
THE 2013 MEETING OF EXPERTS TO THE BWC, WITH A FOCUS ON THE STANDING AGENDA ITEM REVIEW OF SCIENCE AND TECHNOLOGY DEVELOPMENTS

POLICY PAPER 2 BIOCHEMICAL SECURITY 2030 PROJECT

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EXECUTIVE SUMMARY

This paper presents an assessment of the 2013 Meeting of Experts with regard to the progress of the 2012-2015 Intersessional Process in dealing with the standing agenda items. The paper focuses on standing agenda item (b) *Review of developments in the field of science and technology*, as well as developments in science and technology addressed under the standing agenda items (a) *Cooperation and Assistance* and (c) *Implementation of the Convention*, as developments in science and technology can have cross-cutting relevance for the regime. Practical recommendations for a more focussed, effective and efficient manner of dealing with the science and technology review are presented.

It is recommended that:

1. States Parties should continue to explore the possibility of an open-ended working group structure for science and technology review in the run-up to the 2016 Eighth Review Conference.
2. In lieu of the possibility of changing the way science and technology review is carried out in this intersessional period, other mechanisms should be explored for the remaining period. It would be worthwhile exploring, for example, a process similar to the joint initiative of the Geneva Forum with the governments of Germany, Norway and Switzerland that was aimed at improving the CBM mechanism. This process was carried out in a series of workshops and online communications, with the results submitted to the BWC for consideration.
3. The Chair should provide explicit instructions to experts invited as guests of the meeting concerning what type of information would be most valuable to the States Parties. This would greatly improve the quality of the information exchange.
4. Given the importance of implementation of the Convention, States Parties should report on their experiences and progress in implementing:
 - (a) risk management biosafety and biosecurity programmes of oversight designed to minimise the misuse of developments in the life sciences and related fields and
 - (b) dual-use-biosecurity education to raise awareness and help promote a culture of responsibility among those working in the life sciences and related fields, so that best practices and principles may be derived.
5. There is a continued need to find a better way of communicating information presented in side-events to the BWC meeting proceedings.

1. INTRODUCTION AND BACKGROUND

The Seventh Review Conference of the BWC, which was held in 2011, established a third Intersessional Process (ISP), to be conducted between the Seventh and Eight Review Conferences 2012-2015. Many States Parties had called for an entirely new type of ISP with a more structured, analytical format that could lead to substantive decision-making¹. However, the procedure which was finally adopted is very much like that of the previous ISPs, with yearly one week sessions each of the Meeting of Experts (MX) and the Meeting of States Parties (MSP). As before, the MX was tasked with carrying out a review of the topics to be covered, making proposals to the MSP, which would in turn consider these proposals and then make recommendations to the Eighth Review Conference in 2016 to take effective action to strengthen the BWC. What is different about this ISP was that the States Parties were to consider three standing agenda items each year:

- (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, and*
- (c) *Strengthening national implementation.*

In addition to those standing agenda items, two further topics would be considered: *How to enable fuller participation in the CBMs* would be dealt with in 2012 and 2013 and *How to strengthen implementation of Article VII, including consideration of detailed procedures and mechanisms for the provision of assistance and cooperation by States Parties*, would be considered in 2014 and 2015.²

In the run-up to the Seventh Review Conference a good number of States Parties representing a wide global distribution submitted working papers that had some excellent suggestions as to how to proceed in a way that real progress in strengthening the BWC might be achieved. In the end, some of the most forward-looking suggestions that were offered in the working papers were not agreed. In the case of the standing agenda item on review of developments in science and technology (S&T), the States Parties failed to agree to the formation of an open-ended working group, headed by a facilitator with two deputies, and composed of government experts, scientists from civil society institutions, and industry. This would have allowed much needed time for an array of stakeholders to deal effectively with the enormous task of covering the review, making an assessment of the relevance of the developments for the BWC and suggesting possible concrete governance measures to minimize the possibility of misuse.

Nevertheless, the establishment of S&T review as a standing agenda item could be scored as a positive outcome. This topic was never discussed in its own right in the previous ISPs, and a

¹ See UN website for documentation of the working papers submitted to the 7th Review Conference, available at [http://www.unog.ch/80256EE600585943/\(httpPages\)/04FBBDD6315AC720C1257180004B1B2F?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/04FBBDD6315AC720C1257180004B1B2F?OpenDocument)

² United Nations, The Seventh Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 5 - 22 December 2011, *Final Document*, BWC/CONF.VII/7, Geneva 13 January 2012. Available at <http://unog.ch/bwc>.

thorough review of new S&T developments with the assessment of their relevance by the whole body of the BWC at Review Conferences has not been made up to now.³

Regarding the review of S&T developments, the States Parties to the Seventh Review Conference agreed on four topics to be dealt with in the next four years until the Eighth Review Conference in 2016:

“Advances in enabling technologies, including high-throughput systems for sequencing, synthesizing and analyzing DNA; bioinformatics and computational tools; and systems biology (2012),

Advances in technologies for surveillance, detection, diagnosis and mitigation of infectious diseases, and similar occurrences caused by toxins in humans, animals and plants (2013),

Advances in the understanding of pathogenicity, virulence, toxicology, immunology and related issues (2014),

Advances in production, dispersal and delivery technologies of biological agents and toxins (2015)”.⁴

For each topic, seven sub-items were to be considered. In order to better manage the ISP workload, its 2012 chairman, Ambassador Boujemâa Delmi of Algeria, proposed an agenda for dealing with these sub-items:

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

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

(c) possible measures for strengthening national biological risk management, as appropriate, in research and development involving new science and technology developments of relevance to the Convention (2012 and 2014);

(d) voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry (2012, 2013 and 2015);

(e) education and awareness-raising about risks and benefits of life sciences and biotechnology (2012, 2013 and 2015);

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

³ Dando, M. R. and Pearson, G.S. 2011. The Provision of scientific and technological advice to the biological and toxin weapons convention. *Bradford University Review Conference Paper 27*. Available at <http://www.brad.ac.uk/acad/sbtwc/briefing/RCPapers.htm>.

⁴ United Nations, The Seventh Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Geneva, 5 - 22 December 2011, Final Document, BWC/CONF.VII/7, Geneva 13 January 2012. Available at <http://unog.ch/bwc>.

(g) any other science and technology developments of relevance to the Convention (every year)".⁵

1.1 THE S&T STANDING AGENDA ITEM IN THE INTERSESSIONAL PROCESS 2012

In order to analyse the MX 2013, it is perhaps useful to have an idea of the outcome of the first two meetings of the new ISP held in 2012, as the conclusions about how these sessions proceeded have relevance for the years ahead in assessing the progress made over time. For the S&T review in the 2012 meetings, all seven sub-items under the main topic of *advances in enabling technologies, including high-throughput systems for sequencing, synthesizing and analyzing DNA; bioinformatics and computational tools; and systems biology* listed above were addressed. A mere total of six hours during the MX and four hours during the MSP were devoted to consideration of all seven S&T sub-items. The mandate of the third ISP as agreed by the 2011 Seventh Review Conference is, as for previous ISPs, to *promote common understanding and effective action* in relation to the three standing agenda items.

In view of this mandate, it would be expected that the function of the MX in dealing with the S&T standing agenda item would include (1) carrying out the review of developments in these enabling technologies that have relevance for the Convention, in relation to the seven sub-items, (2) determining the consequences these developments might have for the Convention and (3) making proposals that could *promote common understanding and effective action* for the MSP to consider. The task of the MSP as in previous ISPs would be to consider the MX proposals and make recommendations to the 2016 Eighth Review Conference of the BWC for *effective action*.

Along with the statements and presentations made by States Parties, a few “*guests of the meeting*” were invited to address the topics on the agenda. A good deal of the official statements concentrated on identifying dual-use developments in the enabling technologies that are relevant to the Convention. However, when it came to proposing possible governance measures (sub-items c-e), less progress was made, outside of rather general statements that ways of minimizing the risks posed by these developments should be considered. There were a few exceptions. For example, the UK stated in its Working Paper 2 in consideration of global risk management measures that:

*“Effective biorisk management is a key issue”, however, “A single uniform international standard may not be appropriate for all developing countries...”, rather, “...an approach based on systematic risk assessment and the adoption of technologies and materials that are in line with local needs and availability. A ‘whole-system’ approach would include consideration of engineering and technology, training, cultural and behaviour changes, and whole-life costs and sustainability to achieve effective biorisk management”.*⁶

⁵ Letter from Chairman Boujemâa Delmi to the Permanent Representatives in Geneva of the States Parties and Signatories to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction. Geneva, June 21, 2012. Available at [http://www.unog.ch/80256EDD006B8954/\(httpAssets\)/FA64FCEB2F58B968C1257A24003D4F7C/\\$file/Chairman+letter+to+SPs+21+June+2012+\(with+attachments\)-+as+sent.pdf](http://www.unog.ch/80256EDD006B8954/(httpAssets)/FA64FCEB2F58B968C1257A24003D4F7C/$file/Chairman+letter+to+SPs+21+June+2012+(with+attachments)-+as+sent.pdf).

⁶ United Kingdom. *Challenges to developing international cooperation and assistance on biosafety and biosecurity: matching resources to reality*. BWC/MSP/2012/MX/WP.2. Geneva, 12 July 2012. Available at <http://daccess-ods.un.org/TMP/9462277.29320526.html>.

This statement suggests that dealing with the governance issue concerning risk management will indeed be an arduous process.

In a further concrete approach, the US suggested that the MSP should “*invite the scientific community, academia and industry to share their views on how best governments and the BWC can better support them in [implementing] education and outreach*” to raise awareness about dual-use aspects of life scientists’ work.⁷

All in all, however, it was difficult to see how the MSP might glean recommendations out of the MX report for the Eighth Review Conference to act upon. Indeed, the S&T review at the MSP 2012 could be summed up as it is documented in the final report of that meeting.⁸ This amounts to, once again, a collation of suggestions about what could be done to utilize the benefits of the advances in enabling technologies while minimizing the risks involved in this work. This is little more than a repetition of the statements made in the MX report. Indeed, the language used in reporting the outcome of the MSP 2012 indicating certain measures that *could be* taken was very familiar. For example, paragraph 31 noted that “*States Parties identified opportunities for maximizing benefits from these enabling technologies while minimizing risks of their application for prohibited purposes...*”, while paragraph 33 noted that “*States Parties recognized the value of pursuing various national measures...*” and paragraph 39 that “*States Parties noted the value of measures to mitigate biological risks...*”. Outside of a general statement encouraging States Parties to report on “*any actions, measures or other steps that they may have taken on issues under consideration in the intersessional programme*” (paragraph 47), there was no call for States Parties to actively report on any specific actions that would be sensible to implement (such as the education and awareness-raising issue flagged by the US delegation), which would better enable the body of States Parties as a whole to seek out best practices and make concrete recommendations to the Eighth Review Conference.

In an attempt to move the process forward, South Africa presented their Working Paper 7, in which constructive criticism was offered concerning the progress being made in the ISP up to that point, illustrated in the analysis of the S&T review carried out during the MX 2012:

*“the technical discussions during the formal MXP in July 2012 regrettably did not provide sufficient material for an MXP report that would effectively promote common understanding and effective action on the issues raised. Some of the side-events held on the margins of the MXP generated more indepth technical discussions; however, these were not part of the formal MXP”.*⁹

The paper suggested that the time for review was not being used effectively and “*that [this] tendency will continue unless there is a change in the general approach to the MXP*”.¹⁰ This

⁷ USA, *Developments in science and technology*. BWC/MSP/2012/MX/WP.6, Geneva, 16 July 2012. Available at <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G12/615/87/PDF/G1261587.pdf?OpenElement>.

⁸ United Nations. *Report of the Meeting of States Parties*, BWC/MSP/2012/5, Geneva, 19 December, 2012. [http://www.unog.ch/80256EE600585943/\(httpPages\)/F837B6E7A401A21CC1257A150050CB2A?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/F837B6E7A401A21CC1257A150050CB2A?OpenDocument)

⁹ South Africa, *The intersessional process: comments and proposals*, BWC/MSP/2012/WP.7, Geneva, 5 December 2012, available at <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G12/638/77/PDF/G1263877.pdf?OpenElement>.

¹⁰ Ibid.

statement generated a heated debate. While many delegations spoke in ardent support of South Africa's views, some objected strongly to what they considered to be suggestions that would change the structure of the ISP as mandated by the Seventh Review Conference. South Africa denied that the paper was suggesting any change in the mandate. Needless to say, no suggestion to change the structure of the ISP was made in the report of the MSP. At the end of the first round of MX/MSP meetings in 2012, it was difficult to see how this ISP, if the proceedings continue as they are, will lead to effective action that can substantially strengthen the Convention.

2. THE MEETING OF EXPERTS 2013

For the next round of the ISP in 2013, there was a change in the Chair and the Vice Chairs. Ms. Judit Körömi of Hungary was elected to chair the meeting, with Ambassador Mazlan Muhammad of Malaysia and Ambassador Urs Schmid of Switzerland serving as vice-chairs.¹¹ As in the first ISP round in 2012, the Chair suggested a provisional programme of work that was subsequently followed. A rolling, detailed, indicative schedule of the sessions¹² was provided, which was a most helpful guide to the proceedings. Working within the mandated structure of the ISP, Ms. Körömi proposed to “*bring in more voices*”¹³ including inviting a greater number of experts as “*guests of the meeting*” than in the past, apparently in the hope that this would generate a more focussed, productive dialog within the constraints of the mandated structure. In that letter, she further proposed “*to institute a more coordinated system of scheduling side events*” in order to “*develop a schedule that best complements and supports our work*”. The strong engagement of the Chair, including these initiatives to improve the process, is acknowledged.

The three standing agenda items were given equal time (six hours) for consideration on the agenda. In addition, the topic of how to enable fuller participation in the CBMs was allotted three hours for consideration. As in previous years, the General Debate on the first day was suspended at one point to allow for NGO presentations in an informal session. The opening session was devoted to the usual formalities of final decision-making, followed by informal statements in the General Debate. Although many States Parties were of the opinion that these statements should be kept to a minimum in order to devote full time to the agenda items, there were still a rather large number statements, so that this session ran over the scheduled time.

2.1. THE STANDING AGENDA ITEM *SCIENCE AND TECHNOLOGY REVIEW*

The review of developments in the field of science and technology related to the Convention is focussed in 2013 on the topic of *advances in technologies for surveillance, detection, diagnosis and mitigation of infectious diseases, and similar occurrences caused by toxins in humans, animals and plants*. In a departure from the 2013 agenda suggested by the previous Chairman, Ambassador

¹¹ United Nations. 2013. Advance version: Report of the Meeting of Experts. BWC/MSP/2013/MX/3. Geneva. [http://www.unog.ch/80256EDD006B8954/\(httpAssets\)/4FCA57B69503A1DCC1257BF2003B4A6A/\\$file/Advance-BWC_MSP_2013_MX_3-report.pdf](http://www.unog.ch/80256EDD006B8954/(httpAssets)/4FCA57B69503A1DCC1257BF2003B4A6A/$file/Advance-BWC_MSP_2013_MX_3-report.pdf).

¹² Rolling, detailed indicative schedule, Meeting of Experts to the BWC. 2013. Available at [http://www.unog.ch/80256EDD006B8954/\(httpAssets\)/FB78C4ABA9D5DE60C1257B9B0039DA0D/\\$file/BWC+MX+2013+-+Master+plan+-+130814-18.00.pdf](http://www.unog.ch/80256EDD006B8954/(httpAssets)/FB78C4ABA9D5DE60C1257B9B0039DA0D/$file/BWC+MX+2013+-+Master+plan+-+130814-18.00.pdf).

¹³ United Nations. 2013. Letter of 28 February from the Chair of the 2013 ISP proceedings. [http://www.unog.ch/80256EDD006B8954/\(httpAssets\)/899D2B611B6F5564C1257B16005A94AD/\\$file/Chairman+letter+to+SPs+Feb+2013+\(with+annex\).pdf](http://www.unog.ch/80256EDD006B8954/(httpAssets)/899D2B611B6F5564C1257B16005A94AD/$file/Chairman+letter+to+SPs+Feb+2013+(with+annex).pdf)

Boujemâa Delmi of Algeria (as presented in the introduction to this paper above), all seven sub-items under the main topic were considered. That is, the sub-item *Possible measures for strengthening national biological risk management, as appropriate, in research and development involving new science and technology developments of relevance to the Convention* was included, although it was not listed in the Delmi schedule for consideration in 2013.

It was unfortunate that, with few exceptions, many of the presentations by experts that were invited as guests of the Chair were concerned mainly with scientific details and not focussed sufficiently on the implications of the developments for the Convention. There was often so much detail on the slides that it was impossible to see from a distance, and the message was surely lost to many in the room. This was also reflected perhaps in the sparse quoting of expert contributions in the collations in Annex I of the advance version Report of the Meeting. One prominent exception was the presentation by Prof. Simon Wain-Hobson of the Institut Pasteur in Paris, who spoke on “*Moral and ethical issues with dual use research of concern, including gain-of-function-studies*”. Prof. Wain-Hobson did not waste time going into scientific detail, as the ISU had produced an excellent paper covering all necessary background on the experiments in question.¹⁴ He focussed rather on the implications for the BWC and offered concrete measures that in his opinion should be taken. This was a perfect example of the kind of concrete input that is hoped an expert would offer. Nevertheless, even such concrete input is lost, if the structure of the process is not suited to a sustained and focussed dialog among experts and policy makers about the material presented.

Concerning the first two sub-items dealt with (1) *new science and technology developments that have potential for uses contrary to the provisions of the Convention* and (2) *new science and technology developments that have potential benefits for the Convention, including those of special relevance to disease surveillance, diagnosis and mitigation*, the focus by the States Parties and experts was more on the benefits than on the uses contrary to the Convention.¹⁵ This was no doubt a reflection of the nature of the main topic, which lent itself more to consideration of the benefits of S&T developments in these areas. Nevertheless, in keeping with sub-item (1), the UK pointed out in their working paper (WP 8)¹⁶ that:

“...advances in vaccine development have the potential for uses contrary to the provisions of the Convention” through “*Knowledge gained through research on the pathogenicity of the disease agent...and the host immune response*”. In addition, “*Concepts developed to deliver vaccines to specific cell types could also be used to design delivery platforms for harmful materials*”.

Under sub-item (3) *possible measures for strengthening national biological risk management, as appropriate, in research and development involving new science and technology developments of*

¹⁴ ISU. 2012. Making avian influenza aerosol-transmissible in mammals. Background information document. BWC/MSP/2012/MX/INF.2. Geneva, June 11, 2012. <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G12/611/33/PDF/G1261133.pdf?OpenElement>

¹⁵ United Nations. 2013. Advance version: Report of the Meeting of Experts 2013. BWC/MSP/2013/MX/3. [http://www.unog.ch/80256EDD006B8954/\(httpAssets\)/4FCA57B69503A1DCC1257BF2003B4A6A/\\$file/Advance-BWC_MSP_2013_MX_3-report.pdf](http://www.unog.ch/80256EDD006B8954/(httpAssets)/4FCA57B69503A1DCC1257BF2003B4A6A/$file/Advance-BWC_MSP_2013_MX_3-report.pdf)

¹⁶ United Kingdom. 2013. Advances in science and technology: Vaccine development. BWC/MSP/2013/MX/WP.8. Geneva, August 5. <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G13/622/69/PDF/G1362269.pdf?OpenElement>

relevance to the Convention the input, with a few exceptions, was rather meager as far as concrete suggestions for management were concerned. Significantly, the US reported on their risk management measures under the standing agenda item *Implementation of the Convention*, which illustrates that all standing agenda items are intrinsically linked, and that it is important to adopt an integrated approach with cross-fertilization in dealing with the standing agenda items, a point that has been well made previously by others.¹⁷ The US went into some detail in outlining their risk management (oversight) programme of work in the life sciences, and in particular the recent changes in their Select Agent Regulations as well as personnel suitability assessments.¹⁸ Recognizing that no one-size-fits-all is possible and that their type of system may not be a suitable solution for all countries, the US in a further statement encouraged States Parties to exchange on practices and develop shared principles. Indeed, in the area of risk management, it would be most beneficial to learn what systems and practices other countries have implemented or are considering.

As to sub-items (4) *voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry* and (5) *education and awareness-raising about risks and benefits of life sciences and biotechnology*, it was surprising how little was said¹⁹, given the long-held view among States Parties concerning the potential benefits in the way of prevention of misuse of life sciences work that these measures would provide.²⁰ This is disappointing and unfortunate, as strong engagement of the States Parties through their governments is needed if progress in implementing dual-use education at universities is to be made.

Outside of general statements and comments encouraging implementation of biosecurity education, virtually nothing was offered that would suggest concrete ways to achieve implementation of such programmes. An exception was Japan in a statement offering a set of “*further challenges and next steps*”.²¹ However, States Parties were not picking up on previous suggestions for delegations to report on their experiences in implementing dual-use biosecurity education into life sciences curricula, so that best practices can be gathered from these experiences.²²

In regard to sub-item (6) *science- and technology-related developments relevant to the activities of multilateral organizations such as the WHO, OIE, FAO, IPPC and OPCW*, the good intentions of the Chair to encourage a more productive dialog by “*bringing in more voices*” to the meeting did bear fruit. This was evident in the presentations by Switzerland on the “*value of scientific advisory boards*”. Switzerland noted that for the BWC, “*this important work [S&T review] cannot be pursued as sustainably and effectively as necessary in the current intersessional set-up... we need a more systematic and comprehensive review of scientific and technological developments and their bearings on the BWC*”, and went on to delineate the lessons learned from the OPCW Scientific

¹⁷ Pearson, G.S. and Sims, N.A. 2012. Maximizing the potential of the BTWC intersessional process. Bradford University Briefing Paper 6, Third series. http://www.brad.ac.uk/acad/sbtwc/briefing/3_BP_6.pdf.

¹⁸ USA. 2013. Key biosecurity-related changes made to the USA select agent regulations. BWC/MSP/2013/MX/WP. 4. Geneva, July 29. <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G13/621/52/PDF/G1362152.pdf?OpenElement>

¹⁹ United Nations 2013. Advance version: Report of the Meeting of Experts, op.cit.

²⁰ United Nations. 2005. Report of the Meeting of States Parties to the BWC. BWC/MSP/2005/3. Geneva, 14 December.

²¹ United Nations. 2013. Advance version: Report of the Meeting of Experts, op. cit.

²² USA, *Developments in science and technology*. BWC/MSP/2012/MX/WP.6, op. cit.; Poland. 2012. The crucial role of life scientists in the effective implementation of the BTWC. BWC/MSP/2012/WP. 2. Geneva, 22 November.

Advisory Board (SAB). Notably, “it is important to analyse questions carefully (including policy dimension)”, although the SAB “*stays away from policy debate*” that can cripple productive work. This was followed by presentations from the OPCW SAB.

These presentations generated a positive response that could be particularly relevant for a more productive handling of the S&T review in the future. Ukraine made an important contribution to the discussion that started the ball rolling. It suggested that the States Parties “*Consider the establishment of an open-ended working group to consider the implications of advances in science and technology, including the convergence of chemistry and biology, to the Biological and Toxin Weapons Convention in the **preparations for and at the next Review Conference*** (S 15/8 AM) [emphasis added]²³” [emphasis added]. India reported on their previous proposal for establishing a panel to carry out the S&T review. They noted that the suggestion did not receive support at that time as “*Perhaps the idea at that time was not mature enough*”, but that “*The topic could be discussed further and kept in mind for the **preparation of the next Review Conference*** (S 15/8 AM) [emphasis added]”. Australia noted that “A scientific advisory board is a very expensive process” and that “in the BWC context we would benefit more from an open-ended working group” (S 15/8 AM), given the more limited resources of the BWC.

It is important to note that no one was suggesting a change in the structure as mandated for the present ISP, but simply that better progress might be made in the future by considering a working group/panel structure for S&T review after the Eighth Review Conference of the BWC. This discussion was reported in the collations in Annex I of the advance version Report of the 2013 Meeting of Experts, and, importantly, was included in the Chair’s synthesis paper of 30 September 2013 under “*Other science and technology developments of relevance to the Convention*” that the 2013 MSP *should* consider [emphasis added]”.²⁴

2.2 THE STANDING AGENDA ITEM *COOPERATION AND ASSISTANCE*

Efforts to strengthen implementation of BWC Article X on cooperation among States Parties in the peaceful uses of biology have often been accompanied by a degree of tension among BWC member states. This tension has been eased to a certain degree through the realization by treaty partners that capacity-building in the areas of disease control has decided advantages for all countries.²⁵ Infectious diseases are viewed today as global health problems, and it is generally agreed that all countries would benefit from a strengthened disease control on the international level.²⁶ That “*enhancing international cooperation, assistance and exchange in biological sciences and*

²³ The designations refer to statements made that have been quoted in Annex I of the Advance version of the Report of the 2013 Meeting of Experts, op. cit.: S for statement, followed by date.

²⁴ United Nations. 2013. Synthesis of considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the topic under discussion at the Meeting of Experts. Submitted by the Chairman. BWC/MSP/2013/L.1. Geneva 30 September.

²⁵ Millett, P. 2011. Why the 2011 BTWC RevCon might not be business as usual. *Disarmament Forum* one 2011: 3-12.

²⁶ Zacher, M.W. 1999. Global epidemiological surveillance. International cooperation to monitor infectious diseases. In *Global Public Goods. International Cooperation in the 21st Century*, ed. I. Kaul, I. Grunberg, and M.A. Stern, pp. 266-283. Oxford, New York: Oxford University Press.

*technology for peaceful purposes*²⁷ is regarded as a key issue is reflected in the agreement among States Parties to the BWC to make cooperation and assistance in relation to Article X a standing agenda item in the present ISP.

Despite the easing of tension, some states used the 2013 MX to continue to complain about what they considered to be discriminatory and unjustified export control restrictions, while others tried to stress the positive actions they have taken in the way of assisting developing countries. Some helpful suggestions were offered, in particular practical instruction as to the best procedure for requesting assistance in order to receive a positive response. In any case, the participation of States Parties in the debate in regard to this standing agenda item was very active on both sides. India for example presented a balanced view of export controls in relation to the question of assistance. While noting the need for “the establishment of a mechanism for full and effective implementation of Article X” (S 13/8 AM), India stated that “*Strengthened implementation of Article III would ensure that the cooperation envisaged under Article X is not abused*” (S 12/8 AM). There were calls for States Parties to make better use of the cooperation and assistance database operated by the ISU.

2.3 THE STANDING AGENDA ITEM *IMPLEMENTATION OF THE CONVENTION*

One of the key elements of the BWC is the obligation of State Parties laid out in Article IV to implement its provisions. At the same time it is of consequence that one of the main weaknesses of the Convention is the fact that implementation of its provisions has been quite diverse and in some cases decidedly insufficient or even lacking.²⁸ The importance of establishing implementation of the Convention as one of the three standing agenda items in the present ISP becomes even more evident with the realization that implementation is strongly linked with developments in S&T, including risk management and education, as well as cooperation and assistance, capacity-building and export control. Indeed, some of the most concrete proposals for action concerning several S&T sub-items could be found in working papers and statements of States Parties and guests in the sessions on implementation of the Convention. For example, it has been noted above (see section 2.1, sub-item 3, *strengthening national risk management*) that the US chose to outline in some detail their risk management programme under sessions on implementation rather than the standing agenda item on review of developments in S&T.

Although the topic of compliance was not on the agenda for the ISP, a good number of States Parties addressed this issue under the standing agenda item of implementation. Switzerland called on States Parties to:

*“Develop (voluntary) approaches such as the **compliance assessment concept** put forward by Canada, the Czech Republic and Switzerland²⁹, which proposes to demonstrate compliance with the BWC by assessing a country’s implementation of the treaty (e.g. through an examination of national legislation), or the **peer-review mechanism** suggested by UNIDIR and France^{30,31} [emphasis added].*

²⁷ United Nations. 2012. Seventh Review Conference *Final Document*, op. cit., p.16.

²⁸ Woodward, A. 2003. *Time to lay down the law. National legislation to enforce the BWC*. VERTIC Report. Available at <http://www.vertic.org/publications.asp#factsheets>.

²⁹ BWC/MSP/2012/WP.6

³⁰ BWC/MSP/2012/WP.12

³¹ Switzerland. 2013. Compliance with the BWC: preliminary considerations by Switzerland. BWC/MSP/2013/MX/WP. 12. Geneva, 9 August. <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G13/623/78/PDF/G1362378.pdf?OpenElement>

France explained that “*The aim [of peer review] is to allow the organizing State to strengthen its national implementation and practice an exchange of best practice with its peers*” and that “*The aim is to share experiences taking into account national circumstances and best practices when applicable*” (S 15/8 AM). Many, but not all, States Parties were in agreement about exploring these compliance measures further. For example, Iran in speaking for the non-aligned movement (NAM) stated that:

“The proposals on peer review compliance assessment were raised and evaluated in the Seventh Review Conference of the BWC and there was no consensus on such proposals. There are serious difficulties with such concepts in the framework of the BWC including inter alia that they may create a false sense of assurance regarding the national implementation of obligations arising from the Convention. All states parties [should] respect the mandate given by the Review Conference to the inter-sessional process and not reopen the fractious debates of the Review Conference” (S 15/8 AM).

Thus, the subject of compliance assessment/compliance assurance remains a hotly contested issue in the BWC.

3. CONCLUSIONS AND RECOMMENDATIONS

The presentations, statements, working papers and interventions on the standing agenda items under discussion at the 2013 MX provide a good indication of the outcome of the meeting. These for the most part reflected only generalities concerning the topic under consideration, with very few examples of suggestions for concrete action. In the words of one of our interview partners from an active delegation “*We are getting a lot of material on the table, but what are we going to do about it?*” Indeed, the Chair at one point in the proceedings saw fit to complain that the statements were not offering enough concrete proposals that might serve as a guide for the MSP to make recommendations.

As in previous years, the Chair distilled the ideas and proposals drawing on the “*presentations, statements, working papers and interventions*” made at the 2013 MX into a so-called synthesis paper³². The concept of the synthesis paper is to provide a more concrete basis for the delegates at Meeting of States Parties 2013 to perform their task of making recommendations for the Eighth Review Conference in 2016 to act upon. In view of this concept, the Chair in her synthesis paper made the most out of what was offered at the 2013 MX meeting. In this regard, there were some encouraging signals.

For example, in consideration of the standing agenda item of the review of S&T developments under *Possible measures for strengthening national biological risk management* in the synthesis paper, it was proposed that:

“States Parties should work together and with all relevant stakeholders to develop measures to mitigate biological risks” including “*The elaboration of common principles on the basis of which risk assessment and oversight of scientific research activities that have dual-use potential should be carried out during all phases of the research cycle*” and “*The development of oversight frameworks for dual-use research of concern, involving a broad range of stakeholders at the national and international levels*”.

Under *Science- and technology-related developments relevant to the activities of multilateral organizations* it was noted that:

³² United Nations 2013. Synthesis paper prepared by the Chairman. BWC/MSP/2013/L.1., op. cit.

*“There may be lessons for the review of science and technology under the BWC from the experience with the Scientific Advisory Board of the CWC”. Considering Other science and technology developments of relevance to the Convention it was proposed that “States Parties **should** consider ways of establishing a more systematic and comprehensive means of review [emphasis added]” including “A board to provide science advice, similar to the Scientific Advisory Board of the CWC, or based on a different model” or “An open-ended working group to consider the implications of advances in science and technology”.*

On the standing agenda item of Strengthening National Implementation, the synthesis paper noted that:

“States Parties considered a number of possible approaches to demonstrating their compliance with the national implementation obligations of the Convention” including “Voluntary peer review processes on national implementation or compliance assessment”.

It will depend upon the outcome of the 2013 MSP if some of these proposals are incorporated into recommendations for the Eighth Review Conference in 2016 to act upon. However, even if that occurs, it is still doubtful that this ISP under its present structure will progress to addressing the essential governance issue concerning risk management in any detail.

3.1 RECOMMENDATIONS

Recommendation 1: Although it is clear that a change in the structure of this present ISP is very unlikely, it would be most beneficial for the future review of developments in science and technology to continue the dialog that was started at the 2013 MSP in regard to exploring the possibility of an open-ended working group structure for science and technology review in the run-up to the 2016 Eighth Review Conference.

Recommendation 2: In lieu of the possibility of changing the way the science and technology review is carried out in this intersessional period for a more productive process, other mechanisms should be explored, in order to recommend concrete proposals for the 2014 and 2015 MSPs. It would be worthwhile exploring, for example, a process similar to the joint initiative of the Geneva Forum with the governments of Germany, Norway and Switzerland that was aimed at improving the CBM mechanism³³. This process was conducted in a series of workshops, which were complemented by continued online communication. Indeed, concrete proposals to improve the CBM mechanism were worked out in this process³⁴ and these were brought in and discussed with the BWC body as a whole.

Recommendation 3: It would greatly improve the quality of the information communicated by experts invited as guests of the meeting if the Chair would provide explicit instructions to them about what should be addressed in their presentations that might be the most valuable input for the States Parties.

Recommendation 4: Given the importance of implementation of the Convention, it would aid progress in strengthening the BWC for States Parties to report on their progress in implementing:

- (a) risk management biosafety and biosecurity programmes of oversight designed to minimise the misuse of developments in the life sciences and related fields and
- (b) dual-use-biosecurity education to raise awareness and help promote a culture of responsibility among those working in the life sciences and related fields, so that best practices and principles may be derived.

Recommendation 5: The efforts of the Chair to institute a more coordinated system of scheduling side events in order to make better use of the information provided is indeed welcomed, but there is a continued need to find a better way of communicating this information to the BWC body as a whole, that is, to integrate what is being learned in the side events into the meeting proceedings for the benefit of all.

³³ Lentzos, F. 2011. Article V: confidence-building measures, in G.S. Pearson, N. Sims and M.R. Dando (eds.) *Strengthening the Biological Weapons Convention. Key Points for the Seventh Review Conference*, 157–178. University of Bradford, available at http://www.brad.ac.uk/acad/sbtwc/key7rev/keypoints_chapters.html.

³⁴ Germany, Norway and Switzerland. 2011. Review and update of the confidence-building measures. BWC/CONF.VII/WP.9. Geneva, 14 October. Available at [http://www.unog.ch/80256EE600585943/\(httpPages\)/F1CD974A1FDE4794C125731A0037D96D?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/F1CD974A1FDE4794C125731A0037D96D?OpenDocument)