

**Eighth Review Conference of the States Parties  
to the Convention on the Prohibition of the  
Development, Production and Stockpiling  
of Bacteriological (Biological) and  
Toxin Weapons and on Their Destruction**

2 June 2016

Original: English

**Preparatory Committee  
Geneva, 26-27 April and 8-12 August 2016  
Item 7 of the agenda  
Comprehensive consideration of all provisions of the Convention**

**Common understandings reached by the Meetings of States  
Parties during the intersessional programme held from 2012  
to 2015**

**Background information document submitted by the Implementation  
Support Unit**

*Summary*

The Preparatory Committee decided to request the Implementation Support Unit (ISU) to prepare a background information document showing the common understandings reached by the Meetings of States Parties during the intersessional programme held from 2012 to 2015 (see BWC/CONF.VIII/PC/2, paragraph 25). The ISU has duly compiled this document which reproduces the substantive paragraphs from the respective reports adopted by the Meetings of States Parties in 2012, 2013, 2014 and 2015. The text of the common understandings therefore appears in this document exactly as it was adopted by the States Parties at each meeting, although the paragraphs have been renumbered.

## **I. Introduction**

1. The Final Document of the Seventh Review Conference, in the Decisions and Recommendations section, contained the following decision<sup>1</sup>:

"5. Reaffirming the utility of the previous intersessional programmes from 2003–2010, the Conference decides to retain previous structures: annual Meetings of States Parties preceded by annual Meetings of Experts.

<sup>1</sup> See BWC/CONF.VII/7, Part III, paragraphs 5 to 15.



6. The purpose of the intersessional programme is to discuss, and promote common understanding and effective action on those issues identified for inclusion in the intersessional programme by this Seventh Review Conference.
7. Recognizing the need to balance an ambition to improve the intersessional programme within the constraints — both financial and human resources — facing States Parties, the Conference decides to continue to allocate ten days each year to the intersessional programme.
8. 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);
  - (b) How to strengthen implementation of Article VII, including consideration of detailed procedures and mechanisms for the provision of assistance and cooperation by States Parties (2014 and 2015).
10. The restructured Meetings of Experts will last five days, and Meetings of States Parties five days.
11. The first year's meetings will be chaired by a representative of the Group of the Non-Aligned Movement and Other States, the second by a representative of the Eastern European Group, the third by a representative of the Western Group, and the fourth by a representative of the Group of the Non-Aligned Movement and Other States. The annual Chair will be supported by two annual vice-chairs, one from each of the other two regional groups.
12. Each Meeting of Experts will prepare for the consideration of the Meeting of States Parties a factual report reflecting its deliberations. This report will reflect work on the three Standing Agenda Items, as well as a report on the other item scheduled for discussion during that year.
13. In addition to the report of the Meeting of Experts, the Meetings of States Parties will also consider — on an annual basis — progress with universalization of the Convention and the annual reports of the Implementation Support Unit. In 2012 and 2013, the Meeting of States Parties will also consider the Meeting of Experts report on CBMs, and in 2014 and 2015, the Meeting of States Parties will consider the Meeting of Experts report on Article VII.
14. All meetings, both of experts and of States Parties, will reach any conclusions or results by consensus.
15. The Eighth Review Conference will consider the work and outcome of these meetings and decide on any further action."
2. The present document compiles in the following sections the common understandings reached by the Meetings of States Parties during the intersessional

programme held from 2012 to 2015. Each of the three standing agenda items are addressed in turn, followed by the two biennial items.

## **II. Cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X**

### **A. 2012**

3. States Parties recalled their legal obligation to facilitate and their right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.

4. States Parties agreed on the importance of taking full advantage of the 2012–2015 intersessional process, as well as the other outcomes of the Seventh Review Conference, to strengthen international cooperation and assistance. States Parties recognized the value of elaborating further the existing common understandings related to Article X.

5. States Parties agreed to work together to further enhance the functioning of the database system to facilitate requests for and offers of exchange of assistance and cooperation, and continue to assess the utility of the database in view of its intended purpose.

6. States Parties agreed to continue to work together to target and mobilize resources, including financial resources, to address gaps and needs for assistance and cooperation, including in particular from developed to developing States Parties, and from international and regional organizations and other relevant stakeholders. In this regard, States Parties agreed on the value of improving coordination with relevant international and regional organizations and other relevant stakeholders, in full conformity with their respective mandates.

7. In addressing 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, States Parties noted the specific value of:

(a) Improving coordination of key activities in order to enhance synergy and avoid duplication.

(b) Continuing discussion on the challenges associated with the provision of sustainable biosafety and biosecurity capabilities, including in low-resource settings;

(c) Identifying and addressing specific impediments to the provision or receipt of international assistance in response to an attack or unusual disease outbreak;

(d) Continued consideration of challenges and obstacles to developing international cooperation under Article X and possible means of overcoming these.

8. In addressing 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, States Parties recognized the value of ensuring that cooperation and assistance:

(a) Meets differing national circumstances;

- (b) Promotes sharing of best practices and lessons learned;
- (c) Facilitates the fullest possible exchange of equipment, materials and scientific and technological information for peaceful purposes;
- (d) Furthers information exchange and cooperation;
- (e) Enables technical exchange and cooperation, including developing national capacity to address biorisk management;
- (f) Contributes to building human resources;
- (g) Contributes to preventing the proliferation of biological weapons, including through building national capacity.

9. States Parties agreed on the importance of strengthening national capacity through international cooperation to prevent accidental or deliberate releases of biological agents, as well as for detecting, reporting, and responding to outbreaks of infectious disease or biological weapons attacks, including through:

- (a) Identifying and addressing gaps and needs for facilitating the relevant exchange of equipment, materials, and scientific and technological information;
- (b) Promoting collaborative research and development including through exchange of scientists and providing training opportunities in advanced laboratories;
- (c) Building regional partnerships to enhance disease surveillance and containment initiatives;
- (d) Reinforcing defences against new and emerging diseases through stronger national capacity for detection, surveillance, and diagnosis, as well as containing outbreaks at their source, and decontaminating them.

10. In light of rapid developments in the life sciences, States Parties identified a need to continue to strengthen international cooperation to ensure all States Parties have access to the benefits of biotechnology, genetic engineering, microbiology and other related areas. States Parties agreed on the value of domestic legislative, regulatory and policy arrangements to promote activities not prohibited by the Convention and foster innovation in the life sciences, including in industry and academic and research institutions.

11. States Parties agreed on the importance of continuing discussions on full and effective implementation of Article X obligations, including in light of various proposals made by States Parties.

## **B. 2013**

12. States Parties recalled their legal obligation to facilitate and their right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.

13. States Parties recalled their agreement on the importance of taking full advantage of the 2012–2015 intersessional process, as well as the other outcomes of the Seventh Review Conference, to strengthen international cooperation and assistance. States Parties recognized the value of elaborating further the existing common understandings related to Article X.

14. To further reinforce efforts to work together to target and mobilize resources, States Parties agreed on the value of:

(a) Promoting international cooperation providing for the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes in accordance with Article X of the Convention and not limiting this cooperation to financial resources;

(b) Continuing to work together to target and mobilize resources, including financial resources, to address gaps and needs for assistance and cooperation including in particular from developed to developing States Parties and also exploring different ways of cooperation, including South-South, cooperation;

(c) Submitting clear, specific, and timely national reports on implementation of Article X as agreed at the Seventh Review Conference.

15. In order to further enhance the function of the database system to facilitate requests for and offers of exchange of assistance and cooperation, States Parties noted the value of, assessing its functionality, strengthening its utilization and improving its operation. States Parties agreed on the value of:

(a) Making offers of assistance accessible on the open section of the website and feature a prominent link to these offers on the home page;

(b) Encouraging States Parties that have submitted offers to regularly update contact and other information;

(c) Exploring more effective means of bringing assistance requests to the attention of States Parties that have made potentially relevant offers of assistance;

(d) Highlighting the database and related assistance in the course of outreach efforts;

(e) Reviewing the status of these efforts, and the use of the database, on the basis of the Report of the ISU for 2014.

16. To further efforts to address 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, States Parties noted the value of:

(a) Pursuing a long-term, sustainable and systematic approach to the provision of cooperation and assistance;

(b) Avoiding imposing restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials under Article X;

(c) Helping requesting countries to provide a thorough explanation of their needs and to define in specific terms the type of support that could best address those needs;

(d) Leveraging existing bilateral and multilateral partnerships, and create new ones, to better coordinate plans and develop joint solutions to the challenges in exchange of assistance during public health and medical emergencies;

(e) Convene regional seminars and workshops to explore ways and means of promoting the full and effective implementation of Article X.

17. Recognizing the value of twinning programmes and other means of international exchange in education and training for strengthening cooperation among States Parties, for capacity-building and sharing of advanced expertise including in particular with developing countries, and for improving global capacity for disease detection and control, States Parties recognized the value of developing and facilitating such programmes, including by:

(a) Sharing results of advanced research in life sciences so that scientists, engineers, students and teachers including in particular in developing countries are aware of opportunities and can take full advantage of new developments in biological sciences and technology;

(b) Providing opportunities for training in advanced laboratories and working with cutting-edge technology to help build defenses against disease whether naturally occurring or deliberate, including in particular to developing countries.

18. In order to further efforts to strengthen national capacity through international cooperation to prevent accidental or deliberate releases of biological agents, as well as for detecting and responding to outbreaks of infectious disease or biological weapons attacks, States Parties noted the value of:

(a) Providing assistance upon request with challenges related to storing and dealing with pathogens, development of scientific research capacity and training of national specialists;

(b) Facilitating the transport, entry, exit, processing and disposal of biological substances and diagnostic specimens and materials, in accordance with national laws and regulations, for public, animal and plant health response and for other peaceful purposes;

(c) Developing international capacity to provide urgent assistance, including testing systems and diagnostic equipment, medical countermeasures and related logistical support, biological environmental monitoring devices, and advice and expert assistance;

(d) Identifying and addressing specific impediments to the provision or receipt of international assistance in response to an attack or unusual disease outbreak;

(e) Promoting interagency coordination and multi-sectoral cooperation to prepare for, detect, and respond to infectious disease outbreaks whether natural, accidental or deliberate in nature;

(f) Developing and implementing appropriate, sustainable, and effective laboratory safety and security measures, through international cooperation and assistance, including on exchanges of technology, training materials and resources.

19. In order to further efforts to strengthen international cooperation to ensure all States Parties have access to the benefits of developments in the life sciences, States Parties noted the value of harnessing recent advances, including in enabling technologies, in order to strengthen the sustainable development of States Parties, taking into account the needs of developing countries in meeting health-related challenges.

20. Recognizing the importance of coordination with relevant international and regional organizations and other relevant stakeholders, taking into account the mandates of existing mechanisms established by those organizations, States Parties noted the value of closer cooperation and coordination between States Parties and relevant international organization, in accordance with their respective mandates, including in order to build an integrated approach on biosecurity and biosafety.

21. States Parties recalled their agreement on the importance of continuing discussions on full and effective implementation of Article X obligations, including in light of various proposals made by States Parties.

## **C. 2014**

22. States Parties recalled their legal obligation to facilitate and their right to participate in the fullest possible exchange of equipment, materials and scientific and technological

information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.

23. States Parties recalled their agreement on the importance of taking full advantage of the 2012–2015 intersessional process, as well as the other outcomes of the Seventh Review Conference, to strengthen international cooperation and assistance. States Parties recognized the value of elaborating further the existing common understandings related to Article X.

24. States Parties reiterated the value of the submission of clear, specific, and timely national reports on implementation of Article X as agreed at the Seventh Review Conference.

25. In order to further enhance the functioning of the database system to facilitate requests for and offers of exchange of assistance and cooperation, States Parties noted the value of assessing its functionality, strengthening its utilization and improving its operation. States Parties noted the value of continuing and expanding their use of the database, and using it to reconcile supply and demand for technical assistance, and improving the provision of assistance and cooperation by detailing needs and identifying capacity gaps. States Parties also agreed on the value of actively promoting its use and more prominently featuring the assistance and cooperation database on the main ISU webpage. States Parties noted the value of considering in 2015 reasons for its low usage in order to address potential obstacles.

26. To further reinforce efforts to work together to target and mobilize resources, States Parties noted the value of:

(a) Promoting international cooperation providing for the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes in accordance with Article X of the Convention and not limiting this cooperation to financial resources;

(b) Continuing to work together to target and mobilize resources, including financial resources, to address gaps and needs for assistance and cooperation including in particular from developed to developing States Parties and also exploring different ways of cooperation;

(c) Pursuing a long-term, sustainable and systematic approach to the provision of cooperation and assistance;

(d) Mutuality of benefit from international cooperation to address needs including the need for timely access to affordable drugs and vaccines and related diagnostic, preventative and therapeutic equipment;

(e) The important role of the private sector in the transfer of technology and information and the wide range of organizations within the United Nations system that are already engaged in international cooperation relevant to the Convention; and

(f) Where appropriate, that regional cooperation complements national efforts, such as for the stockpiling of prophylactics and therapeutics.

27. To further efforts to address 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, States Parties noted the value of:

(a) Avoiding imposing restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials under Article X;

(b) Helping requesting countries to provide a thorough explanation of their needs and to define in specific terms the type of support that could best address those needs;

States Parties also noted the value of continuing to consider this topic, including the possible importance of the interoperability of regulatory standards.

28. In order to further address 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, States Parties recognized the value of:

(a) Continuing national, regional and international efforts to exchange equipment, materials, scientific and technological information, experiences, lessons-learned, best practices, education, technical knowledge, as well as financial resources;

(b) Open-access to scientific publications, reducing possible barriers to access posed by the costs of subscriptions; and

(c) Facilitating the transport, entry, exit, processing and disposal of biological substances and diagnostic specimens and materials, in accordance with national laws and regulations, for public, animal and plant health response and for other peaceful purposes.

29. In order to further reinforce efforts to develop human resources in the biological sciences and technology relevant to the implementation of the Convention, States Parties recognized the value of international cooperation, upon request:

(a) Building a broader range of human capacity, including, *inter alia* for national implementation of all the provisions of the Convention, science and technology; biosafety and biosecurity management, as well as dealing with disease;

(b) Making full use of train-the-trainer approaches, including, as appropriate, local-based training supported by national or regional associations and organizations; and

(c) Opportunities for training and work with cutting edge technology in universities, research institutions and production facilities as well as advanced laboratories.

30. In order to further efforts to strengthen national, regional and international capacity through international cooperation to prevent accidental or deliberate releases of biological agents, as well as for detecting and responding to outbreaks of infectious disease or biological weapons attacks, States Parties noted the value of, at the request of the recipient State and in accordance with their needs:

(a) Making detection, surveillance and response capacity more effective and robust, including through real-time bio-surveillance, more effective diagnostics, as well as emergency operation centres with common standards;

(b) Sharing relevant information on, *inter alia*, opportunities and challenges resulting from advances in the life sciences and biotechnology, disease outbreaks, biosafety, and health care; and

(c) The availability of cost-effective, affordable and quality assured medicines, vaccines, diagnostics and related equipment and materials for peaceful purposes.

States Parties also noted the value of continuing to consider this topic, including environments conducive to development of diagnostics, prophylactics and therapeutics.

31. In order to further efforts to strengthen international cooperation to ensure all States Parties have access to the benefits of developments in the life sciences, States Parties noted the value of harnessing recent advances, including in enabling technologies, vaccine development and production, biological production technologies, equipment and technical, practical and theoretical training, including for maintenance, occupational health and safety, for high containment laboratories, in order to strengthen the sustainable development of



States Parties, taking into account the needs of developing countries in meeting health-related challenges.

32. Recognizing the importance of coordination with relevant international and regional organizations and other relevant stakeholders, and taking into account the mandates of existing mechanisms established by those organizations, States Parties noted the value of:

- (a) Promoting broader recognition of the role of the Convention; and
- (b) Closer cooperation and coordination between States Parties and relevant international organizations in accordance with their respective mandates.

33. States Parties recalled their agreement on the importance of continuing discussions on full and effective implementation of Article X obligations, including in light of various proposals made by States Parties.

## **D. 2015**

34. States Parties recalled their legal obligation to facilitate and their right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes and not to hamper the economic and technological development of States Parties.

35. States Parties recalled their agreement on the importance of taking full advantage of the 2012–2015 intersessional process, as well as the other outcomes of the Seventh Review Conference, to strengthen international cooperation and assistance. States Parties recognized the value of elaborating further the existing common understandings related to Article X.

36. States Parties reiterated the value of the submission of clear, specific, and timely national reports on implementation of Article X as agreed at the Seventh Review Conference.

37. States Parties recalled their agreement on the importance of continuing discussions on full and, effective implementation of Article X obligations, including in light of various proposals made by States Parties.

38. To further efforts to address the 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, States Parties noted the value of:

- (a) Enhancing international efforts to bridge the gaps between developed and developing countries, and strengthen international cooperation to ensure all States Parties have access to the benefits of biotechnology, genetic engineering, microbiology and other related areas, in light of the rapid pace of science and technology developments, including, inter alia developments of special relevance to disease surveillance, diagnosis and mitigation as well as advances in enabling technologies;
- (b) Making efforts to more specifically identify, evaluate and address challenges and overcome obstacles in the implementation of Article X to generate equitable benefits for all States Parties, in particular developing countries;
- (c) Taking steps to facilitate and ensure timely access to affordable drugs and vaccines and related diagnostic, preventive and therapeutic equipment to affected States, especially in developing countries, as highlighted by the outbreak of Ebola in West Africa in 2014;

(d) Continuing national, regional and international efforts to support the full access and exchange for all States Parties, in particular from developed to developing countries, of equipment, materials, scientific and technological information, experiences, lessons-learned, best practices, education, technical knowledge, as well as financial resources in the field of life sciences and related areas intended for peaceful purposes; and

(e) Facilitate the participation from developing to developed countries, through ICT tools, of scientific information, lessons learned exchanges and sectorial know-how through a cooperative approach.

39. To further address 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, States Parties noted the value of:

(a) Avoiding imposing restrictions and/or limitations on transfers of scientific knowledge, technology, equipment and materials for purposes consistent with the objectives and provisions of the Convention;

(b) Assisting States Parties in the development of appropriate national systems of health care that can respond effectively to infectious disease outbreaks, including through contributing to the training of human resources, transfer of technologies to help improve national capacities for diagnosis, research, response, mitigation and recovery including means of protection, and promote academic and scientific exchange between national experts, and in this context welcomed initiatives that aim to promote and coordinate such assistance, upon request and with the consent of the State Parties;

(c) The growing number of scientific publications and the need to promote wider access through reducing barriers, including barriers imposed by the high costs of subscriptions;

(d) Sharing relevant information about the opportunities and challenges resulting from scientific advances in the life sciences and in biotechnology, infectious disease outbreaks, healthcare, agriculture and industry, including through papers and expert presentations at BWC meetings;

(e) Taking steps to facilitate and ensure that States Parties have full access to the benefits of advances in life sciences, for peaceful purposes including recent advances such as new technologies, the production or development of vaccines, biological production technologies, and equipment and training for appropriate levels of containment laboratories;

(f) Facilitating the availability of cost-effective, affordable and quality-assured medicines, vaccines, diagnostics and related equipment and materials for peaceful purposes; and

(g) Promoting collaborative research and development, including through exchange of scientists and providing training opportunities in advanced laboratories.

40. To further address 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, States Parties noted the value of:

(a) Facilitating the fullest possible exchange of equipment, materials, and technologies for peaceful purposes, and recognized that International cooperation under Article X is not limited to financial resources;

(b) States Parties in a position to do so should consider additional contributions to the BWC Sponsorship programme to increase the level of participation in meetings of the BWC and taking into account the high importance of its predictability; and

(c) Further utilizing the cooperation and assistance database established in pursuance of the decision of the Seventh Review Conference for targeting resources by States Parties offering assistance and cooperation, in order to meet the need of the States Parties.

41. To further address 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, States Parties acknowledged that exchanges in education and training contribute to the development of relevant human resources in the field of biological sciences, and that international cooperation in education and training will help to reduce the gap between the capabilities of States Parties.

42. To further address capacity-building, through international cooperation, in biosafety and biosecurity, and for detecting, notifying, and responding to outbreaks of infectious disease or biological weapons attacks, including in the areas of preparedness, response, and crisis management and mitigation, States Parties noted that recent lessons learnt from infectious disease outbreaks reinforce the need for a continued and stronger concerted international effort to build countries' capacities, at the request of the recipient State and in accordance with their needs, to effectively mitigate the risk posed to human, animal and plant health by relevant biological agents.

43. To further address coordination of cooperation with other relevant international and regional organizations, and other relevant stakeholders, States Parties recognized that relevant international and regional organizations such as the WHO and the OIE play an important role in disease surveillance, prevention, detection, response, mitigation and recovery and there is therefore merit in coordination and cooperation between States Parties and relevant international organizations in accordance with their respective mandates.

### **III. Review of developments in the field of science and technology related to the Convention**

#### **A. 2012**

44. States Parties reviewed various enabling technologies, including, for example, in: bioinformatics; computational biology; DNA microarrays; gene synthesis technology; high throughput mass spectrometry; high-throughput sequencing; nanotechnology; synthetic biology; systems biology; and whole-genome directed evolution. States Parties agreed that these developments could provide for faster, cheaper, and easier application of biological science and technology. These enabling technologies can affect how science is conducted and applied. This will bring both benefits and challenges for the Convention which may require action by States Parties.

45. States Parties agreed that certain developments in science and technology have potential benefits for the Convention, including: improved identification of agents for both public health and security purposes; increasing capacity to investigate the possible use of biological weapons; improved understanding of the nature of disease; and better healthcare technologies such as improved, more efficient and economical vaccines, antibiotics, and their means of delivery, as well as point-of-care diagnostic systems.

46. States Parties also agreed that certain developments in science and technology have the potential for use contrary to the provisions of the Convention now or in the future. These developments include, inter alia, increased capacity to manipulate the pathogenicity, host-specificity, transmissibility, resistance to drugs, or ability to overcome host immunity

to pathogens; to synthesize pathogens and toxins without cultivation of microorganisms or using other natural sources; to identify new mechanisms to disrupt the healthy functioning of humans, animals and plants; and to develop novel means of delivering biological agents and toxins. States Parties also agreed on the importance of facilitating the fullest possible exchange of dual-use technologies where their use is fully consistent with the peaceful object and purpose of the Convention.

47. States Parties identified opportunities for maximising benefits from these enabling technologies while minimizing risks of their application for prohibited purposes, including, for example, supporting:

- (a) Efforts to ensure the fullest possible exchange of equipment, materials and scientific and technological information and in full conformity with the provisions of the Convention;
- (b) Enhanced national oversight of dual use research of concern without hampering the fullest possible exchange of knowledge and technology for peaceful purposes;
- (c) Continued discussion under the Convention on oversight of dual use research of concern;
- (d) Improved use by relevant national agencies of available sequence and function data;
- (e) Enhanced reference databases to support identification of agents by relevant national agencies; and
- (f) Promotion of the beneficial applications of gene synthesis technologies while ensuring their use is fully consistent with the peaceful object and purpose of the Convention.

48. States Parties noted these enabling technologies were the result of a convergence of different sciences and technologies. States Parties recognized the relevance to the Convention of an increasing convergence of scientific disciplines, in particular biology and chemistry. This convergence increases the importance of building and sustaining coordination between the Convention and the Chemical Weapons Convention while respecting the legal and institutional bases of each convention.

49. States Parties reiterated the importance of measures, in accordance with national laws and regulations, to increase awareness among scientists, academia and industry of the Convention and related laws and regulations. States Parties noted the value, on a voluntary basis of using of codes of conduct including those based on the principles of autonomy, beneficence and integrity, in accordance with national laws and regulations. In this regard, States Parties can provide international leadership, facilitate coordination and promote communication. States Parties recognized the value of pursuing various national measures, in accordance with national needs and circumstances, such as:

- (a) Promoting interaction between relevant national agencies and the scientific community;
- (b) Strengthening linkages between biosafety and biosecurity training and broader issues of responsible conduct;
- (c) Encouraging the addition of relevant elements to existing codes, where they exist, as an alternative to developing new codes;
- (d) Supporting the inclusion of relevant material in professional training courses;

(e) Encouraging the development of practical tools for use by individuals and organizations to familiarize them with the provisions of the Convention; as well as

(f) Enabling specific outreach for those working outside of institutional research and commercial environments.

50. States Parties recognized the valuable contribution to their work of associated stakeholders in science, academia and industry agreed on the importance of continuing to encourage them to participate, as appropriate, in the intersessional programme.

## **B. 2013**

51. States Parties identified certain developments in science and technology that have potential benefits for the Convention and agreed on the need to share information on these developments, including:

(a) Improving identification of biological agents and toxins for both health and security purposes, resulting from advances in life science research, including metagenomics, immunological methods, molecular probes, amplification of nucleic acids, and in microbial forensics;

(b) Advances in comparative genomics, which would increase the capacity to investigate alleged use of biological weapons;

(c) Improved, more efficient and economical vaccine and diagnostic technologies, resulting from advances in:

(i) Identifying new targets and reducing the timescale for the development of vaccines, drugs and diagnostics;

(ii) Production of vaccines including through developments in single-use or disposable bioreactor systems, which can increase yield, cost-effectiveness, portability and safety, and novel vaccine production methods, including cell cultures and cell suspension bioreactors, recombinant DNA, metabolic engineering and synthetic biology, chemical peptide synthesis; and transgenic animals and plants;

(iii) Vaccine distribution and delivery, such as encapsulation in silk matrices, nano-vesicles, and nanotechnology-based patches;

(iv) Point-of-care diagnostic systems suitable for use in low resource settings resulting from advances in microfluidics, nanotechnology, lateral flow immunoassays and new techniques emerging from multidisciplinary collaborations that combine different approaches into simple devices;

(d) Enhanced epidemiological capacity including for identifying unknown pathogens, outbreak sources and animal reservoirs, resulting from advances in faster and less expensive high-throughput DNA sequencing, along with parallel advances in computational biology.

52. States Parties agreed that some of the developments reviewed have the potential for uses contrary to the provisions of the Convention, including manipulating the pathogenicity, host-specificity, transmissibility, resistance to drugs, or ability to overcome host immunity to pathogens, and increasing the production efficiency and the effectiveness of biological weapons agents. States Parties also agreed on the importance of facilitating the fullest possible exchange of dual-use technologies where their use is fully consistent with the peaceful object and purpose of the Convention.

53. In order to further seize opportunities for maximizing benefits from advances in science and technology while minimizing the risk of their application for prohibited purposes, States Parties noted the value of:

(a) Promoting access to, and use of, the technologies they reviewed, including through the development of inexpensive and field-portable applications;

(b) Promoting appropriate oversight measures to identify and manage such risks, ensuring that they are proportional to the assessed risk, take into account both risks and benefits, and avoid hampering legitimate peaceful activities;

(c) Recognizing that a one-size-fits-all approach is unsuitable, exploring approaches for developing guiding principles that could be tailored to national circumstances;

(d) Undertaking efforts to engage the scientific community, research funding organizations and, when appropriate, industry in dialogue about how best to identify and manage these risks;

(e) Sharing information about oversight frameworks, guiding principles, and practical experience with other States Parties.

(f) Continuing discussion under the Convention on dual use research, bringing in a wide range of national and international stakeholders and focusing on specific instances in order to better understand options for mitigating risks;

(g) The elaboration of models to inform risk assessment and oversight of scientific research activities that have significant dual-use potential, which should be carried out during all phases of the research cycle.

54. In order to further efforts on education and awareness-raising about risks and benefits of life sciences and biotechnology, States Parties agreed on the value of using science responsibly as an overarching theme to enable parallel outreach efforts across interrelated scientific disciplines, as well as taking full advantage of active learning techniques, consistent with national laws and regulations.

55. States Parties agreed on the value of promoting education on the Convention and the dual-use nature of biotechnology, including through preparing easily accessible and understandable courses, integrating consideration of biosecurity with broader efforts on bioethics, and assessing the impact of such education.

56. In light of the growing convergence between the fields of biology and chemistry, States Parties agreed on the value of furthering efforts to build and sustain coordination between the Convention and the Chemical Weapons Convention, while respecting the legal and institutional bases of each convention. States Parties recognized the value of exploring appropriate ways and means to promote greater collaboration between the CWC and the Convention to analyze potential benefits, risks and threats resulting from relevant advances in science and technology.

57. States Parties agreed on the value of increasing the participation of scientific and technical experts in national delegations to Meetings of Experts. States Parties also recognized the value of contributions to the Sponsorship Programme to facilitate such participation.

58. Recognizing the importance of thoroughly and effectively reviewing science and technology developments relevant to the Convention, and of keeping pace with rapid changes in a wide range of fields, States Parties agreed on the value of considering, in future meetings, possible ways of establishing a more systematic and comprehensive means of review.

59. States Parties recognized the valuable contribution to their work of associated stakeholders in science, academia and industry and agreed on the importance of continuing to encourage them to participate, as appropriate, in the intersessional programme.

## C. 2014

60. States Parties identified certain advances in science and technology that have potential benefits for the Convention and agreed on the need to share information on these developments, including on the improved understanding of, and technologies to investigate:

- (a) Virulence mechanisms;
- (b) Pathogenesis, which should enable more rapid responses to, and the development of countermeasures against, new or re-emerging pathogens;
- (c) Host-pathogen interactions, offering new opportunities for: disease surveillance, detection, and diagnosis, including making vaccine and drug production simpler, faster, cheaper and more efficient; the identification of targets to treat or prevent disease; negating the mechanisms that pathogens use to evade or disrupt the host immune system; identifying virulence factors in emerging pathogens; and the development of more specific vaccines, therapeutics and diagnostics; and
- (d) Toxins, providing new avenues for medicine and research, such as treatments for neuromuscular disorders and post exposure therapy, as well as toxin detection and diagnosis.

61. States Parties reviewed various enabling technologies, including, for example, genome editing tools including those derived from bacterial "immune systems", such as CRISPR/CAS9, as well as those related to continuing progress in synthetic biology.

62. States Parties reviewed advances derived from the convergence of scientific disciplines, including biology, chemistry and nanotechnology. States Parties noted the value of continuing to consider how these advances might be applied to defensive countermeasures, protective clothing and equipment, decontamination, medical countermeasures, as well as for detection and diagnosis.

63. States Parties noted that some of the developments reviewed have the potential for uses contrary to the provisions of the Convention, including: the creation of novel, highly-contagious, virulent pathogens; and programming cells to produce toxins, viruses or other biological materials which could cause harm. States Parties also agreed on the importance of facilitating the fullest possible exchange of relevant technologies where their use is fully consistent with the peaceful object and purpose of the Convention.

64. States Parties also noted the value of continuing to review gain-of-function work and consider the possible implications for the Convention in future meetings.

65. Research that is identified as being of dual-use concern is often vitally important to science, public health and agriculture, and its findings often contribute meaningfully to the broader base of knowledge that advances scientific and health objectives. States Parties recognised that identifying research as being of dual-use concern does not, in itself, provide sufficient justification for proscribing or restricting its availability, or for preventing its pursuit. Identifying research as being of dual-use concern does necessitate greater national oversight, and for a collaborative and informed assessment of the potential benefits and risks of the research. States Parties noted the value of addressing associated safety and security risks as well as the possible misuse of research results and products. States Parties also noted the value of continued discussion at future meetings on oversight of dual-use

research of concern, including specific approaches to: identifying relevant criteria; assessing both risks and possible benefits; and mitigating identified risks.

66. States Parties noted the value of model voluntary codes of conduct. States Parties recognised that codes of conduct, whilst being the prerogative of States Parties, encourage responsible scientific conduct by helping to address risks that life science research output could be used for harm. Codes of conduct, including those developed and used by scientific organizations and institutions, help to support the responsibility of individual scientists to consider the potential consequences, both positive and negative, of their work. Relevant codes of conduct should avoid placing any undue restrictions on the exchange of scientific discoveries consistent with the objectives of the Convention and justified for protective, prophylactic or other peaceful purposes.

67. In order to further efforts on education and awareness-raising about risks and benefits of life sciences and biotechnology, States Parties noted the value of:

(a) Continuing to support, collectively and individually, the promotion of a culture of responsibility and biosecurity among life scientists; and

(b) Making full use, at the national level, of scientists engaged in education and awareness-raising efforts, to identify relevant advances and related issues, and to keep national legal and regulatory frameworks up to date.

68. States Parties noted the value of continued discussion at future meetings of the convergence between the fields of biology and chemistry, and other scientific disciplines.

69. Recognizing the importance of thoroughly and effectively reviewing science and technology developments relevant to the Convention, of keeping pace with rapid changes in a wide range of fields, and in exploring opportunities for enhanced cooperation and sharing of technology identified by such reviews, States Parties reiterated the value of continuing to consider, in future meetings, possible ways of further strengthening scientific review. In this context, the important role played by national experts in the Meeting of Experts was emphasized as well as the value of contributions to the sponsorship programme to facilitate such participation.

## **D. 2015**

70. States Parties identified certain advances in science and technology that have potential benefits for the Convention and agreed on the need to share information on these developments, including on the improved understanding of, and technologies to investigate:

(a) Advances of relevance to agriculture, such as improved biological control methods to combat plant pests and diseases, and approaches to improve food production;

(b) Advances and research in biology, biotechnology, bioengineering and biomedical engineering, in particular, developments in enabling technologies including high-throughput systems for sequencing, synthesizing and analyzing DNA, bioinformatics and computational tools and systems biology, host-pathogen interactions for enhanced cooperation and making vaccines, medicines and diagnostics production simpler, faster, cheaper and more efficient in developing countries; and

(c) Advances in immunology, and various enabling technologies, including, *inter alia*, genome editing tools including those derived from bacterial "immune systems", such as CRISPR, as well as those related to continuing progress in synthetic biology.

71. States Parties noted that some of the developments reviewed have the potential for uses contrary to the provisions of the Convention, including: the creation of novel, highly-contagious, virulent pathogens; and programming cells to produce toxins, viruses or other



biological materials which could cause harm. States Parties also agreed on the importance of facilitating the fullest possible exchange of relevant technologies where their use is fully consistent with the peaceful object and purpose of the Convention.

72. To further address strengthening national biological risk management, as appropriate, in research and development involving new science and technology developments of relevance to the Convention, States Parties noted that a possible measure may include a comprehensive examination of appropriate oversight criteria, *inter alia*, reaching common understandings on optimal methods, including appropriate criteria, as required, for assessing risks and benefits, including risks of misuse, and optimal approaches to mitigating risks, identified at BWC meetings. States Parties further noted that measures taken to mitigate biological risk should be proportional to assessed risk and not hamper peaceful activities, including international cooperation.

73. To further address voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry, States Parties noted the value of considering a template for voluntary codes of conduct for scientists in the fields relevant to the Convention, States Parties also noted the need to bring in a diverse range of expertise from all relevant fields and noted the need to avoid codes of conduct imposing restrictions and/or limitations inconsistent with the Convention.

74. To further address education and awareness-raising about risks and benefits of life sciences and biotechnology, States Parties recognized that the continuous and accelerating rate of progress in scientific knowledge requires the necessity of deepening a culture of responsible use of this knowledge, which takes into account the object and purpose of the Convention without undermining peaceful uses. In order to further efforts on education and awareness-raising about risks and benefits of life sciences and biotechnology, States Parties discussed on the need to share information and knowledge on these developments, including dual-use research of concern.

75. To further address science- and technology-related developments relevant to the activities of multilateral organizations such as the WHO, OIE, FAO, IPPC and OPCW, States Parties noted that the increasing convergence of chemistry and biology underlines the importance of continuing to build and sustain cooperation between the Convention and the Chemical Weapons Convention to assist analysis of the potential benefits and risks resulting from advances in converging scientific and technological areas.

76. Recalling the decision of the Seventh Review Conference for the 2015 Meetings to address the topical scientific subject of any advances in production, dispersal and delivery technologies of biological agents and toxins, States Parties noted that advances in such technologies and its implications needs to be discussed further.

77. States Parties recognized the value of continuing discussions on science and technology developments relevant to the Convention in light of various proposals made by States Parties.

78. States Parties noted that among the lessons identified by assessments of the international response to the Ebola Virus Disease (EVD) outbreak in West Africa was the need to expand investment in research and development on diagnostics, drugs and vaccines, and also recognize the importance of the accessibility of science and technology developments related to the response of any outbreak.

## IV. Strengthening national implementation

### A. 2012

79. States Parties recalled their legal obligation, in accordance with their constitutional processes, to take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of biological weapons and to prevent their transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire them.

80. States Parties reiterated calls for appropriate measures, including effective national export controls, by all States Parties to implement Article III, in order to ensure that direct and indirect transfers relevant to the Convention, to any recipient whatsoever, are authorized only when the intended use is for purposes not prohibited under the Convention. States Parties also reiterated that States Parties should not use the provisions of Article III to impose restrictions and/or limitations on transfers for purposes consistent with the objectives and provisions of the Convention of scientific knowledge, technology, equipment and materials under Article X.

81. States Parties agreed to continue to work to strengthen national implementation, taking into account differences in national circumstances and legal and constitutional processes. States Parties agreed on the need to pursue national implementation through the current intersessional programme to foster regional and sub-regional cooperation to promote awareness of the Convention and strengthen regional discussions on the topics of the current intersessional programme. States Parties recognized the value of elaborating further the existing common understandings related to national implementation.

82. States Parties agreed the full and comprehensive implementation of the Convention, especially Articles III and IV, could benefit from, depending on national needs and circumstances and in accordance with national laws and regulations:

- (a) Information on the status of implementation;
- (b) Continuing discussion on sharing best practices and experiences, including the voluntary exchange of information among States Parties, including in light of various proposals made by States Parties;
- (c) Continuously updating and enforcing national measures;
- (d) Strengthening the national institutions which play a role in national implementation;
- (e) Making appropriate use of national expertise outside of government, including those with knowledge and experience germane to the Convention;
- (f) Enhancing coordination between national regulators and relevant scientific institutions and, where appropriate, cooperation among national regulators; and
- (g) Promoting interagency coordination and multi-sectoral cooperation to prepare for, detect, and respond to infectious disease outbreaks whether natural, accidental, or deliberate in nature.

83. States Parties agreed on the need for strong national biological risk management frameworks to maximize the benefits of, and minimize the risks from, relevant science and technology. States Parties noted the value of measures to mitigate biological risks, including:

- (a) National policies on how best to balance scientific freedom and progress with legitimate security concerns;
- (b) Suitable national oversight frameworks, such as to identify and mitigate risks at the earliest possible stage in, and manage risks throughout, the research cycle;
- (c) Enhanced capacity-building and education on biosafety and biosecurity; and
- (d) Coordination among government agencies and outreach to other relevant national stakeholders dealing with matters relevant to the Convention;
- (e) Appropriate, sustainable, and effective laboratory safety and security measures, including those based on existing frameworks, such as the WHO's Laboratory Biorisk Management Strategic Framework for Action 2012–2016.

84. States Parties recognised the importance of regional and sub-regional cooperation in assisting national implementation of the Convention and agreed to work together to promote awareness of the implementation of the Convention, to strengthen regional discussions on the intersessional topics and their application.

## **B. 2013**

85. States Parties recalled their legal obligation, in accordance with their constitutional processes, to take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of biological weapons and to prevent their transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire them.

86. States Parties recalled their agreement to continue to work to strengthen national implementation, taking into account differences in national circumstances and legal and constitutional processes. States Parties agreed on the need to pursue national implementation through the current intersessional programme to foster regional and subregional cooperation to promote awareness of the Convention and strengthen regional discussions on the topics of the current intersessional programme. States Parties recognized the value of elaborating further the existing common understandings related to national implementation.

87. In order to further efforts to strengthen national implementation, continue to share best practices and experiences, taking into account differences in national circumstances and legal and constitutional processes, States Parties noted the value of:

- (a) Information on the current status of implementation efforts through the sharing of up-to-date information on their legislative, administrative and other national measures;
- (b) Continuing to improve and update data handling of information provided by States Parties on their national implementation;
- (c) Continuing to strengthen the national institutions which play a role in national implementation;
- (d) Enhancing national coordination between law enforcement institutions.

88. States Parties agreed on the value of continuing to develop measures for, and taking advantage of, international cooperation in accordance with Article X to strengthen implementation of the Convention. States Parties noted the value of such international cooperation including public health, socio-economic development, biological safety and security, as well as national capacities to prevent, detect and respond to biological threats.

89. In order to further efforts to mitigate biological risks, States Parties noted the value of, in accordance with national laws and regulations:

(a) Promoting regulation, at the national level, of possession, use and transfer of potentially dangerous biological agents and toxins;

(b) Promoting oversight of pathogens, at the national level, by harmonizing and updating applicable biosafety and biosecurity standards and guidelines, and clarifying and updating biocontainment requirements.

90. States Parties agreed on the value of continuing discussion on measures to strengthen national implementation of the Convention, including in light of various proposals made by States Parties.

## **C. 2014**

91. States Parties recalled their legal obligation, in accordance with their constitutional processes, to take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of biological weapons and to prevent their transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire them.

92. States Parties recalled their agreement to continue to work to strengthen national implementation, taking into account differences in national circumstances and legal and constitutional processes. States Parties noted the need to pursue national implementation through the current intersessional programme to foster regional and sub-regional cooperation to promote awareness of the Convention and strengthen regional discussions on the topics of the current intersessional programme. States Parties noted the value of elaborating further the existing common understandings related to national implementation.

93. States Parties noted the value of continuing to develop measures for, and taking advantage of, international cooperation in accordance with Article X to strengthen implementation of the Convention. States Parties noted the value of such international cooperation including public health, socio-economic development, biological safety and security, as well as national capacities to prevent, detect and respond to biological threats.

94. To further address a range of specific measures for the full and comprehensive implementation of the Convention, especially Articles III and IV, States Parties noted the value of, depending on national needs and circumstances and in accordance with national laws and regulations:

(a) Legislation, regulations and administrative measures; national biosafety, biosecurity and control mechanisms; national export controls; disease surveillance and outbreak response capacity; arrangements for the oversight of science and for reviewing developments in science and technology; educational efforts and awareness-raising; assistance and protection capacity for responding to the alleged use of biological and toxin weapons; exchanging information and providing reports established by review conferences; and provisions for building capacity for peaceful use;

(b) Strengthening the national institutions which play a role in national implementation; and

(c) Exchanging ideas as to what further measures and initiatives could be adopted by States Parties at the national level to increase awareness and understanding, improve domestic cooperation and capacity, and utilization of best practices.

95. Recalling that the Seventh Review Conference called for appropriate measures, including effective national export controls, by all States Parties to implement Article III, States Parties discussed measures, including, *inter alia*:

- (a) Neither favouring the commercial development of industries, nor hindering legitimate economic development of other countries;
- (b) Affecting only a very few cases where there is an unacceptable risk of diversion for prohibited activities,
- (c) Addressing transfers of tangible and intangible goods;
- (d) Including laws and regulations that establish legal authorities and appropriate penalties, procedures and mechanisms for implementation and enforcement, a list of items subject to control, controls on technology directly associated with listed items, a catch-all provision, and regular outreach to life science researchers and the biotechnology industry; and
- (e) Taking into account proliferation-related information, the significance of the transfer in terms of the appropriateness of the stated end-use, an assessment of the end-use, and the role of intermediaries.

96. In order to further efforts to strengthen national implementation, continue to share best practices and experiences, taking into account differences in national circumstances and legal and constitutional processes, States Parties noted the value of:

- (a) Information on the current status of implementation efforts through the sharing of up-to-date information on their legislative, administrative and other national measures;
- (b) Continuing to improve and update data handling of information provided by States Parties on their national implementation;
- (c) Continuing to strengthen the national institutions which play a role in national implementation;
- (d) Enhancing national coordination between law enforcement institutions; and
- (e) Continuing to work to increase participation in the CBMs, including through a voluntary step-by-step approach seeking to identify impediments and difficulties to participation, as appropriate, as well as by identifying assistance opportunities and packages available to help States Parties participate.

97. States Parties recognized the importance of regional and sub-regional cooperation in assisting national implementation by sharing experiences of, and by identifying additional ways and means to strengthen national implementation. States Parties noted the value of exchanging best practice with relevant regional and sub-regional organizations and using them, as appropriate and in accordance with their mandates, to promote networking, collaboration and coordination, and capacity-building as well as to support national and local training and human capacity-building. States Parties commended those States Parties which have engaged in such cooperation and noted the value of, where possible, supporting financially or otherwise promoting such cooperation.

98. In order to further efforts to mitigate biological risks, States Parties noted the value of, in accordance with national laws and regulations, raising awareness amongst all relevant personnel and organizations.

99. States Parties noted the value of continuing discussion on measures to strengthen national implementation of the Convention, including in light of various proposals made by States Parties.

**D. 2015**

100. States Parties recalled their legal obligation, in accordance with their constitutional processes, to take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of biological weapons and to prevent their transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire them.

101. States Parties recalled their agreement to continue to work to strengthen national implementation, taking into account differences in national circumstances and legal and constitutional processes. States Parties noted the value of elaborating further the existing common understandings related to national implementation, including in light of various proposals made by States Parties.

102. To further address ways and means to enhance national implementation, taking into account differences in national circumstances and legal and constitutional processes, 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, States Parties noted the value of:

- (a) Effective and comprehensive national legislation which are consistent with all provisions of the Convention;
- (b) Preserving the peaceful benefits of life science research whilst preventing activities contrary to the provisions of the Convention;
- (c) Continuous capacity-building;
- (d) Strengthening domestic biosecurity regulations and capabilities;
- (e) Effective national export controls in full conformity with all provisions of the Convention;
- (f) Continuing to work to increase participation in the CBMs, including through a voluntary step-by-step approach seeking to identify impediments and difficulties to participation, as appropriate, as well as by identifying assistance opportunities and packages available to help States Parties participate; and
- (g) Cross-regional cooperation, through partnership programmes, or by providing the necessary financial resources to States in need.

103. To further address regional and sub-regional cooperation that can assist national implementation of the Convention, States Parties noted the importance of regional and sub-regional cooperation the sharing of experiences and identifying additional ways and means to strengthen national implementation. States Parties noted the value of exchanging best practice with relevant regional and sub-regional organizations and using them, as appropriate and in accordance with their mandates, to promote networking, collaboration and coordination, and capacity-building as well as to support national and local training and human capacity-building. States Parties commended those States Parties which have engaged in such cooperation and noted the value of, where possible, supporting financially or otherwise promoting such cooperation, and agreed to work together to promote awareness of the implementation of the Convention, and to strengthen regional discussions on the intersessional topics and their application.

104. To further address national, regional and international measures to improve laboratory biosafety and biosecurity of biological agents and toxins, States Parties noted the value of, in accordance with national laws and regulations and local conditions, establishing

effective and appropriate arrangements for the safety and security of biological agents and toxins. States Parties further noted the value of sharing ideas about how best to manage dual use risks, in light of various proposals made by States Parties, including examining comprehensively appropriate oversight criteria, improving capacity building for biosafety and biosecurity according to their specific situations, raise the level of management and transparency for dual-use bioscience and technology research, establish where appropriate mechanisms to guard against the misuse of bioscience and technology, and raising awareness of research personnel concerning biosafety and biosecurity.

## **V. How to enable fuller participation in the Confidence-building Measures (CBMs) (2012-13 only)**

### **A. 2012**

105. States Parties recognized the importance of annual exchanges of information to provide transparency and build mutual trust among States Parties.

106. Taking into account the technical difficulties experienced by some States Parties in completing full and timely CBM submissions, States Parties agreed to work to:

- (a) Find ways to improve participation, including through raising awareness and training;
- (b) Make the CBM submissions more user-friendly;
- (c) Promote their possible utility in improving domestic coordination and in enhancing domestic understanding of national activity to be reported in the CBMs;
- (d) Provide technical assistance and support to States Parties, on request, for preparing and submitting CBM submissions;
- (e) Further develop electronic means of submission; and
- (f) Improve access by States Parties to the information submitted in CBMs, including through the provision of voluntary, informal translations of CBM submissions.

107. States Parties agreed to continue discussing in 2013, including in the light of various proposals made by States Parties, how to enable fuller participation in the CBMs, focusing on the practical difficulties experienced by some States Parties in completing full and timely submissions.

108. States Parties agreed on the importance of all States Parties participating in, and reiterating to others the importance of, the CBMs. States Parties recalled that they are to designate a National Point of Contact as agreed at the Sixth Review Conference and reiterated at the Seventh Review Conference.

109. States Parties recognised the value of the Chairman writing each year to all States Parties to remind them of the call by the Seventh Review Conference to participate annually in the CBMs.

### **B. 2013**

110. Recalling their recognition of the importance of annual exchanges of information to provide transparency and build mutual trust, States Parties noted the value of:

(a) Encouraging States Parties that have not participated regularly in the CBMs or have never participated, to share information on the specific reasons on why they do not participate;

(b) Consider voluntarily making all, or part, of their CBM returns public.

111. Recalling their previous understanding of the value of the Chairman writing each year to all States parties to remind them of the call by the Seventh Review Conference to participate annually in the CBMs, States Parties recognized the value of including in this reminder a request for information on issues affecting their participation in the CBMs

112. Recalling their agreement on the value of activities identified in 2012 for addressing the technical difficulties experienced by some States Parties in completing full and timely CBM submissions, States Parties agreed to work to:

(a) Provide further technical assistance and support to States Parties, on request, for preparing and submitting CBM submissions, including through bilateral cooperation on CBMs and the provision of assistance, using the national point of contact list available on the ISU website;

(b) Continue to develop the electronic CBM platform that was demonstrated at the Meeting of States Parties, including through collaborating with the ISU to test and refine the system;

(c) Further improve access by States Parties to the information submitted in CBMs by examining the financial and technical feasibility, benefits and implications of various means of making CBM submissions available in more UN languages;

(d) Convene regional seminars and workshops to promote awareness of CBMs and to provide an opportunity for States Parties to report on their difficulties and needs for assistance;

(e) Consider a “step-by-step” approach in CBM participation whereby States Parties submit CBM forms separately or one by one, as the information is collected and updated, working towards the end goal of updating and completing CBM submissions while upholding the Decisions of the Seventh Review Conference. In this approach, submitting a “less than perfect” CBM initially, and subsequently updating and completing it, would not have negative consequences.

## **VI. How to strengthen implementation of Article VII, including consideration of detailed procedures and mechanisms for the provision of assistance and cooperation of States Parties (2014-15 only)**

### **A. 2014**

113. States Parties reiterated that States Parties bear the responsibility for providing assistance and coordinating with relevant organizations in the case of alleged use of biological or toxin weapons. States Parties reaffirmed the undertaking made by each State Party to provide or support assistance in accordance with the Charter of the United Nations to any State Party which so requests, if the Security Council decides that such State Party has been exposed to danger as a result of a violation of the Convention.

114. Having considered relevant agreements reached at past review conferences and common understandings identified at previous Meetings of States Parties related to Article VII, including that in view of the humanitarian imperative, pending consideration of a



decision by the Security Council, timely emergency assistance could be provided by States Parties, if requested, States Parties noted that State Parties' national preparedness contributes to international capabilities for response, investigation and mitigation of outbreaks of disease, including those due to alleged use of biological or toxin weapons.

115. States Parties recognised that, without preconditions to the use of Article VII, there are a number of challenges to strengthening its implementation. States Parties recognized the value of continuing to consider in 2015 these challenges and ways to address them.

116. Recognizing the possibility that, following danger to a State Party resulting from activities prohibited by the Convention, national means and resources could be overwhelmed and that assistance may be required, States Parties noted the value of discussing in 2015 what assistance might be needed.

117. Recalling that a State Party's national preparedness contributes to international capabilities for response, investigations and mitigation of outbreaks of disease due to alleged use of biological or toxin weapons, States Parties noted the value, at the national level, of:

- (a) Considering what might be done to deal with a threat or actual use of biological or toxin weapons, determining the sorts of assistance that might be required from other States Parties and international organizations and identifying who could provide it, as well as identifying any challenges to its provision;
- (b) Ensuring effective national capabilities, including through the use, as appropriate, of gap analyses and national plans;
- (c) Strong detection capabilities, including for disease surveillance, primed health communities, cost-effective rapid diagnostic tests, and accurate disease mapping, as well as appropriate countermeasures and recovery and decontamination options;
- (d) Appropriate command, control and coordination of cross-governmental planning and response as well as multi-agency assets during the life cycle of response efforts; and
- (e) Regular training activities to strengthen national capacities.

118. Recalling the importance of enhancing relevant capabilities, strengthening human resources, and sharing appropriate and effective practices, States Parties noted the value of collaborating to build relevant national capacity, including:

- (a) Facilitating, and having the right to participate in the fullest possible exchange of equipment, material and scientific and technological information to protect against, and respond to, the use of biological and toxin weapons;
- (b) Avoiding duplicating existing efforts and capacity and taking into account the differences in national laws, regulations, and constitutional procedures;
- (c) Sharing experiences, expertise, technology and resources to build capacity to protect against biological and toxin weapons and for purposes not prohibited under the Convention;
- (d) Working with relevant international organizations to build relevant national capacity; and
- (e) That national preparedness contributes to international capabilities for response, investigation and mitigation of outbreaks of disease, including those due to alleged use of biological or toxin weapons. States Parties noted that there are differences among States Parties in terms of their level of development, national capabilities and resources, and that these differences affect national and international capacity to respond

effectively to an alleged use of a biological or toxin weapon. States Parties encouraged States Parties, in a position to do so, to assist other States Parties, upon request, to build relevant capacity.

119. Recognizing that an event relevant to Article VII is more than an animal, plant or public health emergency, and in recognition that there is no institutional mechanism under the Convention to undertake relevant activities, States Parties noted the value of:

(a) That in the event that this Article might be invoked, the United Nations could play a coordinating role in providing assistance, with the help of States Parties, as well as the appropriate intergovernmental organizations, in accordance with their respective mandates, such as the World Health Organization (WHO), the World Organisation for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO), and the International Plant Protection Convention (IPPC). States Parties noted the value of further dialogue regarding appropriate means of coordination between States Parties and relevant international organizations; and

(b) Ensuring effective coordination and cooperation with and between relevant international organizations, in accordance with their mandates and upon request by a State Party.

120. When considering a mechanism for the provision of assistance relevant to Article VII, States Parties recalled the need for clear procedures for submitting requests for assistance or for responding to a case of alleged use of biological or toxin weapons. States Parties noted the value of considering in 2015, *inter alia*, what information might be provided.

121. States Parties also agreed on the value of continuing in 2015 to explore strengthening the procedures and mechanisms for the provision of assistance, including, *inter alia*:

(a) Information on, and the feasibility of an inventory of, the types of assistance that States Parties could provide;

(b) A data bank containing publicly available information on means of protection against, and responses to, biological and toxin weapons;

(c) Procedures, or codes of conduct, for the provision of means of protection against, and responses to, the use of biological and toxin weapons to the requesting State Party;

(d) A fund for assistance to affected States Parties; and

(e) Capacity-building for international regional and sub-regional organizations that have relevant mandates, such as by joint exercises, workshops and training, including by the use of e-learning modules.

122. States Parties reiterated the value of continuing discussions on strengthening Article VII, and taking into consideration lessons learned from combatting infectious disease, such as Ebola.

## **B. 2015**

123. States Parties reiterated that States Parties bear the responsibility for providing assistance, and coordinating with relevant organizations in the case of alleged use of biological or toxin weapons. States Parties reaffirmed the undertaking made by each State Party to provide or support assistance in accordance with the Charter of the United Nations

to any State Party which so requests, if the Security Council decides that such State Party has been exposed to danger as a result of a violation of the Convention.

124. Recognizing a need to provide effective and timely assistance under Article VII to the State Party exposed to the danger as a result of violations of the Convention and noting that national capacities and national health systems contribute to international capabilities for response, investigation and mitigation of outbreaks of disease, including those due to alleged use of biological or toxin weapons. States Parties further noted that even where national capacity is strong, further international assistance may be required by the affected State Party.

125. States Parties having considered relevant agreements reached at past review conferences and common understandings identified at previous Meetings of States Parties related to Article VII, reiterated that in view of the humanitarian imperative, pending consideration of a decision by the Security Council, timely emergency assistance could be provided by States Parties, if requested.

126. Recognizing that there are both strong similarities and differences between responses to a deliberate disease and a natural outbreak, States Parties noted:

(a) The importance in both cases of a rapid response, as well as effective communication and coordination;

(b) The value of effective coordination and cooperation with relevant international health and humanitarian organizations, such as WHO, FAO, OIE, IPPC, OCHA and the ICRC, in accordance with their mandates;

(c) That an event relevant to Article VII is more than an animal, plant or public health emergency, and recognizes that there is no institutional mechanism under the Convention to undertake relevant activities;

(d) The importance of understanding of national and regional specificities to ensure rapid engagement with local communities during the response;

(e) The importance of ensuring timely access to affordable drugs and vaccines and related diagnostic tools, preventive and therapeutic equipment to affected States Parties; and

(f) The importance of drawing lessons from the Ebola disease outbreak, including addressing the lack of ready operational capacity and the need for a change in the research and development model to ensure timely, accessible and affordable medical support for affected populations.

127. When considering a mechanism for the provision of assistance relevant to Article VII, States Parties noted the value of various proposals made by States Parties including:

(a) Guidelines, and the information that should be included to aid a State Party in submitting a request for assistance;

(b) The request or appeal for assistance should be transmitted in a timely manner to all States Parties and relevant international organizations for coordination and delivery of emergency and humanitarian assistance and support;

(c) Guidelines on the levels of response to be adopted by the States Parties, depending on the nature of the disease, the geographical area where the outbreak occurred, and the capabilities and capacities of the public health system of the State and the potential of international effects;

(d) Establishing a database containing information on, and an inventory of, the types of assistance that States Parties could provide, as a means to facilitate provision of

assistance to ensure timely and adequate response to a situation involving implementation of Art VII;

- (e) A database containing publicly available information on means of protection against, and responses to, biological and toxin weapons;
- (f) Procedures for the provision of means of protection against, and responses to, the use of biological and toxin weapons to the requesting State Party;
- (g) A fund for assistance to affected States Parties;
- (h) Capacity-building for international regional and sub-regional organizations that have relevant mandates, as appropriate, such as by joint exercises, workshops and training, including by the use of e-learning modules; and
- (i) Exploring what role if any, the ISU should play within this mechanism and any additional resources for enabling such a role.

128. States Parties noted the value of preparations being made in advance of Article VII being invoked, including, a coordinated government approach to emergency management, addressing the full range of possible implications, establishing clear channels of communication, accessing relevant expert advice, and working to improve effective cooperation between the law enforcement and health sectors.

129. Recognizing that for the implementation of Article VII national preparedness contributes to international capabilities, States Parties noted the value, at the national level, of:

- (a) Strong detection capabilities, including for infectious disease detections and surveillance;
- (b) Capacity building for accurate disease mapping, including contact-tracing, social mobilisation capacities, and case investigation;
- (c) Appropriate command, control and coordination, functions; and
- (d) Mechanisms to manage offers of assistance, and to mobilize and coordinate the provision of assistance to other countries upon request.

130. States Parties noted that there are differences among States Parties in terms of their level of development, national capabilities and resources, and that these differences affect national and international capabilities and resources to respond effectively to an alleged use of a biological or toxin weapons. States Parties encouraged States Parties in a position to do so to assist other States Parties, upon request, to build relevant capacity.

131. Recalling discussions in 2014 about the importance of assisting other States Parties by, *inter alia*, enhancing relevant capabilities, strengthening human resources, and sharing appropriate and effective practices, States Parties further agreed on the value of collaborating to build relevant national capacity, including:

- (a) Sharing experiences, expertise, technology and resources to build capacity to protect against biological and toxin weapons;
- (b) New methods and novel diagnostic technologies and equipment for detection of and quick response to a disease outbreak;
- (c) Disease surveillance information and analysis, including data on populations in high-risk and vulnerable situations;
- (d) Enhancing national capacity including through taking advantage of, *inter alia*, the implementation of the International Health Regulations core capacities;

(e) Working with relevant international organizations to build national capacity, such as core capacities of public and animal health systems, or those to address toxins, as well as coordination arrangements; and

(f) Avoiding duplicating existing efforts and capacity and taking into account the differences in national laws, regulations, and constitutional procedures.

---