# IV. Biological weapon disarmament and non-proliferation

#### FILIPPA LENTZOS

The principal legal instrument against biological warfare is the 1972 Biological and Toxin Weapons Convention (BWC). In 2018, Palestine and Niue acceded to the BWC, and the Central African Republic ratified the convention, becoming the 182nd state party.

Key biological disarmament and non-proliferation activities in 2018 were carried out in connection with the first set of 2018–20 BWC intersessional Meetings of Experts (MXs), the First Committee of the United Nations General Assembly, and the BWC Meeting of States Parties (MSP). Several workshops of relevance to biological disarmament and non-proliferation also took place in 2018. Major issues and developments in the field were the unsustainable financial environment of the BWC, the MSP non-report on the MXs, the introduction of the UN Secretary-General's Disarmament Agenda and the increasingly confrontational statements made by Russia alleging that US biological weapon laboratories were operating in neighbouring states, most notably in Georgia.

#### The 2018 Meetings of Experts

The 2016 Review Conference negotiations, which carried over into the 2017 MSP, agreed to hold five Meetings of Experts in each of the three years leading up to the 2021 BWC Review Conference.<sup>3</sup> MX1 was to focus on cooperation and assistance, MX2 on science and technology, MX3 on national implementation, MX4 on assistance, response and preparedness, and MX5 on institutional strengthening. The first set of these meetings took place in August 2018. In advance of each MX, the BWC Implementation Support Unit (ISU) produced a general background document on the topic under consideration.<sup>4</sup>

## Meeting of Experts 1

MX1 met on 7–8 August 2018 and was chaired by Ambassador Maria Teresa T. Almojuela of the Philippines. The purpose of the meeting was to discuss and promote common understanding and effective action on cooperation

<sup>&</sup>lt;sup>1</sup>For a summary and other details of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, see annex A, section I, in this volume.

<sup>&</sup>lt;sup>2</sup> BWC, 'Report on universalization activities', BWC/MSP/2018/3/Rev.1, 3 Dec. 2018, para. 1.

<sup>&</sup>lt;sup>3</sup> BWC, 'Report of the Meeting of States Parties', BWC/MSP/2017/6, 19 Dec. 2017, para. 19.

<sup>&</sup>lt;sup>4</sup> For background documents, along with all working papers, technical briefing presentations, side event details and the joint NGO position paper, see BWC, '2018 Meetings of Experts (7–16 Aug. 2018)', Meetings and documents.

and assistance, with a particular focus on strengthening cooperation and assistance on peaceful uses of the life sciences and associated technologies (Article X). States parties submitted 12 working papers, A joint non-governmental organization (NGO) position paper submitted to all five MXs set out a collective NGO view on key action points for the meetings. Technical briefings were provided to the meeting by the Group of Experts under UN Security Council Resolution 1540, the International Criminal Police Organization (INTERPOL), the World Organization for Animal Health (OIE). the Organisation for the Prohibition of Chemical Weapons (OPCW) and the World Health Organization (WHO). The ISU briefed the meeting on the newly updated Cooperation and Assistance Database. Three side events were hosted by India, Russia and the Johns Hopkins Center for Health Security.

The meeting reviewed the comprehensive activities being undertaken by states parties to implement Article X. In exploring ways to promote more robust cooperation and assistance, delegations noted the need to: (a) further optimize the operation of the Cooperation and Assistance Database; (b) develop guidelines for sustainable resource mobilization strategies; (c) develop a database to serve as reference on regulatory frameworks for biosafety and biosecurity; (d) support academic networks to promote human resource capacities in the biological sciences in the developing world; and (e) provide effective training and manuals to support states in crafting biological risk management systems.5

In her reflections on MX1, the chair suggested several concrete proposals for further consideration in the next MX1, such as: an action plan for Article X implementation; guidelines on Article X reports; the creation of a BWC Cooperation and Assistance Officer position within the ISU; an open-ended working group to monitor, coordinate and review activities of cooperation and assistance; and ways to further collaboration with INTERPOL, the OIE and WHO.6

#### Meeting of Experts 2

MX2 met on 9-10 August 2018 and was chaired by Pedro Luiz Dalcero of Brazil. The purpose of the meeting was to discuss and promote common understanding and effective action on developments in the fields of science and technology related to the BWC, with a particular focus on genome editing. States parties submitted 12 working papers. Technical briefings were provided to the meeting by the Group of Experts under UN Security Council

<sup>&</sup>lt;sup>5</sup> BWC, 'Report of the 2018 Meeting of Experts on cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X', BWC/MSP/2018/MX.1/3, 7 Nov. 2018, paras 17-23.

<sup>&</sup>lt;sup>6</sup> BWC, 'Meeting of Experts on cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X: Reflections and proposals for possible outcomes', BWC/ MSP/2018/CRP.2, 4 Dec. 2018, para. 12.

Resolution 1540, the OIE, the OPCW and the UN Interregional Crime and Justice Research Institute (UNICRI). Four side events were hosted by China, Russia, the InterAcademy Partnership (IAP) and the US National Academy of Sciences, and the OPCW.

The meeting reviewed developments in science and technology relevant to the convention, and identified potential benefits and risks. It considered biological risk assessment and management, particularly through regulation, and discussed biosecurity education and the development of a voluntary code of conduct for biological scientists and other relevant personnel. Genome editing was considered in depth, along with other relevant scientific and technological developments and the activities of relevant multilateral organizations. In his reflections on MX2, the chair noted that:

while there was convergence on the importance for the BWC of keeping under consideration new technological developments in areas associated with the Convention's field of application, future discussions and outcomes regarding further activities of the intersessional process should focus on issues that achieved greater commonality of approaches among delegations. In this regard, two areas could be explored: (i) risk assessment and management, and (ii) a voluntary code of conduct for biological scientists and relevant personnel.<sup>8</sup>

It was the chair's view that these two topics could lead to meaningful discussions in the MX2 meetings in 2019 and 2020, and that they 'present the best prospect for an agreed outcome on [science and technology] issues in the 2021 Review Conference of the BWC'. He also noted that while MX2 is the currently available format for discussions, other possibilities such as working groups operating in parallel and complementary to MX2 should not be ruled out.

#### Meeting of Experts 3

MX3 met on 13 August 2018 and was chaired by Ambassador Julio Herráiz España of Spain. The purpose of the meeting was to discuss and promote common understanding and effective action on strengthening national implementation. States parties submitted nine working papers. The ISU briefed the meeting on its new platform for electronic submission of BWC Confidence Building Measures (CBMs), which will go live in 2019. Three side events were hosted by the Danish Centre for Biosecurity and Biopreparedness and Kenya, the European Union (EU) and the USA.

<sup>&</sup>lt;sup>7</sup> BWC, 'Report of the 2018 Meeting of Experts on review of developments in the field of science and technology related to the Convention', BWC/MSP/2018/MX.2/3, 12 Nov. 2018, paras 17–21.

 $<sup>^8</sup>$  BWC, 'Meeting of Experts on review of developments in the field of science and technology related to the Convention: Reflections and proposals for possible outcomes', BWC/MSP/2018/CRP.3, 4 Dec. 2018, para. 4.

<sup>&</sup>lt;sup>9</sup> BWC, BWC/MSP/2018/CRP.3 (note 8), para. 7.

The meeting considered measures related to Article IV of the convention, which obliges states to take any national measures necessary to implement the provisions of the BWC domestically. It also considered CBMs, particularly regarding the quantity and quality of submissions. While the past five years have seen an increase in the submission of CBMs, only around 40 per cent of states have submitted CBMs and the quality of these submissions is variable. As of January 2019, 32 submissions for 2018 had been made publicly available. the highest annual number to date. 10 The meeting also discussed additional ways to promote transparency and confidence building, focusing particularly on peer review and transparency visits. The role of international cooperation and assistance under Article X, in support of strengthening implementation. was also considered, along with issues related to Article III, such as effective measures of export control.11

In his reflections on MX3, the chair identified three areas ripe for further discussion at MX3 in 2019 and 2020: CBMs and their improvement, other voluntary transparency initiatives and export controls.<sup>12</sup>

### Meeting of Experts 4

MX4 met on 14-15 August 2018 and was chaired by Daniel Nord of Sweden. The purpose of the meeting was to discuss and promote common understanding and effective action on assistance, response and preparedness. States parties submitted 11 working papers. Technical briefings were provided to the meeting by the OIE, the OPCW and WHO. Five side events were hosted by Canada, France, Russia, Georgetown University and the Nuclear Threat Initiative (NTI), and the Johns Hopkins Center for Health Security.

The meeting discussed practical challenges and possible solutions for implementing Article VII, which obliges states parties to provide assistance to any state party that has been exposed to danger as a result of a violation of the convention. Particular attention was given to guidelines on and formats for assistance. Procedures for providing a prompt and efficient response to a request for assistance without preconditions were also discussed, including the concept of mobile biomedical units. Approaches to strengthening international response capabilities for infectious disease outbreaks, both natural and deliberate in origin, were explored, as were means for preparing for, responding to and rendering assistance in case of the possible hostile use of biological agents against agriculture, livestock and the natural environment. 13

<sup>&</sup>lt;sup>10</sup> BWC, 'Confidence-Building Measures', [n.d.].

<sup>&</sup>lt;sup>11</sup> BWC, 'Report of the 2018 Meeting of Experts on strengthening national implementation', BWC/ MSP/2018/MX.3/3, 18 Oct. 2018, paras 16-20.

<sup>&</sup>lt;sup>12</sup> BWC, 'Meeting of Experts on strengthening national implementation: Reflections and proposals for possible outcomes', BWC/MSP/2018/CRP.4, 4 Dec. 2018, sections I, II and III.

 $<sup>^{13}</sup>$  BWC, 'Report of the 2018 Meeting of Experts on assistance, response and preparedness', BWC/ MSP/2018/MX.4/3, 12 Nov. 2018, paras 16-21.

In his reflections on MX4, the chair underscored that no framework currently exists for addressing requests for assistance in the event that a state party has been attacked by biological weapons. If an assistance request was made today, many of the necessary elements of such a framework would need to be improvised. MX4 discussions showed, however, that 'there was widespread support for the development of [such] a framework', although there were differences over how and when to do this. The chair suggested that formats and guidelines should be developed, and that the use of these formats and guidelines in preparations and training exercises would enable lessons to be learned and weaknesses to be dealt with before formal approval and adoption by states parties. The chair also noted the broad support among delegations for a database to facilitate the implementation of Article VII, but that questions remained over how the database would function, which technical platform, what assistance offers could be listed and the possible financial costs. He urged further work to address these issues in 2019 and 2021.

## Meeting of Experts 5

MX5 met on 16 August 2018 and was chaired by Otakar Gorgol of Czechia. The purpose of the meeting was to discuss and promote common understanding and effective action on institutional strengthening of the convention. States parties submitted four working papers. Three side events were hosted by the USA, King's College London and Norway, and the Geneva Disarmament Platform and the British American Security Information Council. The meeting had only one agenda item: consideration of the full range of approaches and options to further strengthen the convention and its functioning through possible additional legal measures or other measures in the framework of the convention.

In his reflections on MX5, the chair noted that while there was a strong desire and willingness among delegations to strengthen the convention, there were also differing views on the ways and means to do so: 'The most significant point of disagreement remains whether to pursue objectives through a new legally-binding agreement'. However, 'there is no prospect of consensus on this matter now or in the near future'. He continued:

It is clear that these are strongly held positions: if progress is to be made, it will be essential to avoid taking action prejudicial to either position. Within this context, however, it may be possible to take steps to strengthen the Convention in the near term through politically agreed measures that do not involve new legal mechanisms.

<sup>17</sup> BWC, BWC/MSP/2018/CRP.6 (note 16), para. 8.

 $<sup>^{14}</sup>$  BWC, 'Meeting of Experts on assistance, response and preparedness: Reflections and proposals for possible outcomes', BWC/MSP/2018/CRP.5, 4 Dec. 2016, para. 3.

BWC, BWC/MSP/2018/CRP.5 (note 14), para. 5.
BWC, 'Meeting of Experts on assistance, response and preparedness: Reflections and proposals for possible outcomes', BWC/MSP/2018/CRP.6, 4 Dec. 2018, para. 5.

Such measures could be agreed and implemented swiftly, while further discussions on the specifications of a legally-binding protocol could proceed. In other words, the discussion in the MX5 should continue to focus not only on legal mechanisms, but on other institutional aspects of the BWC as well.<sup>18</sup>

The chair suggested focusing on improving and widening the existing set of CBMs and on guidelines for submitting assistance requests under Article VII.

#### The First Committee of the UN General Assembly

Resolution A/C.1/73/L.9 on the BWC was adopted in the First Committee of the UN General Assembly on 5 November 2018 without a vote.<sup>19</sup> As in previous years, the increase in the number of states parties to the treaty was noted but, unusually, these states, which included Palestine, were not named. A substantial addition to the traditional BWC resolution was that it noted with concern the untenable financial situation of the convention and requested the chair of the 2018 MSP to prepare an information paper on measures to address financial predictability and sustainability for future BWC meetings and for the ISU.<sup>20</sup>

The biennial resolution on measures to uphold the authority of the 1925 Geneva Protocol was agreed by 178 states with 2 regular abstentions: Israel and the USA. No state voted against. The Geneva Protocol prohibits the use of chemical and biological weapons, and the resolution renewed its previous call to all states 'to observe strictly the principles and objectives of the Protocol'. Universal adherence to the Geneva Protocol by all states, including by all states parties to the BWC, has been an agreed politically binding commitment within the framework of the BWC since 1980. However, the number of BWC states parties that are not parties to the Geneva Protocol has increased since 1980. Moreover, a number of states still formally maintain reservations to the Protocol, and the resolution calls on those states to withdraw these reservations.

## The 2018 Meeting of States Parties

The 2018 MSP took place on 4, 5 and 7 December 2018, chaired by Ljupčo Jivan Gjorgjinski of North Macedonia. While the process of selecting chairs

<sup>&</sup>lt;sup>18</sup> BWC, BWC/MSP/2018/CRP.6 (note 16), para. 9.

<sup>&</sup>lt;sup>19</sup> United Nations, General Assembly, First Committee, Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, A/C.1/73/L.9, 18 Oct. 2018.

<sup>&</sup>lt;sup>20</sup> United Nations, 'First Committee sends 8 drafts to General Assembly, including text aimed at identifying, holding perpetrators of chemical weapon use accountable', Press release GA/DIS/3617, 5 Dec. 2018.

<sup>&</sup>lt;sup>21</sup> United Nations, General Assembly, First Committee, 'Measures to uphold the authority of the 1925 Geneva Protocol', A/C.1/73/L.17, 10 Oct. 2018; and United Nations (note 20).

and vice chairs of MSPs is not clearly codified, recent practice has been for regional groups to decide their selections among themselves, and for this to be accepted by states parties unless an objection is raised. For the 2018 MSP, the USA had made it known informally in advance that it would be unable to accept the Non-Aligned Movement (NAM) selection of Venezuela as vice chair. At the meeting, states parties decided to proceed, on an exceptional basis, without vice chairs for 2018.

The meeting was responsible for managing the intersessional programme through consideration of the MX reports and for taking the necessary measures with respect to budgetary and financial matters. The chair produced a report on universalization activities in advance of the meeting.<sup>22</sup> In addition, an information paper was mandated by the General Assembly to address financial predictability and sustainability.<sup>23</sup> The ISU produced an annual report on its activities.<sup>24</sup> States parties submitted 11 working papers.<sup>25</sup> Nine side events were hosted on the margins of the meeting.<sup>26</sup>

The originally scheduled four-day meeting (4–7 December) was reduced to three days (4, 5 and 7 December), reflecting the adverse financial environment, although discussions continued informally on 6 December.

The main focus of the meeting was the need for urgent measures to ensure financial predictability, and the sustainability of the meetings agreed by states parties and of ISU staff contracts. States parties recognized that the convention's financial difficulties stem from three principal sources: nonpayment of contributions by some states parties; delays in receipt of contributions from other states parties; and the financial requirements of the UN with respect to activities not funded from the UN's regular budget. In order to address these, the meeting endorsed a set of substantive measures to encourage timely payment, ensure liquidity and avoid deficit spending or accumulation of liabilities. One such measure was to establish a Working Capital Fund (WCF) to be financed by voluntary contributions and used solely as a source of short-term financing pending receipt of reasonably anticipated contributions. The meeting also: (a) requested regular reporting on expenditure, collection and use of the WCF by the UN Office at Geneva and the ISU; (b) asked the chair of the 2019 MSP to identify further measures. including measures to incentivize payment, for consideration at the 2019

<sup>&</sup>lt;sup>22</sup> BWC, BWC/MSP/2018/3/Rev.1 (note 2).

<sup>&</sup>lt;sup>23</sup> BWC, 'Information paper to address financial predictability and sustainability for the Meetings agreed by the States Parties and for the Implementation Support Unit', BWC/MSP/2018/5, 5 Dec. 2018.

<sup>&</sup>lt;sup>24</sup> BWC, 'Annual report of the Implementation Support Unit', BWC/MSP/2018/4, 8 Dec. 2018.

<sup>&</sup>lt;sup>25</sup> United Nations Office at Geneva, Meeting of States Parties.

<sup>&</sup>lt;sup>26</sup> The 9 side events were hosted by Biosecure and the UK; Germany (two events); Russia; the EU; Hamburg University; the InterAcademy Partnership, the US National Academies of Sciences, the Croatian Academy of Sciences and Arts, and the Croatian Society for Biosafety and Biosecurity; the Johns Hopkins Center for Health Security; and the UN Counter-Terrorism Center (UNOCT), UNICRI and INTERPOL.

MSP; and (c) resolved to continue monitoring the financial situation of the convention, including at the 2019 MSP.27

In addition to the financial deliberations, the meeting considered universalization, the annual report of the ISU, arrangements for the 2019 meetings and the reports of each MX. The substantive outcome of the meeting's consideration of the MX reports, after long and difficult negotiations, was minimal. The report of the 2018 MSP contained just one line on the 2018 MXs: 'No consensus was reached on the deliberations including any possible outcomes of the Meetings of Experts'. 28 The chair expressed his regret that the report could not include more substantive elements, and particularly regretted the loss of any reference to the chairs of the meetings who he said had done excellent work.29

According to Richard Guthrie, an observer of the late-night negotiations, 'It was the Iranian delegation that was responsible for there being no substantive element to the final report, much to the visible frustration of countries that often have been allied with that country, such as China and Russia'.30 This minimal outcome was unreflective of the considerable preparations and substantial discussions that had gone into the 2018 BWC meetings by a range of actors, and the concerted efforts of the vast majority of states parties negotiating the final report to get more of the substance reflected in the report. It exemplifies the frustration that often comes with consensusdriven processes and raises the larger question of whether current working practices are the best way of ensuring the purpose of the treaty-to ensure that biological weapons are not developed.

## Implications for the future development of the convention

Since the very first BWC Review Conference in 1980, all final documents and MSP reports have been adopted by consensus. While laudable, this has come at a cost. Consensus has most often been achieved not by forging genuine substantive compromise, but by finding clever, or obscure, diplomatic formulations that paper over unresolved differences. Consensus keeps resulting in watered-down documents with little real-world impact. Often, the consensus wording is simply reused formulations based on previous final documents. Trying to establish consensus consumes a great deal of meeting time that could be better spent, for instance, discussing advances in science and technology, or on compliance assessment and confidence building. Consensus brings in political battles from other areas and shifts the focus away from the core purpose of the treaty. In many ways, consensus

<sup>&</sup>lt;sup>27</sup> BWC, 'Report of the 2018 Meeting of States Parties', BWC/MSP/2018/6 (advance version).

<sup>&</sup>lt;sup>28</sup> BWC, BWC/MSP/2018/6 (note 27), para. 26.

<sup>&</sup>lt;sup>29</sup> Guthrie, R., 'The 2018 Meeting of States Parties: Conclusion and reflections', MSP Report no. 5, Daily Reports from BWC Meetings, BioWeapons Prevention Project. <sup>30</sup> Guthrie (note 29).

has become less a tool for encouraging creative compromise, and more an instrument for demanding unanimity, usually resulting in lowest common denominator outcomes, as was clearly the case for the 2018 MSP report.

It is argued that the general status quo of BWC processes reflects incremental evolution, rather than stasis. <sup>31</sup> The complete lack of any substantive outcome from the MX deliberations in the MSP report, however, is now slowing the already slow evolution to a near standstill. This does not seem to be a tenable position if the convention is to retain its leading role in the global dialogue on preventing the misuse of biology. One small but still significant way to deal with consensus would be to develop a different kind of report, in which consensus recommendations and proposals are prominently noted but those which do not achieve consensus are also clearly stated and acknowledged. This is not impossible in the BWC, but it would take leadership.

Outdated working practices are symptomatic of wider challenges for the BWC. A big-picture approach would be to scale back expectations of the convention's roles. Like-minded states, or partnerships between states, civil society and other actors, could then move more actively into the space, supplementing any treaty activities by taking initiatives that still aim towards the purposes of the BWC but are outside of formal BWC processes. This is not a new idea: it has had various iterations over the years.<sup>32</sup> It has been most recently described as an 'innovation' approach where, rather than a single international regime against biological weapons, there would be a loosely linked regime complex with discrete components created at different times, by different groups of countries, and not integrated, comprehensive or arranged in a clear hierarchy.<sup>33</sup> As noted by one expert in the field, Jez Littlewood, 'Arguably, this loose regime complex is the existing reality in which the BWC resides, but States Parties to the Convention have been unable to further develop the model and strengthen the Convention in this manner because a large number of States refuse to abandon traditional forms of arms control'.34

While some states are pushing hard against a looser regime approach, others are actively encouraging it and still others seem open to the idea. Examples of efforts to forge new networks and linkages, increase coordination and

<sup>&</sup>lt;sup>31</sup> Sims, N. A. and Littlewood, J., 'Ambitious incrementalism: Enhancing BWC implementation in the absence of a verification protocol', *Nonproliferation Review*, vol. 18, no. 3 (Nov. 2011), pp. 499–511.

<sup>&</sup>lt;sup>32</sup> Littlewood, J., *The Biological Weapons Convention: A Failed Revolution* (Ashgate: Farnham, 2005); Millett, P., 'The Biological Weapons Convention: Securing biology in the twenty-first century', *Journal of Conflict and Security Law*, vol. 15, no. 1 (2010), pp. 25–43; Lennane, R., 'Divide and delegate: The future of the BWC', International Law and Policy Institute, BWC Review Conference Series Paper no. 1, Nov. 2016; and Koblentz, G. and Lentzos, F., 'Risks, trade-offs & responsible science', International Law and Policy Institute, BWC Review Conference Series Paper no. 3, Nov. 2016.

<sup>&</sup>lt;sup>33</sup> Littlewood, J., 'Implications for the Biological and Toxin Weapons Convention', eds M. Crowley et al., *Preventing Chemical Weapons: Arms Control and Disarmament as the Sciences Converge* (Royal Society of Chemistry: London, 2018).

<sup>34</sup> Littlewood (note 33), p. 507.

develop more flexible arrangements can be seen in the increased outreach and dialogue between states, civil society and other actors.

#### Workshops in 2018

The unusually large number of BWC-related workshops in 2018 was testament to the initiative and financial support of a growing number of individual states or groups of states parties, civil society and other actors, and their interest in strengthening the norm and prohibition against biological weapons. Four universalization workshops were organized by the ISU and the UN Office for Disarmament Affairs (UNODA), with EU funding, in order to increase treaty participation. Four similarly funded ISU/UNODA-organized workshops to improve national implementation were also held, as were two workshops on transfer controls on biological materials. China hosted an international experts' workshop in June, 'Building a global community of shared future for biosecurity: Development of a code of conduct for biological scientists'. Two workshops on cooperation and assistance under Article X of the BWC were organized by the ISU and funded by Norway.

Several workshops were held on developments in science and technology and their implications for the BWC. The ISU and UNODA organized four of these, with EU funding. The InterAcademy Partnership, the US National Academies of Sciences, the Croatian Academy of Sciences and Arts, and the Croatian Society for Biosafety and Biosecurity organized an international experts' workshop in Croatia on 'Governance of dual-use research in the life sciences'. A report of the meeting was launched at the 2018 MSP.<sup>35</sup> Switzerland hosted the third of the biennial Spiez Convergence workshops on significant advances in the chemical and biological sciences.<sup>36</sup> The Johns Hopkins Center for Health Security hosted a global forum in Geneva on scientific advances important to the BWC.

Several workshops were held on response to and preparedness for the deliberate use of biological weapons. A workshop on the development of an international bio-emergency management plan for deliberate events was co-organized by the ISU and the Geneva Centre for Security Policy (GCSP), funded by Canada. A workshop on the importance of disease surveillance and alert mechanisms was co-organized by the ISU and the GCSP, funded by Japan. Switzerland hosted its fourth workshop on developing a UN Secretary-General's Mechanism (UNSGM) designated laboratory network to support

<sup>&</sup>lt;sup>35</sup> National Academies of Sciences, Engineering, and Medicine et al., *Governance of Dual Use Research in the Life Sciences: Advancing Global Consensus on Research Oversight* (National Academies Press: Washington, DC, 2018).

<sup>&</sup>lt;sup>36</sup> Spiez Laboratory, 'Spiez Convergence: Report on the third workshop, 11–14 Sep. 2018', Spiez Laboratory, Zurich, Nov. 2018.

the convention. To further support the UNSGM-designated laboratory network, Denmark and Sweden hosted dry lab computer modelling exercises.

Under its Global Biological Policy and Programs, NTI | bio, the biosecurity division of the NTI, hosted a 'Global Biosecurity Dialogue' event in the United Kingdom. NTI | bio also introduced its Biosecurity Innovation and Risk Reduction Initiative and co-hosted an international experts' conference on 'powerful actors, high impact bio-threats' at Wilton Park with the Johns Hopkins Center for Health Security and the Future of Humanity Institute, University of Oxford.

#### Major developments in 2018

In addition to the issues of the unsustainable financial environment of the BWC and the 2018 MSP's non-report of the 2018 MXs, there were two major developments affecting biological disarmament and non-proliferation in 2018.

The first was a series of increasingly confrontational statements by Russia alleging that US biological weapon laboratories were operating in neighbouring states. At the heart of the accusations was the Richard Lugar Center for Public Health Research (Lugar Center) in Georgia.<sup>37</sup> While such stories have been circulating in the media for a number of years, the messaging significantly increased after the UK identified Russia as the perpetrator of the March 2018 attempted assassination in Salisbury, using the nerve agent novichok (see section II).38 The accusations entered the multilateral arena in late September 2018, through an exchange of notes verbales circulated to BWC states parties on behalf of Georgia and Russia.<sup>39</sup> There were also confrontational diplomatic exchanges between Georgian and Russian representatives through statements and rights of reply at the First Committee of the UN General Assembly. 40 In November, a two-day transparency visit to the Lugar Center by 22 state representatives and experts took place at the invitation of Georgia. Russia was invited but did not participate. The visiting team concluded that 'the facility demonstrated significant transparency about its activities' and that it had 'observed nothing that was inconsistent with prophylactic, protective and other peaceful purposes'. 41 The visiting

<sup>&</sup>lt;sup>37</sup> Lentzos, F., 'The Russian disinformation attack that poses a biological danger', *Bulletin of the Atomic Scientists*, 19 Nov. 2018.

<sup>38</sup> Lentzos (note 37).

<sup>39</sup> Lentzos (note 37).

<sup>&</sup>lt;sup>40</sup> Lentzos (note 37).

<sup>&</sup>lt;sup>41</sup> BWC, 'Building confidence through transparency: Peer review transparency visit at the Richard Lugar Center for Public Health Research of the National Center for Disease Control and Public Health in Tbilisi, Georgia', Working paper submitted by Georgia and Germany, co-sponsored by Austria, Belgium, Colombia, Iraq, Hungary, Malaysia, Mali, the United Kingdom and the United States, BWC/MSP/2018/WP.5, 3 Dec. 2018, para. 14.

team's report, supplemented by an independent report from a civil society participant, was communicated through working papers to the 2018 BWC MSP.<sup>42</sup> The transparency visit was also presented and discussed at a side event at the 2018 MSP in December.<sup>43</sup>

The second major development in 2018 was the launch of the UN Secretary-General's disarmament initiative, 'Securing Our Common Future: An Agenda for Disarmament'.<sup>44</sup> In the biological field, the emphasis was on strengthening the BWC, establishing a dedicated institutional capacity to investigate allegations of biological weapon use, and, in cases of a biological attack, coordinating an adequate international response.<sup>45</sup> This emphasis is in line with the increasing focus in the biological disarmament community on the growing risks of future biological weapon use and the need to prepare for such an eventuality.

<sup>&</sup>lt;sup>42</sup> BWC, BWC/MSP/2018/WP.5 (note 41); and BWC, 'Transparency visit to the Lugar Center, Georgia: An independent report', Working paper submitted by Georgia, BWC/MSP/2018/WP.11, 7 Dec. 2018.

<sup>&</sup>lt;sup>43</sup> BWC, BWC/MSP/2018/WP.11 (note 42), paras 66-67.

<sup>&</sup>lt;sup>44</sup> United Nations Office for Disarmament Affairs (UNODA), Securing Our Common Future: An Agenda for Disarmament (UNODA: New York, 2018).

<sup>&</sup>lt;sup>45</sup> UNODA (note 44), 'Ensuring respect for norms against chemical and biological weapons', Part II, 'Disarmament to save humanity'. On the nuclear weapon-related aspects of the agenda, see chapter 7, section V, in this volume; on the conventional arms control aspects of the agenda, see chapter 9, section II, in this volume.