, the Meeting of States Parties can be expected to continue the momentum created by the successful outcome of the Sixth Review Conference.

This review was written by Graham S. Pearson, HSP Advisory Board