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Balanced Minimalism

The Biological Weapons Convention after its 7th Review Conference

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Summary

The history of biological warfare can be traced back to ancient times. Even though incidents of intentional use of disease as a weapon have been few and the present danger of biological weapons use might be only moderate, the particularly inhumane nature of these weapons make their complete and lasting abolition imperative.

The 1972 Biological Weapons Convention (BWC) codifies an old norm against biological weapons and contains additional proscriptions and prescriptions intended to achieve their disarmament, while ensuring that the benefits of biology can be exploited for peaceful purposes. However, the BWC control regime is afflicted with deficits, including the lack of effective systems to monitor relevant scientific and technological developments and to verify state party compliance with treaty provisions.

BWC members had their most recent chance to address these and other deficits at the 7th BWC Review Conference held in December 2011. After difficult negotiations, they agreed on a Final Document and an agenda for a new round of annual intersessional meetings in 2012-2015, both of which balance widely differing priorities but leave only minimal room for progress. The review reaffirmed important existing understandings and added some new ones regarding biosafety, biosecurity and assistance in case of a biological attack. Old and new disputes impaired the proceedings, including over: the primary purposes of the BWC and its regime, especially the relationship between the development and security-related provisions; notions of state sovereignty and governance; compliance and verification; and the relationship of the BWC with other international instruments. Many of these conflicts were not resolved to any substantial degree during the Review Conference and continue to affect the intersessional discussions.

As part of a set of "Decisions and Recommendations", states parties also agreed to extend the mandate of the Implementation Support Unit (ISU) on a status-quo basis. The new intersessional agenda comprises three standing agenda items and two additional topics that will each be covered in two of the four years (see below); compliance is not included in this agenda. As before, there will be annual meetings of experts and of states parties; they are not mandated to make decisions. The 2012 discussions showed the limits of this agreement: The meetings resulted in an exchange of positions and views on all topics, but without practical and binding consequences. To maximise the benefits of this process, future meetings would have to be prepared and structured in a way that rendered them more efficient, and more states parties would have to provide substantial input and act constructively.

With regard to the topic of **cooperation and assistance**, the 2011 Review Conference agreed on three elements: A sponsorship programme to facilitate participation at the BWC meetings for developing countries; a database to match requests and offers for cooperation and assistance (not limited to, but emphasising international cooperation under BWC Article X); and a standing agenda item in the new intersessional process. Inclusion of this item was consensual but interpretations differ as to whether or not its scope is limited to technological cooperation and exchange or includes assistance activities, for instance concerning national implementation. In order to reduce existing conflicts, states parties should make better use of the database and agree to make technical changes as soon as

practical problems are identified. More pragmatic cooperation across regional groups would be needed, and more states parties, particularly from developing countries, should join in on discussions so that all facets of the Article X debate, including fundamental questions such as its scope and function for the BWC, can be scrutinised.

The review of scientific and technological (S&T) developments relevant to the BWC was included as the second intersessional standing agenda item. The work programme foresees discussions on distinct issues every year; a concluding assessment and decisions on collective follow-up steps will not be possible before the next Review Conference in 2016. Effective monitoring of S&T developments could be the basis for other steps to strengthen the regime, including revision of the Confidence-Building Measures (CBMs), discussions on compliance control measures, and more constructive approaches to international cooperation under Article X. However, to serve this purpose the S&T discussions would need to be more structured, information exchanged would have to be processed more effectively and be made more easily accessible to states parties, and follow-up procedures would need to be set in place. In part, this could be achieved within the existing meeting format, but a holistic consideration of S&T might have to be prepared outside of it.

The third standing agenda item, **national implementation of the BWC**, as it was defined in 2011 is unlikely to take states parties beyond exchanges of experiences, national approaches and activities. Yet it would be important to move towards common implementation standards and periodic national and multilateral implementation reviews. States parties should collectively draw lessons from experiences with implementation activities – be they internal reviews, external assistance or peer review exercises – to help prepare discussions in 2016 on a more coherent BWC implementation framework.

A review of the CBM system was deemed necessary at the 2011 Review Conference given that the existing CBMs had not been re-examined for 20 years and participation rates have never been satisfactory. The Review Conference agreed on several changes and included the topic of enhancing participation in the CBM process in the intersessional agenda for 2012 and 2013, but further substantive changes will not be possible prior to 2016. Until then, exchanges of experiences with CBM submissions and with national data collection processes, including experiences of irregular submitters, could help identify the areas in which assistance might be needed or provided, which could, in turn, help increase the rate of participation. The intersessional meetings in 2013 should also be used for an discussion of underlying principles and purposes of CBMs as transparency tools, including their limitations, in order to pave the way for agreement on more effective transparency measures in 2016.

Being an intersessional topic for 2014 and 2015 only, the **provision of assistance in case of a BW attack** was not addressed in 2012. Given its link with developmental questions, this issue harbours considerable potential for polarisation. Those interested in pragmatic progress should hence prepare factual and practical discussions, including on concrete elements of an assistance procedure, to minimise the scope for conflict and to facilitate a possible decision on assistance procedures in 2016. The intersessional meetings should also re-examine the potential function of the UN Secretary General's investigation mechanism for alleged use of biological and chemical weapons for the BWC.

The absence of verification measures and consequent weakness of the **BWC's system of ensuring compliance with its provisions** are crucial deficits. Ever since the negotiations on a compliance protocol to the BWC failed in 2001, the topic has been highly contentious within the regime. As a consequence, the issue could neither be included in the 2011 Final Document nor in the intersessional work programme. A return to the protocol negotiations is neither feasible nor desirable, and political and technological circumstances have changed drastically since the last review of possible verification measures for the BWC 20 years ago. Any consideration of verification and compliance would thus need to start from scratch. Acknowledgement of this fact, as demonstrated by a number of states, might be bolstered by more regular thematic interaction, either within the intersessional meetings as proposed by some states or in a parallel informal discussion process. The aim should be to equip the BWC with a workable, up-to-date and effective compliance control system as soon as possible.

An assessment of the Review Conference results one year into the third intersessional process is forced to draw sobering conclusions. The Conference reaffirmed important BWC norms, but the limitations in the current intersessional process put serious limits on the chances for progress prior to 2016. Deep divisions among states parties touch upon basic notions beyond the BWC, including fundamental ideas on governance, sovereignty and justice, overshadowing the overlap of common interests that might, or should, exist in preventing biological warfare. To take the regime forward, it would be necessary to engage more states parties in constructive discussions on all issues on the table. Time should also be set aside in future meetings for discussions on principles and for a strategic dialogue regarding the future of the BWC. This could be helpful to reduce the current polarisations and to help determine the direction in which the BWC should be steered. Currently, the regime seems to be in a state of transition. A forum would thus be useful in which states parties, aided by civil society experts and practitioners, could address basic concerns and conceptual ideas on issues such as compliance and the BWC, the role and function of the BWC in today's world, the scope of Article X, and the degree to which the BWC can or should address biosecurity and global health issues.

The focus on biosafety and biosecurity and on health preparedness during the past decade has moved the BWC regime closer to the global health arena. For the BWC to remain (or become more) effective as a security instrument in the coming years, the biological weapons control community would need to define areas of overlap with other, health or biosafety and biosecurity-related forums and subsequently work out productive strategies for cooperation. It would be equally important that they draw boundaries to preserve the BWC's distinct features and purpose as a biological disarmament regime. The challenge of the BWC and its regime is to ascertain that the process of global biological disarmament will be completed and to ensure that the state of biological disarmament will remain for all times. The effort and political will this requires are significant – but so are the potential consequences of failure. State parties should therefore muster the will and resources necessary to steer the BWC towards being a strong and effective guarantor of complete biological disarmament.

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1. Introduction¹

It would be easy to introduce a text on the biological weapons control regime with a sinister doomsday scenario involving a biological attack. A number of contingency exercises have portrayed such scenarios, and fiction writing and Hollywood movies have added their share. In 2008, a commission mandated by the US Congress to assess the risk of WMD proliferation and terrorism concluded that

"[...] unless the world community acts decisively and with great urgency, it is more likely than not that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013. The Commission further believes that terrorists are more likely to be able to obtain and use a biological weapon than a nuclear weapon" (Graham et al. 2008: xv).

Yet the threat of a biological attack carried out by states, while not completely absent, appears low at this point in time, as does the threat of large-scale bioterrorist attacks (see Dando 2005).² Only a sophisticated biological weapons programme, if any at all, could turn doomsday scenarios into reality. A very old and strong norm against the use of biological weapons adds a moral barrier to the technological and political hurdles.

This, however, does not mean that the issue can be laid to rest in books on the history of warfare. Even though a biological weapons attack is unlikely at present, and even if it were not on a scale to extinguish half of humankind, the consequences of any such attack on health, politics, and economies could be immense. Biological weapons are treacherous devices, infecting and killing indiscriminately. Their nature as silent, invisible weapons with incalculable consequences, coupled with the instinctive human fear of disease, make them potent psychological weapons, regardless of the actual damage they may inflict. Moreover, current rapid developments in the life sciences could - on account of technologies and agents with dual-use capabilities - lead some actors to alter military and political calculations in favour of biological weapons through a fundamental shift in doctrine or due to misperceptions and miscalculations of the intentions of others.3 More tangible, perhaps, is the risk that well-intentioned research - such as that carried out on the H5N1 (bird flu) virus - could create results with high dual-use potential which might one day be misused by criminals or terrorists.4 So while the danger today might be less imminent than that posed by other weapons categories, the potential impacts of biological weapons make it imperative to ensure their disarmament once and for all.

- 1 I am grateful to Volker Beck, Nicholas Sims, Matthias Dembinski, Marco Fey, Thorsten Gromes, Aviv Melamud, Daniel Müller and Elvira Rosert for their helpful comments. All views expressed are my personal views.
- 2 Al Qaeda reportedly is interested in acquiring biological attack capabilities, including for large-scale attacks, but appears to have been unable to turn this interest into reality (Mowatt-Larssen 2010).
- 3 On risks inherent in expanded biodefence research see Guillemin (2007: 27-28).
- 4 In order to study the possibility of human-to-human transmission of the H5N1 virus, scientists had artificially enhanced its transmissibility. This led to an intense debate about the legitimacy of such experiments with high dual-use potential, the limits of scientific freedom, and the adequate balance of public health and (bio)security concerns (see e.g. Tu 2012).

The norm against biological weapons is codified in two international treaties: the 1925 Geneva Protocol prohibiting their use, and the 1972 Biological Weapons Convention (BWC) prohibiting, *inter alia*, their production and possession. The biological weapons control regime has developed considerably in the course of its 40-year history, but major problems remain: member states cannot verify the compliance of others with treaty obligations; the regime structure is too static to allow prompt reactions to challenges; relevant fields of science and technology develop rapidly, with possible negative and positive implications for the future of biological weapons control and, as of yet, insufficient measures and political will to monitor, exploit or contain such implications.

The failure in 2001 of negotiations that were aimed at strengthening the regime as well as the negative attitude towards multilateral biological weapons control in the US government under George W. Bush brought the BWC into serious crisis. This, and the focus on biological terrorism (rather than state-run biological weapons programmes) since the early 2000s, has induced significant changes in the regime. Traditional biological weapons control measures have been merged with anti-terrorism and public health issues. Relevant activities are being undertaken outside the BWC regime, such as under UN Security Council Resolution 1540, the G8 Global Partnership, and the Global Health Security Initiative (GHSI), as well as under the aegis of the World Health Organisation (WHO) and other international organisations. For several years, contested views on the BWC regime's primary (actual or desirable) functions have shaped discourses, and the BWC regime seems to be in a state of transition with no clear end in sight.

Regardless of these developments, the BWC remains the sole international treaty that codifies a comprehensive and robust norm against biological weapons. There is thus a need to maintain and strengthen this regime, especially in light of the developments outlined above. BWC members had their most recent opportunity to work towards this end at the 7th BWC Review Conference held in 2011. After difficult negotiations, states parties agreed on a final document which balances their widely differing priorities; the current political climate, however, allows minimal room for progress. In many cases, conflicts and debates of the Review Conference continued to impact the discussions held at the BWC Meetings of Experts and States Parties in 2012.

This PRIF Report starts by taking stock of the BWC's history. Chapter 3 provides a detailed analysis of the results from the 7th BWC Review Conference and subsequent developments in eight major issue areas. Each sub-chapter contains recommendations for future action. Chapter 4 concludes with reflections on the current state of the BWC regime. It also provides a number of long-term suggestions on how political rifts that have hindered practical progress might be lessened in the long run, and how the BWC regime might be better equipped to achieve and maintain biological disarmament and prevent the reemergence of biological weapons.

5 Resolution 1540 obligates UN members to enact measures to prevent terrorists from acquiring biological and other weapons (www.un.org/en/sc/1540); under the G 8 Global Partnership 21 donors fund projects to decrease the risk of proliferation (see www.nti.org); the GHSI was founded to improve health preparedness for bioterrorist threats, among other issues (www.ghsi.ca, all accessed 22.12.2012).

2. History of the BWC Regime

2.1 The Prohibition of Biological Weapons

Norms against biological and chemical warfare can be traced back to ancient times and are found in various cultures. The first attempts at regulation under international law date from the late 19th and early 20th century when the use of "poison or poisoned weapons" in war was outlawed (Zanders 2003: 392-396). Roughly around the same time, a better understanding of diseases, their origins and ways of transmission developed with the discovery of bacteria and, later in the 20th century, viruses (Davison 2005: 2-9). While this led to invaluable advances in medicine and pharmacology, it also aroused interest in microorganisms as weapons. Perhaps not incidentally, the most advanced countries in terms of microbiology, France and Germany, were the first to initiate biological weapons (BW) programmes prior to World War I (Davison 2005: 9, 12).

The horrible experiences with chemical warfare in that war prompted the negotiation of the 1925 Geneva Protocol which prohibits the use of chemical and biological weapons (CBW) in war (Goldblat 1971: 43-71). Since many signatories reserved their right to retaliate in kind and exempted non-members from the scope of the prohibition, the Protocol was initially a no-first-use agreement among signatories (Sims 1988: 39). Several countries established offensive BW programmes in the first half of the 20th century, mostly to gain a second-strike capability and deterrent. A number of other states followed suit in the second half of the century, even though the prohibition on CBW use had come to be considered customary international law and hence universal (Boserup 1972).

Discussions about an expanded CBW prohibition lasted throughout the first half of the 20th century (Goldblat 1971) but only gained momentum after the UK proposed to separate the two weapons categories and negotiate a BW prohibition in 1968. This proposal, even though it was met with initial resistance by many countries, and the US's unilateral renunciation of BW in 1969 paved the way for the negotiation of the BWC (Chevrier 2012: 112-116; Tucker 1999: 182-186). The BWC was opened for signature in 1972 and entered into force in 1975. It prohibits the development, production and stockpiling of BW (Article I), that is, of

"[m]icrobial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes", and "[w]eapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict."

- 6 Known former offensive BW programmes of greatly varying sizes and quality include those of Canada, France, Germany, Hungary, Japan, the UK and the US (who abandoned their programmes between 1918 and 1969), and of Iraq, South Africa and the Soviet Union (whose programmes were officially terminated after 1990) (Geissler/van Courtland Moon 1999; Wheelis et al. 2006). Several other states have been suspected of sustaining an interest in BW warfare, though their number has declined (e.g. US DoS 2005, 2010, 2012; www.nti.org/country-profiles/, 23.11.2012).
- 7 For the BWC text, see www.opbw.org (21.3.2012).

This comprehensive prohibition has been reaffirmed and is understood to cover all new scientific and technological developments.⁸ The BWC obligates members to disarm existing arsenals (Article II), prevent BW proliferation (Article III), implement its provisions nationally (Article IV), assist others in case of BW attacks (Article VII), and cooperate internationally and facilitate the exchange of biotechnological material and know-how "to the fullest extent possible" (Article X).The BWC had 170 members as of April 2013.

2.2 The Evolution of the BWC Regime, 1975-2011

Within the BWC, the main institutions for regime development are the review conferences held every five years. All but one of them adopted a consensual Final Declaration containing reaffirmations, additional understandings and interpretations of the Convention. Declaration conferences also established new regime elements, such as confidence-building measures (CBMs) and annual meetings. Being consensual "decisions adopted by a meeting of the parties" whose "purpose is clear" (see Aust 2000: 191), Final Declarations can be considered "subsequent agreement[s] between the parties regarding the interpretation of the treaty or the application of its provisions" and should thus be taken into account when interpreting the BWC. Even though they do not constitute new *legal* obligations for the states parties, review conference agreements represent commitments that are *politically binding* for all members.

Other forums also exist in which regime developments have taken place and which were mandated by review conferences. These include: expert meetings held in 1987 (to finalise the first round of CBMs as agreed in 1986) and in 1992-1993 (to discuss the technical possibilities for BWC verification); a Special Conference in 1994 which decided on the mandate for the subsequent negotiations of a legally-binding compliance protocol to the BWC; a special negotiation forum, the Ad Hoc Group (AHG), tasked with negotiating this compliance protocol, which it did, unsuccessfully, between 1995 and 2001; and the intersessional processes from 2003-2005 and from 2007-2010 with annual Meetings of Experts and States Parties. In all of these forums, efforts to take the regime forward have addressed various issues, including transparency, compliance and verification; international cooperation; the institutional set-up of the regime; national implementation; awareness-raising, biosafety and biosecurity. These issues have been crucial for the functioning of the regime and thus provide an important background for understanding the 7th Review Conference and subsequent developments.

- 8 BWC/CONF.II/13 (Part II): 3, 1986; BWC/CONF.III/23 (Part II): 3, 1991; BWC/CONF.IV/9 (Part II): 15-16, 1996; BWC/CONF.VI/6: 9, 2006; BWC/CONF.VII/7: 10, 2011.
- 9 For a regime theoretical analysis of the BWC, see Kelle (2003); for an analysis of regime evolution until 1999 see Sims (2001). All official BWC documents can be accessed at www.opbw.org and www.unog.ch/disarmament/bwc.
- 10 The 2001 conference could not agree a Final Declaration and was suspended to avoid failure (Rissanen 2002). At the resumed session in 2002, states parties agreed a procedural Final Document including the decision on the new intersessional process (see below), but they did not complete the review of the BWC.
- 11 1969 Vienna Convention on the Law of Treaties (VCLT), Article 31.3 (http://untreaty.un.org/cod/avl/ha/vclt.html, 8.3.2012); see Aust (2000: 191f.).

2.2.1 Transparency, Compliance and Verification

Ever since the negotiation of the BWC, many states have criticised existing transparency and compliance measures as being too weak. In cases of "problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention", the BWC foresees consultations among states parties, aided by "appropriate international [UN] procedures", if desired (Article V). In cases of suspected treaty violations, BWC members may call on the UN Security Council to investigate the matter (Article VI) – a procedure many states have viewed as unjust as it grants the veto powers and their allies disproportionate influence on the course of the investigations (Becker-Jakob 2011: 9). Four major attempts have been made to redress the problem.

Firstly, Sweden, supported by a number of other states, undertook initiatives in 1980 and 1982 to amend the BWC in order to include strengthened consultation and compliance procedures, which proved unsuccessful (Sims 1988: 168-199). Secondly, in 1986 and 1991, states parties introduced and expanded CBMs to improve transparency in the regime.¹² However, participation rates in the CBM exchange, and thereby their contribution to enhanced transparency and trust, have remained low (Hunger/Shen 2011: 516-517; Lentzos 2011: 29). At the 2006 Review Conference, some states parties proposed modest technical changes and the initiation of a substantive CBM review; however, due to strong political opposition, only the former could be agreed (Becker 2007: 26). Thirdly, in 1986 and 1991, states parties developed procedures for consultative meetings that could be convened under Article V (BWC/CONF.III/23 Part II: 7-8). These procedures were applied only once when, in 1997, Cuba accused the US of deliberately having released a plant pest over Cuban territory (Zilinskas 1999). Experts have proposed improvements to the existing procedures (Tucker 2011; Sims 2013) but no effort has been made at state level so far. Fourthly, the most significant initiative to establish a compliance and verification system for the BWC was undertaken between 1992 and 2001, when states first explored the technical possibilities for verification and in 1995 started negotiations in the Ad Hoc Group (AHG) on a legallybinding compliance protocol to the BWC (see e.g. Littlewood 2005).

The negotiations suffered from fundamental differences of positions among states parties regarding, among others, the nature and intrusiveness of the inspection system as well as the question of export controls and of international cooperation and technological exchange. They failed in 2001 (Rissanen 2001). US policy of the day led to entrenched positions in the regime: The US categorically rejected any further negotiations and/or legally-binding additions to the BWC, and a group of Non-Aligned Movement (NAM) members called ardently, albeit not entirely convincingly, for a return to the AHG negotiations (the most outspoken being Cuba, India, Iran, Pakistan and Russia). The way in which Western states dealt with the crisis that ensued after the breakdown of negotiations intensified tensions in the regime and shaped its discursive setting and agenda for years to come (see Becker-Jakob 2011: 9-10). The 2006 Review Conference was mainly used to consolidate the regime. Whereas many actors involved agree that a return to the protocol negotiations would neither

¹² For the original CBM forms see BWC/CONF.II/EX/2 (1987), BWC/CONF.III/23 part III, Annex (1991); for the current, updated version see BWC/CONF.VII/7. See also e.g. Hunger/Shen 2011.

be feasible nor desirable, many governmental and non-governmental actors felt in 2011 that the time was ripe to initiate a re-examination of the question of an enhanced compliance system for the BWC (see Lennane 2011).

2.2.2 International Cooperation

Like most disarmament treaties, the BWC contains provisions intended to enhance international cooperation in the peaceful use of pertinent technologies "to the fullest extent possible" and to foster technological development in general (Article X). These provisions were meant to serve as incentives to attract a wider membership particularly among developing countries. However, the cooperation requirement stands in potential tension with the non-proliferation norm as enshrined in Article III as well as with the export controls that many countries consider crucial to the implementation of this Article. The conflict about the relative importance of Articles III and X has intensified along with the rapid growth of biotechnology that accelerated in the 1980s and with the expansion of an informal export control regime among developed countries - the Australia Group - to bio-related items in the early 1990s.13 Developing countries, which see the 'promotional aspects' of the BWC as being equal to the 'regulatory', security-related ones, have since claimed that Article X had not adequately been implemented and that Western export controls had even hampered development. For them, cooperation under Article X is a core issue for the regime. Developed countries, which see the major purpose of the BWC in its security (disarmament and non-proliferation) elements and the promotional provisions as secondary to them, have rejected the allegations put forward by the NAM. While they do not negate the validity of Article X, many refuse to grant it equal status with the norms of nonproliferation and national implementation or with the biological weapons prohibition (Articles I, III and IV). This conflict complicated the protocol negotiations (Littlewood 2005) and became a major source of conflict in 2002, when NAM members saw their concerns neglected in the new process in favour of Western and, in particular, US priorities. While the topic still proved a stumbling block at the 2006 Review Conference, it was included in the 2007-2010 intersessional process, and Western countries have appeared more willing to discuss issues related to Article X in recent years (Millett 2011: 12). Yet the extent to which this debate could be de-politicised and transformed into a more constructive dialogue remained unclear prior to the 2011 Review Conference.

2.2.3 Institutional Set-Up of the Regime

It has long been pointed out that the BWC regime suffers from an 'institutional deficit' (Sims 2006), namely the lack of an organisation that oversees and assists with the implementation of the treaty in its various aspects. Proposals to establish a small secretariat were made in 1991 but were not implemented (Sims 1991: 4-5). During the protocol negotiations, states parties envisaged creating a treaty/regime organisation that was to be modelled on the Organisation for the Prohibition of Chemical Weapons (OPCW) which was established by the Chemical Weapons Convention (CWC); since the negotiations failed, this could not be realised. After 2001, proposals moved away from the notion of a holistic treaty organisation

¹³ The Australia Group was founded in 1984 but the regulations initally only covered materials related to chemical weapons (www.australiagroup.net, 2.3.2012).

and instead returned to models of more limited administrative support for the BWC (see e.g. Findlay/Woodward 2004; Sims 2009). The US remained adamantly opposed to any institutionalisation of the regime until 2006, when the 6th Review Conference agreed to establish a three-person Implementation Support Unit (ISU) within the UN Office for Disarmament Affairs. The ISU was tasked with providing administrative and implementation support, facilitating communication among states parties and assisting the CBM process (BWC/CONF.VI/6: 19-20). Its mandate had a limited duration up to 2011 and was hence up for renewal at the 7th Review Conference.

The intersessional process as agreed in 2002 established a new, and rather rigid, structure of annual meetings of experts and states parties. The meetings were to discuss and exchange opinions on a predefined set of issues: national implementation as well as national biosecurity and oversight mechanisms (2003); disease surveillance and investigations of alleged BW use (2004); and codes of conduct for natural scientists to raise awareness of the misuse potential of the life sciences (2005) (BWC/CONF.V/17: 3-4). The meetings were not mandated to take any decisions or produce binding collective regulations, and they did not address many of the recognised deficits of the BWC. Yet, the intersessional process facilitated interaction and communication among BWC members, saved the regime from collapse, moved states parties towards 'common understandings' on several relevant issues, and gradually improved the working atmosphere (McLeish 2011: 35-37). The relative ease with which the 2006 Review Conference could agree on holding another round of intersessional meetings in 2007-2010 (Becker 2007: 23) indicates that annual meetings have become an accepted regime element. While the format of a third intersessional process for 2012-2015 was disputed, the question of whether or not there should be new meetings seemed uncontroversial in 2011.

2.2.4 The Intersessional Process 2007-2010 and New Topics

The second intersessional process in 2007-2010, which provided the immediate background for the 7th Review Conference, followed the same structure as the first: States parties were "to discuss, and promote common understanding and effective action on" a set of clearly defined topics (BWC/CONF.VI/6: 21).¹⁴ In part, these topics were repeats of previous ones – national implementation (2007), biosafety/biosecurity and codes of conduct (2008) had all been covered at previous meetings. In part they charted new ground, as international cooperation under Article X (2009) and assistance in the case of BW use, as foreseen in Article VII (2010), had not been discussed in this format before. As in the first process, the meetings produced a vast amount of information from which the chairs, supported by the ISU, distilled common approaches and fundamentals. However, no substantive conclusions or binding decisions on follow-up actions were agreed.

¹⁴ For reports and commentaries on the intersessional meetings see e.g. the daily reports written by Richard Guthrie on behalf of BWPP (www.bwpp.org/reports.html, 23.3.2012); the reports in *Arms Control Today* (www.armscontrol.org/subject/16/date, 23.3.2012) and the *CBW Conventions Bulletin* (www.sussex.ac.uk/ Units/spru/hsp/pdfbulletin.html, 23.3.2012). For documentation from all meetings see www.unog.ch/ disarmament/bwc (09.03.2012).

When judged in relation to the rationale of their inception – namely to save the regime from collapse in the dire period of 2001-02 - the first two intersessional processes have worked well. They led to more intense collaboration and dialogue, directed attention towards issues that had previously been neglected, and allowed inclusion of important stakeholders who had not been involved in the security aspects of biology before (see Khan et al. 2011: 68-69; McLeish 2011: 36-37; Millett 2011: 7-8). National implementation had long been relegated to the sidelines of the BWC regime, despite the fact that it was one of the original treaty norms (cf. Kelle 2003). In the course of the intersessional meetings, and supported by anti-terrorism measures as adopted for instance under Resolution 1540 (2004), the implementation aspect has evolved into one of the core elements of the regime, and practical implementation, while still not fully satisfactory, has made progress. Biosafety, biosecurity, and awareness-raising among life scientists, have emerged as important concepts. Even though some states parties harboured reservations about the central role accorded to them in recent years, an understanding is emerging of their definition and relevance for the prevention of biological risks and threats, which seems to be widely shared.¹⁵ This is indicative of a subtle, ongoing shift in the BWC regime away from a traditional inter-state security regime to one that also covers bioterrorist threats and biological risks more generally.

At the same time, long-standing conflicts lingered on between 2007 and 2010, and new ones seemed to be in the offing. A small group of states continued to call for the negotiation of a "legally-binding instrument to strengthen the convention" is; the US, however, continued to reject this demand as well as any discussion of verification. While national export controls have become more broadly accepted, several members of the Non-Aligned Movement (NAM) maintained their resentment towards the Australia Group. They conditioned their support for several new topics on their being connected with cooperation, and they repeatedly blocked progress on other issues with reference to (in their view) insufficient implementation of Article X. The inclusion of issues related to Articles X and VII in the intersessional agenda allowed for a more substantive discussion of these topics. This rapprochement notwithstanding, the Meetings of States Parties in 2009, and particularly in 2010, proved more difficult than previous meetings (see Pearson 2012: 36). Finding a way of recording the outcomes that was roundly acceptable was more trying as several states wished to avoid the impression of a consensus they felt had not been established. Concerns about decision-making procedures and possible deviations from established practice as well as about perceived infringements on states parties' sovereignty surfaced in 2010 and cast a long shadow over the Review Conference.

¹⁵ Biosafety entails the prevention of accidental release of pathogens or toxins, whereas biosecurity consists of measures to protect against illegitimate access to such agents (see BWC/MSP/2008/5: 4-5).

¹⁶ See e.g. the statements by Algeria, Brazil, China, Cuba, India, Iran, Pakistan and others at the intersessional meetings 2007-2010.

3. The 7th Review Conference and Beyond¹⁷

3.1 Preparations for the Review Conference

The procedural aspects of the 7th Review Conference – such as the nomination of the conference president and committee chairs, the rules of procedure and the agenda - were prepared by the Preparatory Committee (PrepCom) in Geneva from April 24-26, 2011. The agenda was agreed after a dispute between Iran and the US was resolved on whether or not a "legally-binding instrument to strengthen the Convention" would be explicitly mentioned (see BWC/CONF.VII/PC/2: 4, for the agenda see Annex I). Regarding the rules of procedure, the PrepCom chair and president-designate of the Review Conference, Dutch ambassador Paul van den Ijssel, proposed opening all sessions of the Review Conference to the public in addition to the formal plenary sessions (the opening and closing formalities and the General Debate). Many Western states, while conceding that parts of the negotiations would likely need to be held in private, supported the proposal in principle, pointing to the importance of transparency and the significant contributions civil society representatives had made to the BWC regime over the years. However, some NAM countries opposed the changes, seeing the nature of the conference as an inter-governmental meeting being threatened. It was thus decided that the sessions would remain private by default but that "the Committees may decide to hold certain meetings in public" (BWC/CONF.VII/PC/2: 4, para. 23).

A considerable part of the substantive preparations for the Review Conference were carried out in a number of seminars or workshops.¹⁹ These meetings provided an opportunity to exchange positions in informal settings and likewise revealed broad convergence regarding the kinds of topics that should be addressed, though not necessarily on desired outcomes. The topics included: review of relevant scientific and technological developments, national implementation, structure and topics of the next intersessional process, international cooperation and assistance, and CBMs.

Several states made advance versions of their working papers available on the ISU website so that their ideas on CBMs, the structure and topics of a new intersessional process and other issues could be reflected on prior to December 2011. The BioWeapons Prevention Project (BWPP) organised online discussions in which non-governmental experts shared their views on a set of relevant topics²⁰ and the 'Nonproliferation Review' published a special issue with articles that covered the major topics at stake (Smithson/Zanders 2011) – to mention but two of the various non-governmental activities. This host of preparatory activities and discussions on a limited set of recurring topics gave the impression that common ground was emerging – or at least a shared understanding of the most pressing issues (Guthrie 2011b #1; Millett 2011: 9). This fostered great expectations as to what might

¹⁷ For reports and analyses of the 7th Review Conference see e.g. Guthrie 2011b; Horner/Meier 2012; Pearson 2012; Pearson/Sims 2012.

¹⁸ For reports of the PrepCom see Guthrie 2011a.

¹⁹ For the reports of some of these events see http://bit.ly/55FPOH, 23.3.2012.

²⁰ See www.bwpp.org/revcon.html (23.3.2012).

be achievable at the Review Conference in terms of making the BWC a more effective security instrument (see Pearson 2012: 43).

3.2 Organisation of the Review Conference

Following the opening and procedural sessions and the General Debate, the substantive work of the conference was divided among the Committee of the Whole and informal plenary sessions.²¹ The former was chaired by Ambassador Desra Pecarya of Indonesia and prepared the Final Declaration. The latter were chaired by President van den Ijssel and tackled 'crosscutting issues' such as the CBM review, the structure and topics of the next intersessional process, universalisation, and the future of the ISU (see chapter 3.4). At previous review conferences, similar meetings had been held as closed sessions. In 2011, however, both Chairs held the first meetings in public mode, and, since no state party objected, all subsequent sessions remained public as well (see Pearson 2012: 32, 34). The PrepCom controversy notwithstanding, civil society representatives thus had access to all proceedings except for informal consultations, regional group meetings and endgame 'green room' negotiations.

Traditionally, states parties to the BWC are organised in three regional groups, still reflecting Cold War realities. The Group of Western and Other States (WEOG) and the Group of Non-Aligned and Other States (NAM) continue to hold group meetings, while only the NAM prepares joint papers. The Group of Eastern European States seems to consult only to nominate candidates for conference posts. These positions rotate among the three groups. Other active groupings included the JACKSNNZ²² as well as a new ad hoc alliance of 'like-minded states' (China, India, Iran, Pakistan, Russia) who mainly collaborated on the question of the new intersessional process (see Guthrie 2011b #12; Pearson/Sims 2012: 60-61). The European Union (EU), as collective actor, was all but absent from this Review Conference. While it had prepared a Council Decision for the Review Conference (2011/429/CFSP, 18 July 2011), it did not put forward far-reaching objectives, and there were no additional activities carried out by the EU during the conference (see Pearson 2012: 44).²³ After the establishment of the European External Action Service (EEAS) in 2011, the EU was no longer represented by the Council Presidency, which, as state party, had previously always been a full participant at the meetings. Registered as an international organisation, the EU was now relegated to observer status with limited participation rights. In practice, this meant that the joint EU statement was only delivered after all states parties had spoken in the general debate (see Pearson 2012: 37), and that the EU could submit written proposals but not participate in discussions. This, combined with a weak preparation process prior to the

²¹ NGOs and international organisations also addressed the conference. All publicly available statements can be accessed at www.unog.ch/disarmament/bwc; see also Pearson (2012: 6-32).

²² A group of seven states that first appeared in the BWC context in 2006. The name is an acronym of the member countries: Japan, Australia, Canada, Republic of Korea, Switzerland, Norway, New Zealand.

²³ In 2008, the EU agreed a Council Joint Action for 2009-2011 under which it rendered support for national implementation, universalisation and CBM submission (2008/858/CFSP, 10 November 2008; for the follow-on Council Decision ('BWC Action') see 2012/421/CFSP, 23 July 2012).

Review Conference, meant that the clout of previous EU positions, which were backed by the 27 EU members and other states, was lost at the 7th Review Conference.

3.3 Article-by-Article Review of the BWC

The Final Declarations of the BWC review conferences record the interpretations and additional understandings of states parties at given points in the regime's development. They are usually agreed upon by consensus and are hence the result of negotiations, compromises and, more often than not, package deals and bargains. While their content can shed light on the degree of *agreement* among states parties at the time, their negotiation histories offer insights into the degree of *divergence in positions* within the regime, which may linger even after a conference has agreed on a Final Document.²⁴

As has been the practice since 1980, the "review of the operation of the Convention" (BWC Article XII) was carried out article by article, meaning that states parties discussed and recorded their understandings of each treaty article separately. Whereas previously agreed language often proved a way out of deadlock situations at the previous Review Conference, in 2011 even text that had been agreed in 2006 was opened up for re-negotiation on more than one occasion. This, along with disagreement on fundamental ideas, made the article-by-article review even more difficult than it had been in 2006.²⁵

The 'Easy Ones': Disarmament, Geneva Protocol, CWC, and Final Clauses

The texts pertaining to **Articles II** (disarmament), **XI** (treaty amendments), **XIII** (BWC duration), and **XV** (official languages) were either copied *verbatim* from the 2006 Final Declaration or were updated to reflect developments up to and including 2006 (BWC/CONF.VII/7: 10; 18-19). The section on **Article VIII** (on the continued validity of the 1925 Geneva Protocol) now contains one paragraph regarding the UN Secretary General's (UNSG) investigation mechanism for cases of alleged CBW use, including a new reference to national trainings for experts whom the UNSG could draw on in case an investigation is initiated (BWC/CONF.VII/7: 15-16).²⁶ The **Article IX** text (negotiation of CW ban) now recognises "the increasing convergence of biology and chemistry and its possible challenges and opportunities for the implementation of the Convention" (BWC/CONF.VII/7: 16, para 51). A NAM proposal that referred to the discussion in the CWC regime on the destruction of CW in detail (BWC/CONF.VII/COW/INF.2: 15-16) was rejected by the US and Russia and was dropped early in the negotiations.²⁷

- 24 In the BWC regime, the Final *Declarations* cover the actual (article-by-article) review of the BWC, whereas the Final *Documents* include the procedural report, annexes, and, since 2006, additional 'Decisions and Recommendations' along with the Final Declaration (see Guthrie 2012b #9).
- 25 For analyses of the article-by-article review see also Pearson (2012: 39-41); Pearson/Sims (2012: 63-87).
- 26 The mechanism was set up in the 1980s to facilitate international investigations of cases of alleged CBW use. For a detailed account see Littlewood (2006).
- 27 It was known in December 2011 that neither the US nor Russia would be able to meet the final deadline of 29 April 2012 for the destruction of all their remaining CW. This issue had been intensly debated in The Hague just prior to the BWC review conference (Horner 2012); the NAM proposal in Geneva therefore seemed to be a political manoeuvre.

Solvable Problems and Bargaining Chips: BW Prohibition, Non-Proliferation, Complaint Procedure, Assistance

Article I contains the BW prohibition and is the source of the taboo against these weapons. It was strengthened in 2006 (Becker 2007: 17) and affirmed in 2011, as was the effective prohibition of BW *use*. There was no attempt to water down the general purpose criterion or the comprehensive prohibition which includes "all scientific and technological developments in the life sciences and in other fields of science relevant to the Convention" (BWC/CONF.VII/7: 10). Controversies only emerged regarding proposed additions to the 2006 text: Algeria and the US aimed at including references to compliance in separate proposals (BWC/CONF.VII/5: 4), but neither was accepted. Apart from a new reference to the S&T review to be conducted in the intersessional process, the text remained identical to that of 2006 (BWC/CONF.VII/7: 10), keeping the BW prohibition norm intact.

As could be expected, Article III (non-proliferation obligation) provoked debate due to long-standing differences between Western and NAM states regarding the Australia Group's export control guidelines and the relationship between the non-proliferation and cooperation norms. Consequently, variations of the themes of the interplay between Article III and X, and of the role of the Australia Group versus "a non-discriminatory and universally acceptable approach" (Cuba) to biotechnological transfers, were among the proposals for changes to the 2006 text (BWC/CONF.VII/5: 5). This illustrated that the Australia Group is still viewed as discriminatory by several states parties. At the same time, a number of non-Australia Group members have adopted national export controls on the basis of the Group guidelines, so that opposition to the Australia Group is more fragmented than it was before. While Article III provoked the usual skirmishes, and while a few states held strong positions and reportedly seemed to use text proposals as bargaining chips, the overall debate was more moderate than at previous occasions, and the relevance of national export controls was openly questioned by only one state party. With its call for a complaint procedure in response to transfer denials and the authorisation of biotechnological transfers solely among BWC parties (BWC/CONF.VII/5: 4-5), Iran was even isolated within the NAM. Nevertheless, the issue nearly blocked consensus. In a case of 'consensus by deletion' diplomacy, states parties ultimately agreed on language almost identical to that of 2006 (BWC/CONF.VII/7: 10-11; Pearson/Sims 2012: 66), confirming the continuing need to prevent BW proliferation and the importance of national export controls.

The only change to the section on **Article VI** (complaint procedure for compliance concerns) related to the UNSG investigation mechanism for alleged CBW use. Russia had initially demanded deletion of both references to the UNSG mechanism in the 2006 text and offered the compromise of moving both to Article VIII (continued validity of the Geneva Protocol). Support was offered by a number of states that had previously been reluctant to enhance the mechanism's status in the BWC context, for fear that this might detract from their priority of negotiating a verification system for the BWC. However, the proposed changes were unacceptable to a number of WEOG and other states, many of whom have long supported the UNSG mechanism and did not want to see it dissociated even further from the BWC. The predictable compromise was to retain one reference under Article VI and move the other to Article VIII (BWC/CONF.VII/7: 13; 15-16). While it is not

unreasonable to relate the mechanism to Article VIII – the Geneva Protocol is, after all, the mechanism's international legal 'home' – rather than binding the mechanism tighter to the BWC, as some states would have preferred, it has now been more visibly distanced from it (see Pearson/Sims 2012: 74, 78).

Article VII-related issues of assistance in cases of BW use evolved through the intersessional discussions in 2009, which is reflected in the Final Declaration by additions to the 2006 text (BWC/CONF.VII/7: 14-15). Not only was this issue less controversial in 2011 than it had been in 2006, the new intersessional programme even includes the explicit possibility of discussing (though not deciding on) such procedures (BWC/CONF.VII/7: 21). The Final Declaration now recognises inter alia that: (1) it is the responsibility of the states parties to provide assistance (para. 34); (2) that the provision of assistance might require more detailed procedures to be effective (para. 37); (3) that there is a need to improve national disease surveillance and detection capacities as well as other capacities needed to respond to alleged BW use; and (4) that assistance is encouraged also in capacity-building (para. 38 and 39). Several further concrete measures were proposed by NAM countries but rejected by Western states, and disagreement existed regarding the relationship between Articles VII and X (see Guthrie 2011b #6). The Final Declaration assumes an interrelation of health and security in that it states the need for ensuring that efforts "are effective irrespective of whether a disease outbreak is naturally occurring or deliberately caused" (para 40, see also para 39). This linkage reflects an evolution of the BWC that has been underway for several years and may eventually broaden the regime's focus from traditional biological weapons threats to biological threats more generally.

Fundamental Divisions: Compliance, National Implementation, International Cooperation, Decision-Making

The most conflictive themes condensed in the discussions about the Solemn Declaration which states and reaffirms the principles as contained in the Preamble of the BWC. The final version of the 2011 Solemn Declaration resembles that of 2006 (BWC/CONF.VII/7: 9). This result, however, conceals the fundamentally differing positions that have existed and will likely remain on a number of issues, including the Protocol negotiations, the role of bioterrorism in the BWC context, and the relationship of the BWC to other international instruments (see Guthrie 2011b #8, #15). The most significant alteration of the 2006 text was proposed by Iran, which strongly promoted language that would have defined the BWC as consisting of 'three pillars': the elimination of biological weapons, assistance and protection against these weapons, and "international cooperation for the use of biological agents and toxins for peaceful purposes" (BWC/CONF.VII/5, Annex I: 3). While all three elements are indeed covered by the BWC, their treatment as principles of equal standing, emphasised by placing them in the Solemn Declaration, would have represented a significant departure from previous understandings of the BWC's main purposes and principles as recorded in older Final Declarations. As such, it was rejected by Western countries, most vocally the UK and the US. The proposal reflected the Iranian approach to the entire Review Conference, supported by other NAM countries, to redefine the scope of the BWC and place international cooperation on equal footing with the BW prohibition and related norms. NAM members succeeded in inserting their claim that "the BWC forms a composite whole"

and should be implemented in a balanced manner, which has been reiterated in numerous NAM statements and interventions for years. Western states, on the other hand, successfully blocked contentious proposals related to international cooperation and strengthening the BWC "through the adoption [...] of a non-discriminatory, legally-binding agreement [...]" (see BWC/CONF.VII/5: 3).

The review of **Article IV** (national implementation) was one of the most labourious to negotiate. This reflected the fact that national implementation was also one of those norms that had evolved most over the past decade. Many of the measures discussed in the past intersessional process – such as biosafety and biosecurity, awareness raising, codes of conduct – fall within its scope; national implementation legislation itself has received more attention; and the contentious topic of export controls is also related to Article IV. Other contentions arose regarding references to UN Security Council Resolution 1540 (2004), to the WHO Revised International Health Regulations (2005), and to an attempt to link Article IV to Article X (see BWC/CONF.VII/COW/INF.2: 5-9).²⁸

While states parties largely agreed that new elements had emerged with regard to national implementation, they put forward differing ideas on how to handle these elements. Efforts to condense and merge the numerous proposals raised questions as to whether previous understandings and concerns were reflected adequately, as well as about the exact nature and status of the intersessional discussions and Final Reports. Several states argued, for example, that the work of the intersessional meetings on biosafety and biosecurity had to be reflected in the Final Declaration to render it meaningful. Others, however, maintained that discussions needed to continue (even though some of those supported the notions of biosafety, biosecurity and awareness-raising in principle) before definitions and common understandings could be recorded. Diverging views also existed regarding the question of whether there was a need for periodic – as opposed to one-time – review of implementation efforts by states parties. Moreover, the issue of national implementation was known to be a priority for many Western states and hence provided ground for strategic proposals and bargaining chips. All in all, the implementation norm was reaffirmed, and biosafety and biosecurity - as relatively recent additional regime elements - were intensely debated and included in the Final Declaration (BWC/CONF.VII/7: 11-12). Yet states parties continue to grant these issues unequal weight and still have some distance to cover in order to establish a truly shared definition and common understanding of their role in the BWC regime.²⁹

The proposals made for **Article V** (cooperation and problem-solving) mostly related to CBMs and a verification mechanism. As regards the procedures for consultative meetings established in 1986 and 1991, the Final Declaration reaffirms their validity, but, except for some smaller US proposals, there were no attempts to modify or even discuss them in detail. The discussions revealed continuing political resentment towards the CBMs; several

²⁸ The International Health Regulations commit all 194 WHO members to implementing measures to "prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide" (www.who.int/ihr/en).

²⁹ At the 2012 Meeting of Experts, debates erupted again over the question of whether or not there was an agreed definition of biosafety and biosecurity in the BWC regime (see Guthrie 2012a #3).

countries maintained linkages with the Protocol negotiations by emphasising that CBMs were no substitute for a legally-binding instrument. In this context, some delegations – in particular India, Iran and Pakistan – opposed enhancing the status of the CBMs. The view that CBMs were *voluntary* measures was strongly opposed by others, in particular Switzerland, the UK and the US, who emphasised the *politically-binding* nature of the CBMs. The final text supplemented the 2006 review with a reference to "the importance of increasing and continuing participation in the CBMs" (para. 23), a (weak) reference to the desirability of a CBM update (para. 25), and the request to states parties "in a position to do so" to provide assistance in completing CBM returns (BWC/CONF.VII/7: 12-13). However, states parties could neither agree on a significantly strengthened understanding on CBMs nor on a clear strategy for their substantial overhaul, something many delegates and observers may have hoped for given the intense preparations. Article V was one of the rare cases in which the 2006 Final Declaration provided a fall-back option. A weakening of the text was thus averted, but at the expense of stronger language on a CBM review.

The debate about **Article X** (international cooperation in the peaceful use of biology) repeated well-known points of conflict. Moreover, as a known NAM priority, this Article paralleled Article IV as the subject of negotiation tactics and bargains. NAM states argued that this Article had been neglected even though it was crucial to the BWC's success. Western states appeared to take the issue more seriously than on previous occasions, and they supported the idea of a sponsorship programme to facilitate participation in BWC meetings for developing countries, the idea of establishing a database to match offers and requests for cooperation and assistance, and the idea of including the issue as a topic in the next intersessional programme. However, they rejected many NAM efforts to enhance the Article's standing in relation to other Articles and to emphasise the shortfalls of international cooperation to date. Instead, Western contributions aimed at balancing the calls for enhanced cooperation with the recognition of efforts made, and the responsibilities of developed countries to provide assistance with the responsibility of potential beneficiaries to "identify their specific needs" (BWC/CONF.VII/COW/INF.2: 18-19).

Disputes once again concerned: the relation between Articles III and X (does full implementation of the former contribute to implementation of the latter, or vice versa?); the notion, propagated by some NAM countries and rejected by WEOG members, that Article X had not yet been fully implemented; and an "Article X mechanism" as proposed in a NAM working paper (BWC/CONF.VII/WP.26) as well as a complaint procedure for transfer denials proposed by Iran (BWC/CONF.VII/WP.29). Efforts by NAM actors to keep the scope of Article X as broad and generic as possible met calls by Western countries to narrow it and put special emphasis on single aspects such as disease surveillance (BWC/CONF.VII/COW/INF.2: 16-20). While a compromise could be reached, the 2011 review is unlikely to have changed the fundamentally differing positions that have informed this conflict for years.

Surprisingly, the review of two of the BWC's **final clauses** also caused significant problems. **Article XII** of the BWC provides for one review conference to be held five years after the treaty's entry into force. This conference took place in 1980, and a second one was scheduled for 1986. Review conferences have been held every five years ever since, and in

2011 states parties formalised this practice by replacing the previous *recommendation* to follow this pattern (e.g. BWC/CONF.VI/6: 17) with an undisputed *decision* "that Review Conferences be held at least every five years". The next one is scheduled for 2016 (BWC/CONF.VII/7: 18; see Pearson 2012: 44-45).

Controversies emerged over proposals regarding decision-making by consensus. Technically, this concerns the rules of procedure and not the review of the BWC itself. However, two separate proposals by India and Iran aimed at emphasising a consensus rule as the basis for decision-making in the review section on BWC Article XII (BWC/CONF.VII/5: 22).³⁰ The existing rules of procedure include the possibility of voting under certain circumstances (BWC/CONF.VII/7: 49, rule 28), and many other states were not willing to agree to fundamental changes. Seen in a broader multilateral disarmament context, this debate may represent a trend reverse to that in other forums such as the Conference on Disarmament or the 2012 negotiations for an Arms Trade Treaty, in which the functionality and desirability of the consensus rule have been questioned. Additional discussions were opened when some non-Western actors, wary that decision-making rights could be conferred to other bodies such as the intersessional meetings of states parties, wished to affirm the review conferences as the supreme (decision-making) body of the BWC. This provoked an intense debate about the function and authority of review conferences relative to other BWC meetings; it did not produce conclusive results.

On a comparable meta-level, the review of **Article XIV**, which relates to signature, ratification, accession and entry into force, was a matter for debate. Like Article XII, it was not contested in and of itself. Rather, the debate revolved around extended understandings on the nature of universalisation efforts. While some argued that this task could be handled by, or with the support of, the ISU, or through active efforts of the respective intersessional chairs, others maintained that it was a political endeavour and the "primary responsibility" of the states parties (see BWC/CONF.VII/5: 23; BWC/CONF.VII/7: 19). This seemingly minor conflict was informed, among other factors, by fundamental concerns about state sovereignty, global governance, and notions of international affairs as inter-governmental endeavours that should not be interfered with by other international institutions or actors. These concerns have rendered this and other conflicts difficult to resolve at the 7th Review Conference, and they are likely to impact future deliberations.

The review of the BWC revealed two things: First, the norm against BW, including their use, remains solid and uncontested; it has not been affected by the perceived weakness(es) of the regime. The consensual affirmation of this basic BWC provision and the wide support for enhanced operationalisation of this norm – through effective national export controls, improved national implementation and strengthened biosafety and biosecurity measures – were among the most positive outcomes of the 2011 BWC review. The prohibition of biological warfare can thus still be considered strong, despite the lack of universality of the BWC or other weaknesses in the regime. Second, old and new disputes impacted the

³⁰ The Iranian position may have been influenced by the 2011 CWC Conference of States Parties which took place immediately prior to the BWC review conference and which, for the first time, adopted a decision that did not enjoy full consensus (with Iran being the sole dissenter) (Horner 2012).

proceedings. As varied in substance as they are, the most problematic sections of the review suffered from common difficulties, including fundamental differences in positions regarding

- the primary purposes of the BWC and its regime, in particular the prominence of the 'promotional' relative to the 'regulatory' security-related provisions;
- notions of state sovereignty and acceptable levels of involvement by other actors;
- the role of bioterrorism in the BWC context;
- the question of compliance and how to refer to the past BWC protocol negotiations;
- the BWC's relation to international instruments like UN Resolution 1540, the WHO's International Health Regulations (IHR) and the UN Secretary General's mechanism to investigate the alleged use of biological or chemical weapons;
- the function and status of the outcomes from the intersessional process, and of the meetings of states parties relative to review conferences.

Divisions mainly ran along a WEOG – NAM divide, with only a handful of leading states serving as protagonists on either side – even though the line-up crossed group boundaries in some cases, such as bioterrorism.³¹ Agreement on the Final Declaration in the end hinged on very complex bargains that weaved together several of the BWC article reviews and aspects of the 'Decisions and Recommendations' and glossed over fundamental disagreements. However, the first intersessional meeting in 2012 has revealed how thin these compromises are, and some actors openly emphasised the 'delicate balance' achieved in the Final Document of the 7th Review Conference.³² This is a clear indication that many of the conflicts that complicated the Review Conference negotiations, including in the article-by-article review, were not resolved and continue to affect the intersessional discussions.

3.4 'Decisions and Recommendations': Issues for 2012-2016

The 'Decisions and Recommendations' of the 7th Review Conference included the following topics: the intersessional processes in 2007-2010 and 2012-2015, cooperation and assistance, S&T review, national implementation, CBMs, universalisation, the ISU, and financial arrangements (BWC/CONF.VII/7: 20-26; see Pearson 2012: 41-43). The following analysis will cover the Review Conference discussions and the developments in 2012 in most of these areas and in the area of compliance. Some sub-chapters conclude with concrete recommendations.

3.4.1 The ISU

The ISU was established by the 6th Review Conference in 2006 in order to support the implementation of the BWC and the intersessional meetings. Its role was to be purely administrative, and its mandate was limited until the subsequent Review Conference in 2011.

- 31 At the insistence of one state party, the Final Declaration contains only one explicit reference to terrorism; in all other places where agency is involved, a generic reference to 'anyone' replaced the previous phrase-ology (BWC/CONF.VII/7). Given the negotiation history, this can be read to include non-state actors.
- 32 See e.g. Statement of Iran on Behalf of the Non-Aligned Movement and Other States Parties to the BWC, Meeting of States Parties, Geneva, 10 December 2012.

Between 2006 and 2011, numerous states parties from all regional groups expressed their appreciation for and satisfaction with the work of the ISU, which, with a staff of only three, has covered a work programme that included a large number of outreach activities and support for individual countries with national implementation or completion of the CBM returns on request (see BWC/CONF.VII/3).

There was a general expectation prior to the 2011 Review Conference that the ISU's mandate would be renewed, and indeed no objections were raised at the Conference to extending it to 2016 (BWC/CONF.VII/7: 25). Less clear was whether its mandate would be changed, and whether there would be consensus on an increase in budget and staff. Politically, the mandate depended mostly on the question of whether or not new tasks would arise from other Conference agreements (see Guthrie 2011b #13). A number of states seemed willing to accord the ISU an enhanced role, such as through assigning it a more proactive part in the CBM process, or in providing and/or matching requests and offers for assistance. For others, however, it was to maintain its administrative character and refrain from any activities that could be perceived as political.

As regards the size of the unit, a number of states supported limited growth, up to a staff of five. The ISU itself emphasised in its 2011 report that it had been operating at the limits of its financial and human resources (BWC/CONF.VII/3: 6-7). However, as a consequence of the global financial crisis, precarious domestic budgetary situations among some BWC members prevented their consent to any effective increase in the BWC budget and blocked the expansion of the ISU (see Guthrie 2011b #16; Horner/Meier 2012). The added tasks, such as administering the cooperation and assistance database, have stretched ISU resources even further since 2011. Voluntary contributions by states parties to support the ISU's activities were permitted by the Review Conference only on the condition of strict transparency and impartiality (BWC/CONF.VII/7: 25). Given the current budgetary situation, however, the ISU expects that part of its work will continue to depend on such contributions (BWC/MSP/2012/12: 6). While the ISU has fulfilled an important supportive function for the BWC, on account of political reservations and budgetary problems it is still not equipped to truly rectify the 'institutional deficit' that has impaired the BWC regime's effectiveness for so long.

3.4.2 A New Intersessional Process 2012-2015

It was never seriously questioned whether or not a new round of annual meetings should take place in 2012-2015. The intersessional meetings, once devised as a stopgap solution to save the regime from collapse, seemed to have become an established regime element. The exact form of the process, however, led to heated debate.

Many observers and state representatives had come to the conclusion prior to the **2011 Review Conference** that the old format of one-topic-per-year Meetings of Experts and States Parties had run their course, that the most relevant issues needed continuous and not just one-time attention, and that it was time to devise a different, more productive mode of interaction. Many proposals made to this end resembled each other in essence in that they suggested establishing working groups which would each deal with certain topics in more depth and on a more regular and continuous basis. The Working Groups were to be assigned permanent chairs in order to provide increased continuity, provided with extended meeting

periods, and equipped with greater flexibility and at least limited decision-making authority, as defined and mandated by the Review Conference.³³

Other states parties opposed such far-reaching changes and opted for a more limited reform that would establish 'standing agenda items' to be covered every year, but in the familiar format, i.e. meetings of experts and states parties with the same mandate and duration as before. They emphasised the need to cover all aspects of the BWC "in a balanced manner" and to maintain the review conferences as the regime's sole decision-making organ. Disagreements also arose over the respective purposes of the meetings of experts and states parties and over the function of the latter relative to review conferences. Any attempts to compromise - such as by establishing parallel structures or extending the meeting time failed mostly due to opposition by a small group of states who, in the course of the conference, formed an ad hoc coalition of 'like-minded states': China, India, Iran, Pakistan, and Russia (Horner/Meier 2012). These states blocked attempts to create an entirely new format, to add decision-making powers of any kind, to give the meetings of states parties additional authority, or to enhance the role of experts and non-governmental actors in the intersessional process. They expressed concern that new structures could put too much strain on limited resources of poorer members and that more intense non-governmental input, combined with decision-making powers, might infringe upon state sovereignty and give non-governmental actors undue influence over the proceedings.34 They also questioned the existence of a legal basis that allowed for deferring decision-making powers from review conferences to other meeting formats. This proposition led to a heated debate as others argued that it was within the purview of review conferences to mandate, by consensus, other BWC-related bodies to take decisions in specified areas.

The agreed format provides for three standing agenda items to be covered every year and for two additional topics to be covered in two consecutive years. The standing agenda items include cooperation and assistance, S&T developments, and national implementation, and the additional items are enhanced CBM participation, scheduled for 2012-2013, and assistance under Article VII for 2014-2015 (see chapters 3.4.3-3.4.7). A number of states from different regional groups promoted addressing compliance in one way or another, but no solution could be found that satisfied the wishes of all states parties, so it was not included in the intersessional programme.

The mandate remains as it was: the Meetings of Experts will provide factual reports to the Meetings of States Parties, and these will aim to "promote common understanding and effective action" on the topics under consideration in their Final Reports (BWC/CONF.VII/7: 21). Decisions will continue to be reserved for the next Review Conference. One argument in favour of this arrangement is that negotiating binding decisions, rather than recording non-binding common understandings, could politicise the

³³ BWC/CONF.VII/WP.2, /WP.10, /WP.11, /WP.12, /WP.13, /WP.18, WP.23; see also e.g. McLeish 2011; Vestergaard/Roul 2011.

³⁴ Reflecting the effects of the economic crisis, the financial aspect of extending the meeting time and changing the structure in a way that might require investment of additional resources was a concern for other states parties as well.

proceedings even more than is the case already, and it would also likely take more time than available at the meetings of states parties (Geneva Forum 2006: 9). However, it would have been possible to limit decision-making authority to specific subjects, such as a further CBM review and practical steps derived from the S&T review, at the very least, to allow for prompt progress well before 2016 (see e.g. McLeish 2011: 39).

The intersessional meetings in 2012 exposed the limits of the 2011 agreement as well as the "fragility of the consensus" of the 7th Review Conference.35 The new arrangement of topics, coupled with the old structure, resulted in an exchange of positions and views on all four topics, though without any clear strategy in sight as to how these might be turned into realities and, given the lack of decision-making authority, no binding consequences stemming directly from the meetings. Even recording the exchanges and distilling common elements, let alone recommendations, proved very difficult at the 2012 Meeting of States Parties. It was obvious that reservations expressed in 2011 persisted regarding the scope of the intersessional process and regarding any shifting of emphasis or aspects in the mandate; such reservations had possibly even intensified. Some states parties maintained that there existed a hierarchy among the standing agenda items and biennial topics. All factions insisted on maintaining the "delicate balance" between the agenda items and demanded that they that they would receive equal attention. Even pragmatic proposals such as those by South Africa to structure future meetings in a more effective way (BWC/MSP/2012/WP.7) met with resistance as they were construed as departing from established practice and the agreed mandate (see Guthrie 2012b #5).

▶ The willingness to make maximum use of the existing potential – which is limited as it is – appears low, and this does not bode well for coming meetings and opportunities to use the process in order to strengthen the BWC at the next Review Conference. It will be up to the chairs of the intersessional meetings to prepare and structure the meetings so as to render them as efficient as possible; and up to states parties to provide substantial and practical input and to act constructively. More efforts along these lines will be needed if BWC members wish to exploit the potential of the intersessional process to the fullest extent possible.

3.4.3 Cooperation and Assistance

The **2011 Final Document** recorded agreement on three elements related to cooperation and assistance. They included a standing agenda item for the new intersessional process, a database, and a sponsorship programme (BWC/CONF.VII/7: 21-24).

The *sponsorship programme* aims at facilitating participation at BWC meetings for delegations from developing countries, particularly those "which have previously not participated in the meetings, or have been unable to regularly send experts from capital". Depending on the available resources, non-member states could also be supported (BWC/CONF.VII/7: 23). The programme is based on voluntary contributions by BWC members. The programme was proposed by the NAM and accepted with little debate

(BWC/CONF.VII/WP.26: 3). It formalises the practice of voluntary financial support which had existed previously but was carried out on an ad hoc basis.

Additionally, the NAM had demanded the establishment of a *database to match offers* and requests for cooperation and assistance (BWC/CONF.VII/WP.26: 3); Western countries supported this proposal in general, but differing views existed with regard to the exact scope of the database. This includes issues such as whether the programme should include assistance covered under Article VII, whether it should solely be related to Article X, and whether there should exist an option to register cases of transfer denials. The agreed database is not limited to cooperation under Article X though it does place emphasis on offers and requests "including in terms of equipment, materials and scientific and technological information regarding the use of biological and toxin agents for peaceful purposes" (BWC/CONF.VII/7: 22-23).

The first ISU report on the operation of the database was due at the 2012 Meeting of States Parties (BWC/MSP/2012/2: 5). To date, states parties have submitted few offers of assistance and cooperation and even fewer requests. It is too early to judge the utility of the database after only one year of operation, though there seems to exist a certain degree of incongruity between the fervour in the calls for the implementation of Article X and the utilisation of available opportunities.

Establishing a *standing agenda item on cooperation and assistance* was also, in principle, consensually agreed upon in **2011**, though different views existed as to its exact scope. International cooperation was a priority for the NAM group. Western states supported the inclusion of this topic but preferred to cluster cooperation related to Article X with assistance activities associated with other regime elements, such as assistance under Article VII, national implementation efforts and the completion of CBM returns. NAM states, on the other hand, insisted on limiting the topic to international (technological) cooperation under Article X and on keeping this separated from assistance as framed by Western countries as well as assistance under Article VII.

These fundamental differences, which were concealed by a compromise in phrasing within the 2011 Final Document, re-emerged in the 2012 intersessional meetings and complicated discussions and agreement on the Final Report (see Guthrie 2012b #3). As in 2011, the question of the "full implementation" of Article X was heavily debated. Several NAM states insisted on the inclusion of this phrase, whereas some Western states argued that it was misleading. To underline the point that Article X was already being implemented, the latter provided reports on their cooperation and assistance activities - according to a broad understanding of the topic -, such as in the areas of disease surveillance and control, biosafety, biosecurity and national implementation legislation. Activities carried out in other contexts were also covered, such as the WHO and the G8 Global Partnership (see Guthrie 2012a #2, 2012b #3). During the 2012 Meeting of Experts, some NAM members from Africa, Latin America and Southeast Asia shared experiences with international cooperation and, in at least two cases, voiced their specific needs (see Guthrie 2012a #2). At the Meeting of States Parties, however, there were fewer such practical contributions, and only a small number of NAM members contributed to the discussions at all. Cuba and Iran once again took aim at the US for its sanctions policy, claiming that this was a violation of BWC Article X, and

called for non-discriminatory implementation of this article. Iran, in particular, linked the need for increased cooperation with the rapid advances in the life sciences that made it all the more important to "bridge the ever-increasing gaps" between developing and developed countries. Iran also maintained its position that transfer denials could be addressed under this standing agenda item.³⁶

The 2012 Final Report included a number of NAM proposals but, in doing so, mainly reiterated agenda sub-items without adding much substance. States parties will continue to report on their implementation of Article X; they will address challenges and obstacles to international cooperation and "ways and means to overcome these", possibilities for mobilising resources, education and training programmes, capacity-building in biosafety, biosecurity and combating infectious diseases (BWC/CONF.VII/7: 22; BWC/2012/MSP/5: 4-6). Concrete activities will depend on initiatives by states parties themselves. While one may have hoped that the increased attention devoted to Article X would have contributed to depoliticising the issue and lead to a more focussed implementation of its provisions, existing tensions were reinforced.

▶ In order to overcome this problem, states parties could take a number of steps. First, states on both the providing and receiving end could make better use of the database, as it has the potential to yield practical benefits and help transform disagreement on the implementation of Article X into more constructive dialogue. If practical problems in its application or suggestions for improvement arise, parties should agree on making technical changes right away and not postpone them until 2016. Second, there should be more pragmatic cross-group cooperation in practical assistance and cooperation projects 'on the ground' as well as in terms of conceptual collaboration within the BWC framework. Third, it would be important that more states parties, particularly from developing countries, join in on discussions so that all facets of the Article X debate can be brought to light. In the past, developing countries put forward varying priorities and rationales with regard to their positions on Article X. These included the generalised political positions that prevail in current contributions, but also practical needs, a perceived entitlement to sharing biotechnological developments and benefits, and, implicitly, a perceived right to health (see Becker-Jakob 2011: 5-9). As the conflict surrounding Article X is one of the BWC's central problems today, it would be crucial to address fundamental questions – such as the scope of Article X, the kinds of activities falling within or outside its scope, and the Article's purpose and function within the BWC regime - if the regime is to move ahead. Such principled exchanges would ideally be carried out in parallel rather than intermingled with approaches to the practical questions contained in the intersessional agenda. Practical aspects could predominantly be tackled by the meetings of experts, and time could be set aside for the fundamental questions at the meetings of states parties.

³⁶ Statement by Iran to the 2012 Meeting of States Parties on agenda item "Cooperation and assistance", Geneva, 6 December 2012.

More pragmatic cross-group interaction and cooperation will be needed at any rate to give Article X the constructive attention it deserves as a BWC provision while bearing in mind its security context and not overstretching its scope.

3.4.4 Review of Scientific and Technological Developments

The lack of an institutionalised mechanism to review scientific and technological developments relevant to the BWC (S&T review) is another of the regime's deficits. It is a particularly grave problem due to rapid advances in and the spread of biotechnology and other life sciences that have taken place over the last decades. These developments could one day have serious consequences for the BWC and the norm against biological weapons (see e.g. Kelle et al. 2012; McLeish/Trapp 2011). Prior to 2011, consensus did not exist within the regime in terms of discussing S&T developments in-depth and systematically, let alone in establishing a new review structure, even though S&T review was explicitly included in BWC Article XII as a task for the review conference(s), and even though a number of proposals for review structures had previously been made (Berger/Davison 2011: 19-23). 2011 witnessed a remarkable shift on this front: During preparations for the 7th Review Conference, S&T review appeared as the least controversial issue on the agenda. While it was not discussed at the Conference in depth, states parties agreed to include S&T in the next intersessional programme. However, with the decision to treat S&T as a standing agenda item and not within a working group structure, states parties missed an opportunity for holistic discussion of risks and opportunities arising from S&T developments. Instead, they now have to focus on annual, clearly delineated topics; a concluding assessment of the S&T issue is not foreseen for the intersessional process.

The consensus on S&T as an intersessional topic notwithstanding, discussions will also likely suffer from general weaknesses in the new intersessional process itself. States parties will not be able to decide on collective follow-up actions even in the case of urgent matters. It would be very difficult in practice to revisit issues from previous years in order to respond to new developments. In 2011, states parties compiled a long list of elements to be addressed at the intersessional meetings, covering beneficial and potentially dangerous S&T developments in biology, biotechnology and related technologies, and education and awareness-raising in the scientific community (BWC/CONF.VII/7: 21; 23-24).³⁷ The latter aspect is of particular relevance given that many scientists and researchers the world over are still unaware of the potentials for misuse of their work (see e.g. Rappert 2011: 45-46). However, with only ten meeting days per year allotted for discussing all four agenda items, the meetings leave limited time to address all relevant developments. Rather than holding a substantial review of S&T developments with practical consequences for the BWC regime, the intersessional discussions are likely to remain limited to mere exchanges of information on developments regarded as relevant.

³⁷ This incudes a list of general topics to be discussed every year as well as four clusters to be discussed one per year (enabling technologies in 2012, improved measures to combat diseases in 2013, understanding of pathogenicity, virulence, toxicity and immunology in 2014, and potential BW production and delivery technologies in 2015; BWC/CONF.VII/7: 23-24).

The intersessional meetings in 2012 confirmed these concerns. The lack of structure and coherence at the Experts Meeting in July may have been partly due to the limited preparation time and general uncertainty about the new intersessional process – this was the first meeting with the revised format (see Guthrie 2012a #6, 2012b #1). However, the Meeting of States Parties did not produce results that were any more substantive. Its Final Report balanced the potentials for misuse and benefits derived from relevant S&T advances, and implicitly linked the monitoring of S&T developments to technological exchange as provided for in Article X (see BWC/MSP/2012/5: 6-7). References to oversight of "dual use research of concern" were informed by the debate on H5N1 (bird flu) research published in 2012. The Report also contained calls for awareness-raising among scientists, including through codes of conduct, and made proposals regarding biosafety and biosecurity training as well as other awarenessraising actions, aimed at reducing the risk of accidental or deliberate misuse of life sciences. Such calls are reasonable, but, owing to the fact that states parties once again only recognised "the value of" the listed measures, their implementation is not binding and left open to individual interpretation. This, and the fact that there will not be any collective follow-up actions, is most regrettable. The monitoring of S&T developments in biology and related disciplines is of central importance to the effectiveness of the BWC and serves as the basis for a number of potential steps to strengthen the regime.

▶ By helping to identify potential future threats and benefits, an effective S&T review could serve as an essential component in any approach of preventive arms control for the BWC (see McLeish/Trapp 2011: 534-535). It could, for example, inform revisions to the CBM system. It could also help prepare the ground for a review of verification or compliance control measures for the BWC – in whichever form they may one day take – by providing a sound overview of relevant technological developments that might be misused for weapons purposes *or* employed to deter, detect or trace such misuse. Finding an appropriate way of ensuring compliance with the BWC under today's circumstances might itself be a matter for future scrutiny and would need to be bolstered by a sound S&T review. A more efficient S&T review process could also help put the debates related to Article X in context and on solid factual grounding by clarifying which advances actually need to be addressed, which of these are relevant for developing countries, and in which areas cooperation might make the most sense given the existing preconditions and needs of developing countries.

In order to fulfil these tasks, however, the S&T review process would need to be made much more efficient than it was in 2012. Discussions would need to be more structured, information exchanged at the meetings of experts would have to be processed more effectively and be made more accessible for the meetings of states parties, and follow-up procedures would need to be put in place, ideally including representatives from science, industry and relevant international bodies (McLeish/Trapp 2011: 537). It would likewise be important for states parties to devise practical steps that follow from a more effective S&T review. In light of the proceedings at the 2012 meetings and the reluctance of some states parties to involve non-governmental stakeholders to a greater extent, any meaningful progress before the next Review Conference within the BWC structure currently seems unlikely. Yet, in view of the crucial role of S&T developments for the future of biological weapons control and for other areas in which the BWC needs strengthening, it would be

essential that states parties found a way of addressing these developments more effectively prior to 2016, either within or outside the current intersessional meetings.

3.4.5 National Implementation

After the collapse of the Protocol negotiations, and along with increased attention to bioterrorism after 2001, implementation of the BWC's provisions into national laws and regulations received heightened attention within the regime. Many states parties recognised that national implementation had hitherto been neglected and was far too weak. Moreover, with the shift of attention away from a multilaterally negotiated agreement and towards efforts to prevent the misuse of biology for hostile purposes, the role of national measures, including national legislation, was considered more relevant. National implementation had consequently been on the agenda in the first and second intersessional processes, but its inclusion in the third process was subject to debate (Pearson 2012: 45).

In 2011, several NAM countries objected to the repeated consideration of Article IV in the new process, arguing that this issue had already received sufficient attention in 2003, 2006 and 2007 and that it was now time to turn to other elements of the BWC (such as Article X). Consequently, they opposed including national implementation as a recurring theme in the new intersessional programme and were only prepared to accept it as a one-time agenda item, if at all (see Guthrie 2011b #13). WEOG members insisted on more regular inclusion, as they viewed national implementation as a central component of the BWC regime. They also highlighted the fact that implementation was not yet satisfactory in all states parties and stated that it was an ongoing process that needed continuous and not just a one-time review.

In addition to these disputes, states parties disagreed on whether or not there should be any reference to compliance under this item in 2011. Some states argued that there was a 'natural' link between implementation and compliance, and they supported addressing these issues together in the intersessional process for 2012-2015.³⁸ The like-minded NAM states demanded an explicit reference to verification, which the US opposed. At one point, a draft sub-agenda item that would have enabled the discussion of compliance was proposed but did not enjoy consensus (see chapter 3.4.8).

As part of the complex package deal that was necessary to reach consensus on the 2011 Final Document, "strengthening national implementation" was agreed as the third standing agenda item for the intersessional process (BWC/CONF.VII/7: 21; 24). The Final Document mandates discussions on "ways and means to enhance national implementation", on regional and sub-regional cooperation to assist national implementation, on biosafety and biosecurity measures, and on "any potential further measures, as appropriate, relevant for implementation of the Convention" (BWC/CONF.VII/7: 24; see Guthrie 2011b #14). Since these sub-items are not structured in a more detailed manner, any aspect could be addressed at any meeting. As there will be no opportunity to decide on additional actions before 2016,

³⁸ The most explicit connection was made in a project initiated by Canada, joined by Switzerland and the Czech Republic, that promoted the notion of national implementation assessment as a compliance control measure (see BWC/MSP/2010/WP.3/Rev.1; BWC/MSP/2012/WP.16).

the intersessional discussions are unlikely to go beyond mere exchanges of experiences, national approaches and activities at national levels.

The 2012 sessions devoted to national implementation mostly produced national reports on completed or ongoing implementation measures (Guthrie 2012a #4, 2012b #4). Such exchanges of information are welcome since they may provide other states parties with models for their own initiatives and may induce others to undertake and report on national activities as well. However, without coordinated efforts, they are unlikely to enhance the status of national implementation significantly: Those who feel obliged to maintain or improve their status of national implementation will continue to do so, but those who do not see the need to do the same will not face any pressure to change their attitude. After such a degree of attention has been devoted to this subject since 2003, it should now be time to move on to other aspects, for instance developing and agreeing common standards or checklists for national implementation and appropriate intervals for implementation reviews.³⁹ However, in 2012, some states parties connected the notion of such standards with the negotiation of a legally binding document which they have been calling for since 2001 (see Guthrie 2012a #2, 2012b #4) and which has been a non-starter ever since. After intense consultations at the Meeting of States Parties, BWC members agreed on listing several possible actions in the Report that could be taken on a national or regional level to enhance implementation of the BWC (BWC/MSP/2012/5: 8-9).

A five-nation initiative of December 2012 invited the 2013 Chair to facilitate a discussion on compliance under the standing agenda item of national implementation (BWC/MSP/2012/WP.11; see chapter 3.4.8). If realised, this initiative, though focussed on compliance, might help enhance states parties' understanding of the scope of national implementation. A French initiative to introduce a "peer review process" for national implementation of the BWC might be another useful step in this direction (BWC/CONF.VII/WP.28; BWC/MSP/2012/WP.12). It aimed at establishing a mechanism to collaboratively evaluate on a voluntary basis the state of a given BWC member's national implementation measures (on peer review for the BWC see Revill 2013). Several other states expressed their support for or interest in this idea, and France indicated its determination to carry the proposal further. However, others maintained their opposition to the concept, *inter alia* warning that such a process could convey a "false sense of assurance" regarding the state of implementation, and reluctantly accepted a vague paragraph in the Final Report of the Meeting of States Parties covering further exploration of the concept (BWC/MSP/2012/5: 8; Guthrie 2012b #6).

▶ The 2012 discussions seemed so highly politicised that the extent to which future meetings may move forward in this particular area remains unclear. Currently, it seems unlikely that states parties will move beyond national steps and towards common and binding standards of implementation, desirable as this may be. A strategy for BWC

³⁹ For elements of national implementation legislation see e.g. Spence (2011).

⁴⁰ See statement by Iran on behalf of the NAM and Other States Parties under the agenda item on national implementation, Meeting of States Parties, Geneva, 12 December 2012; see also see Guthrie (2012b #4).

implementation that comprised more concerted action to enhance the status of implementation among all members would be equally desirable. If such concrete steps are not feasible, it would at least be useful for the discussions to lead to greater common understanding of the exact functions of national implementation for the BWC, including in the areas of biosafety, biosecurity and compliance. Additionally, future reports on practical experiences with peer reviews along the lines of the French proposal might provide a more solid basis for assessing the concept's utility and addressing concerns.

At the very least, states parties should attempt to acknowledge experiences with national implementation activities – be it with internal reviews, with external assistance⁴¹ or with peer review exercises – and to draw lessons from these collectively. This may help prepare the discussions for the 8th Review Conference which could address the question of a more coherent implementation framework for the BWC.

3.4.6 Reform of the CBM Process

The CBMs were devised in 1986 and expanded in 1991 and not reviewed until 2011. In 2009 and 2010, Germany, Norway and Switzerland, together with the Geneva Forum, organised a series of workshops at which participants discussed the purpose and functioning of the existing CBMs as well as concrete proposals for changes. The synthesised results of these discussions were published (Lentzos/Hamilton 2011) and presented to the BWC states parties well in advance of the Review Conference.⁴² Despite these intense preparations, and despite equally intense efforts by the Australian facilitator during the Review Conference, the actual changes to the CBM forms as agreed in 2011 were modest (see Pearson/Sims 2012: 124-126). The topic was included in the intersessional process as one of the two biennial topics (for 2012 and 2013), but further substantive changes will not be possible before the next Review Conference in 2016.

The most significant changes that could be agreed at the **2011 Conference** were the deletion of reporting requirements on "outbreaks of reportable diseases" and on the promotion of contacts between scientists, as well as the addition of a new requirement to declare biosafety and biosecurity measures (BWC/CONF.VII/7: 24; 27-41). Proposals that had been intensely discussed but were not agreed included, among others, a modification of the reporting requirement on national biodefence activities to explicitly include research commissioned to the civil sector (see Lentzos 2011: 28-29) and the deletion of the requirement to list relevant scientific publications, for the sake of reducing the reporting burden.⁴³

In 2011, some states parties regarded the CBMs as a potentially useful tool for increasing transparency, though one that might need considerable revisions to function effectively and meet current circumstances; they also emphasised the politically binding nature of the CBMs. Others did not see the value added in this process and underlined that CBMs could

⁴¹ Assistance with national implementation is being provided bilaterally, by the ISU, by the EU under its BWC Actions (2012/421/CFSP, 23 July 2012) and by VERTIC (www.vertic.org, 15.03.2013).

⁴² http://bit.ly/13eo7wS (23.3.2012).

⁴³ On the need for increased transparency in the biodefence sector see Roffey/Gould (2011).

not substitute legally binding compliance and verification measures; some of them played down their binding nature or even openly regarded CBMs as "voluntary". Still other BWC members seemed to have only a nominal interest in enhanced transparency and hence did not support substantial revisions that could make the CBMs more effective as transparency tool. Disagreements existed with regard to the exact nature of changes to be made, the extent to which the 7th Review Conference should, or could, decide on such changes, and which further deliberations in the intersessional process were required. The very question of whether or not CBMs should be addressed in the next intersessional process was also a matter of debate.

Compared to 2006, when the only achievement possible was a statement in the Final Document that "the issue merits further and comprehensive attention at the Seventh Review Conference" (BWC/CONF.VI/6: 22), the substantive changes made in 2011 can be considered a step forward. It remains to be seen, however, how effective they will be in easing submission and increasing the number of CBM returns; as of March 2013, 69 states had submitted their CBMs compared to 69 in 2011 and 72 in 2010.⁴⁴

Any hopes that the intersessional meetings could be used to prepare a further substantial 'overhaul' of the CBMs for the next Review Conference in 2016 were dealt a blow by the discussions at the Meetings of Experts and of States Parties in 2012. The intersessional agenda item is limited to "Enhancing participation in the CBM process" (BWC/CONF.VII/7: 21), and several states insisted that this excluded discussions on substantive matters decisions were not foreseen for the intersessional process anyway. Others argued that substantive revisions could also contribute to enhancing the rate of participation, as the perceived relevance of the collected information may well impact readiness to supply it.⁴⁵ Most contributions repeated positions presented in 2011 on the need for further reform as well as on limitations of the CBM process. The UK (BWC/MSP/2012/WP.1) and the US (BWC/MSP/2012/MX/WP.4) submitted concrete proposals for future work on CBMs, some of which are listed in the 2012 Final Report of the Meeting of States Parties (BWC/MSP/2012/5: 9). Apart from this, the Report merely reiterated the importance of the CBM process and of some of the agreements reached at the 7th Review Conference, such as the designation of a National Point of Contact. As could be expected given the political positions expressed in both 2012 intersessional meetings, there are no suggestions for any further substantive discussions, let alone revision, of the CBM content. Unless states parties find a different way to address this topic in 2013, the CBM review seems all but stalled until 2016. This development is particularly unfortunate since some of the actors that now argue against substantive discussions had maintained in 2011 that the appropriate place for substantive deliberations were the intersessional meetings.

▶ Interested states parties could still try to steer the formal 2013 discussions in a more productive direction. Contacts could be made with states that have not yet, or not in a long

⁴⁴ http://bit.ly/YrsEu6 (15.3.2013).

⁴⁵ See e.g. the statements by Germany, Switzerland and the US on the agenda item on CBMs at the 2012 Meeting of States Parties, Geneva, 13 December 2012.

time, submitted CBMs in order to encourage them to share their views and experiences. The Final Report could include recommendations that are as concrete as possible regarding the exact substantive questions that need to be addressed by the 2016 Review Conference. This would be possible without prejudicing the outcome of further reviews and in keeping with the current mandate. In addition, states parties could invite experts dealing with CBMs 'on the ground' to the 2013 Meeting of Experts – such as representatives from agencies tasked with compiling or analysing the CBMs, or those asked to provide information – to hear their views on the current forms and on information they consider relevant. This would be valuable to have from both regular submitters and states parties who have only recently begun to participate in the process. Such an exchange would also follow the recommendation of the 2012 Final Report of the Meeting of States Parties to focus on "practical difficulties experienced by some States Parties in completing full and timely submissions" (BWC/MSP/2012/5: 9). It could help identify and/or further clarify where exactly assistance might be needed – which could in turn help increase the rate of participation in the CBM process.

Moreover, the intersessional discussions in 2013 should be used to intensify the exchange of views on the underlying principles and purposes of CBMs as tools to enhance transparency and trust, as well as their limitations (see UK, BWC/MSP/2012/WP.1). CBMs are not meant to be a tool for verifying compliance, and this has never been their purpose. However, they can potentially yield important and useful information on patterns of activity and, through the rate of participation, attitudes that could serve as indicators of states parties' commitment to the BWC's aims. In this sense, an effective CBM system might be one element of a future strengthened compliance system (see Lennane 2011: 43-45); it should include a follow-up process to and analysis of the submissions (Hunger/Shen 2011: 521-523; Lentzos 2011: 30).

The exact actions that would make the current process more effective remain a matter of further deliberation. While it is unlikely that a conceptual exchange would alter the well-articulated views held by some protagonists, it might enlighten others who had hitherto been indifferent regarding the potential benefit of an improved CBM system. It might likewise highlight its shortcomings and help pave the way for the establishment of further, truly effective transparency measures in 2016.

3.4.7 Assistance under Article VII

The provision of assistance in case of a BW attack has long been an issue of strong NAM interest. 46 Since 2006, Article VII has been interpreted to cover, albeit with varying degrees of obligation, all kinds of biological attack, regardless of whether the perpetrator was a BWC member, a non-party or a non-state actor (BWC/CONF.VI/6: 14). The obligation to provide assistance is contingent on the UN Security Council having determined a *deliberate* use of a biological agent. Since 1996, states parties have repeatedly

⁴⁶ Depending on the method and scope of attack, any country can depend on external assistance in mitigating the effects; such need would likely be greater in countries with less developed health systems and infrastructure.

"take[n] note of the proposal that States Parties may need to discuss the detailed procedure for assistance in order to ensure that timely emergency assistance would be provided by States Parties, if requested, in the event of use of biological or toxin weapons" (BWC/CONF.VI/6: 14).

Initially considered in the context of the compliance protocol negotiations (see BWC/CONF.IV/9 part II: 21), the topic remained part of a complex of highly politicised issues after the negotiations failed in 2001. It was thus not addressed in substance until the intersessional meetings in 2010, during which states parties recorded a number of understandings with regard to Article VII. One stated that the issue had "health and security components" with a "potentially complex and sensitive interface" between the two arenas. Another mandated that providing assistance was the responsibility of states parties and would benefit from detailed procedures. The usefulness of assistance in building national capacity especially in developing countries to prevent and respond to disease outbreaks was pointed out, as was the potential role for the UNSG mechanism to investigate the source of a suspected biological attack (BWC/MSP/2010/6: 4-6). With the exception of the latter, these understandings were also incorporated in the review of Article VII in 2011 (BWC/CONF.VII/7: 14-15; see chapter 3.3). With regard to assistance and capacity-building in responding to disease outbreaks, the distinction between deliberate use and natural outbreaks has become blurred (e.g. BWC/MSP/2010/6: 4).

For 2014 and 2015, the new intersessional agenda includes an item on "[h]ow to strengthen implementation of Article VII, including consideration of detailed procedures and mechanisms for the provision of assistance and cooperation by States Parties" (BWC/CONF.VII/7: 21). Agreement on this agenda item was closely connected to the discussions regarding the scope of the standing agenda item on cooperation and assistance (see chapter 3.4.3), in which Western and NAM states differed on the extent to which assistance should be merged with international cooperation under Article X. As part of the compromise that facilitated agreement on the Final Document, the standing agenda item contains an element of assistance, but Article VII was treated separately and in parallel with CBMs which were a Western priority.

▶ In accordance with the agenda, the assistance issue was not addressed in 2012. Given its link with developmental questions, the connection to international cooperation, and the increasing tension among proponents and opponents of an enhanced development component in the BWC regime, there is considerable potential for additional polarisation. It would hence be important that states parties interested in pragmatic progress prepare factual and practical discussions for 2014.

First, this could include concrete ideas for procedures to be used in case of a suspected BW attack, including possible chains of communication among states and relevant international bodies. A procedural precedent could be found in the consultation procedures under Article V which were also added and elaborated through Review Conference decisions in 1986 and 1991 (BWC/CONF.II/13/II: 5; BWC/CONF.III/23 part II). Second, states parties could also consider providing national rosters of experts or reporting on specific capabilities – such as detection, forensics, decontamination, or treatment – which could be called upon in case assistance under Article VII is needed. Third, the intersessional meetings would provide an opportunity to re-discuss the potential function of the UNSG's investigation

mechanism for the BWC from a different angle. In particular given the requirement that the UN Security Council must determine the deliberate use of BW before the assistance obligation can be fully invoked, an impartial investigation procedure that is already in place seems valuable. Opposition still remains to bringing the UNSG mechanims closer to the BWC; however, its consideration in relation to Article VII might highlight its utility for the Convention.

Even though a concrete assistance procedure cannot be agreed upon until the 8th Review Conference in 2016, early discussion of possible common ground might help prepare for such a decision and avoid an overload of the Review Conference deliberations.

3.4.8 Compliance and Verification

The lack of verification measures and consequent weakness of the compliance system are the gravest deficits in the BWC, and compliance and verification have been highly contentious topics in the regime for decades (see chapter 2.2.1). At the same time, verification in the field of biology is even more complex and demanding than in other technology fields due to the nature of the technology and agents involved: many items have a dual-use character, which means they could be abused for malevolent purposes, and it is hardly possible to define threshold quantities for microorganisms in isolation from clearly defined, legitimate processes. This is particularly relevant in the case of biodefence activities which are legitimate but could, in some cases, be hard to distinguish from prohibited activities in the absence of effective transparency measures (Roffey/Gould 2011). Since 2001, compliance measures for the BWC have not been discussed beyond the regular calls by NAM members, Russia and China for a return to the Protocol negotiations.

At the **2011 Review Conference**, a number of states repeated these calls or expressed their support for strengthening the BWC through a multilaterally negotiated, legally-binding document.⁴⁷ The US, on the other hand, maintained its position that the BWC was unverifiable and opposed any reference to such a legally-binding document or to the past Protocol negotiations; conflict was thus bound to erupt again in 2011. Indeed, on several occasions, demands to include language on compliance and the Protocol negotiations provoked clashes, though it is hard to tell to what extent these demands were deliberately used as bargaining chips or were representative of genuine convictions.

In 2010, Canada presented a proposal for compliance assessment through detailed description of national implementation measures, thus explicitly linking compliance to national implementation (BWC/MSP/2010/WP.3/Rev.1). According to this idea, rather than focusing on single facilities in states parties, compliance assessment could examine parties' "implementation programs", i.e. the regulatory framework in place to implement the BWC, as described and submitted to the ISU by states parties. In 2011, Canada and Switzerland – joined by the Czech Republic in 2012 – turned this idea into reality by providing details about their respective national implementation programmes (BWC/MSP/2012/WP.6). The project was not discussed in the Review Conference plenary. While an assessment approach

⁴⁷ See e.g. the General Statements by Algeria, Belarus, Brazil, Cuba (on behalf of the NAM), Iran, India, Malaysia, Pakistan, and Russia at the 7th Review Conference.

based on voluntary national declarations might not be sufficient as a tool for compliance *control* in the strict sense (and probably was not intended to be), it could be a useful step in an incremental model of compliance control, especially if supplemented by a follow-up for instance under the Article V consultation procedure (see Sims 2013). As with the French peer review proposal, it might be a useful basis for further steps were more states to join the endeavour and share their experience.

For those interested in an effective enhancement of the BWC's compliance system, one of the greatest disappointments at the 7th Review Conference must have been the loss of one particular sub-agenda item within 'national implementation', proposed for the agenda of the new intersessional process (see Guthrie 2011b #16). This sub-item would have enabled discussion of "practical ways and means of assuring the compliance of States Parties with their obligations under the Convention" (Guthrie 2011b #13; Pearson/Sims 2012: 109-110). However, it was dismissed due to attempts by some states parties to include more explicit verification language (Guthrie 2011 #16). The proposed text, weak as it was, would have allowed raising the issue of verification during the intersessional discussions – an opportunity that the like-minded states could have seized if there had been genuine political interest in the subject matter. It would also have enabled conceptual discussions on concepts of compliance and compliance control, including verification, that might (bene)fit the BWC.⁴⁸ This opportunity was missed in political squabble.

This development notwithstanding, Australia, Canada, New Zealand, Norway and Switzerland attempted to coax states parties towards discussing compliance issues in the framework of the current intersessional process (BWC/MSP/2012/WP.11; see Schneidmiller 2013). They invited the Chair of the 2013 meetings to allocate session time under the standing agenda item on national implementation to a conceptual discussion of compliance in the BWC context. States parties were encouraged to convey their views far in advance of the next Meeting of Experts, which will take place in August 2013, in order to stimulate debate. It could be fruitful if this initiative enabled an exchange of views beyond the repetition of rhetorical demands, and states parties should seize this opportunity if it becomes available. However, owing to the current climate, this might well be yet another practical proposal that falls victim to the politicised atmosphere in the regime. In that case, states parties will have to find other innovative ways to address the topic, as there are no fall-back options available (see Lennane 2011: 41-43).

The last comprehensive review of possible verification measures for the BWC took place 20 years ago. Since then, political and technological circumstances have changed drastically. This has opened up new possibilities and foreclosed others. If the BWC is to retain its function as a disarmament and security instrument, it will need a robust, up-to-date system to check states parties' compliance with their obligations under the treaty, including in the area of biodefence. It is therefore necessary to investigate concepts and strategies that are appropriate for today's (political and biotechnological) world. For the past ten years, the regime has been dominated by the repercussions of the events of 2001, an instance of

renewed vigour and change of focus in 2006 notwithstanding. However, a return to the Protocol negotiations is not a feasible option for political and technological reasons. Politically, the US maintains its position that the BWC is not verifiable and will thus not agree to a repetition of previous approaches to verification and compliance. Since the last BWC policy review in the US was carried out under the arms control-friendly Obama administration and came to the same conclusion (US White House 2009), this situation is unlikely to change anytime in the near future. Moreover, the history of the Protocol is fraught with so much political resentment that any renewed negotiation process under the same mandate would be doomed to fail for this reason alone. But even leaving all political quandary aside, from a purely technological perspective it would not make sense, either, as the AHG negotiations were based on technological assessments that are now outdated. Any consideration of verification and compliance measures would thus need to start from scratch, with new technology assessments and discussions about possible common approaches (see Sims/Littlewood 2011: 508).

▶ States parties that hold principled positions and use this issue as a proxy for other goals are unlikely to change their views any time soon, despite the fact that their voiced support for verification lost credibility when they rejected a compromise formula to the agenda sub-item on compliance at the 7th Review Conference. A number of other states, however, seem to be moving towards the understanding that BWC members will have to work towards strengthened compliance measures sooner rather than later while also facing the fact that this could (or would have to) take other forms than it had in the past.⁴9 Hopefully, this momentum could be enhanced and harmonised through more regular interaction, either within the intersessional meetings, according to the five-country initiative, or, if this is not feasible, in a parallel process.

Interested states could exchange views on the main issues and problems in informal meetings and/or electronically in a process similar to that used to prepare the CBM review. This could include discussions on how Article V might be used more efficiently in this context (see Lentzos 2011; Tucker 2011; Sims 2013), and could also include questions on the table as to what would (and would not) actually constitute (non)compliance with the BWC, how states parties could credibly demonstrate their own compliance, and how states parties could ascertain the compliance of others.⁵⁰ This last aspect has not received as much attention as the others in recent discussions. Though national measures to demonstrate compliance are valuable, they are not sufficient without an element of external monitoring. The issue of compliance is bound to figure prominently in the deliberations at the 8th Review Conference in 2016, and it would be of utmost importance to prepare for this as much as possible, with the aim of equipping the BWC with a workable, up-to-date and effective compliance control system as soon as possible.

⁴⁹ See e.g. the General Statements by the EU, Indonesia, the JACKSNNZ, and South Africa to the 7th Review Conference.

⁵⁰ See BWC/CONF.VII/WP.11; Guthrie 2011b #7; Lentzos 2011; Sims 2009: 141-167.

4. Conclusions

The results of the 6th Review Conference in 2006 were characterised as modest progress and regime consolidation by many (see e.g. Guthrie 2007); the atmosphere was generally described as constructive and even collegial. In comparison, commentators viewed the results of the 7th Review Conference in 2011 more critically, although some observers and participants – with the very difficult negotiations still on their minds – may have initially had a slightly more favourable view of the outcome. After all, agreement on a Final Document was still far from certain on the final day of the conference.⁵¹ However, an assessment one year into the third intersessional process must now draw some sobering conclusions.

The Review Conference reaffirmed the most important norms of the BWC and ensured that annual meetings would continue to enable states parties to interact between review conferences. This had proven useful in the past intersessional processes, and might well become useful again. However, the limitations of the current intersessional process - in particular the lack of decision-making authority even for selected topics and a structure that does not meet the demands of the new standing agenda items - put serious restraints on what can be achieved prior to 2016. The discussions could still help "promote common understanding", as they were intended to do; indeed, some outcomes from the past intersessional process found their way into the 2011 BWC review and have thus become shared additional understandings of the treaty. However, as the Review Conference suggested and the first year of the intersessional process confirmed, some divisions between states parties run very deep and touch upon fundamental ideas that go beyond specific BWC topics, including those of governance, sovereignty and justice. These divisions currently seem to overshadow any overlap of common interests that might, or should, exist in preventing biological warfare, as 'philosophical debates' between a very small number of states parties about principled positions proved during several sessions of the 2012 intersessional meetings. Such principled discussions can be useful in clarifying one's own position and helping understand those of others, as long as they are steered toward a common goal and do not prevent practical progress as has recently been the case.

It is noteworthy that many of the results from 2011 remained unattainable at the previous Review Conference. The ISU, whose extension on a status-quo basis was undisputed in 2011, was a hard-won achievement in 2006. The need for a CBM review, difficult and limited as it may have been in its implementation in 2011, was hardly contested this time, whereas it could not even be included as a desideratum in the Final Document in 2006. Likewise, the review of relevant scientific and technological developments was only disputed in its details, not on the whole. While 'standing agenda items' (or "recurring themes", in 2006 speak) were a nonstarter at the 6th Review Conference, they came to represent a common denominator in the debate about the structure of the future intersessional process. And whereas international cooperation was already included as a topic in the last intersessional process, some elements that were easily agreed upon in 2011 resembled NAM demands that were rejected in 2006.

⁵¹ For assessments of the review conference see e.g. Guthrie 2011b #16; Horner/Meier 2012; Moodie 2011; Pearson 2012; Pearson/Sims 2012.

This acceptance of measures as base lines which had been red lines five years ago suggests a kind of 'ratchet effect', of collective learning and evolution, though it is taking place slowly and is not a matter of course.

In order to build on this and take the regime's development forward, it would be necessary to engage more states parties in constructive discussions on all the issues that are currently on the table. Hopefully, the EU will find a mode of engagement that enhances its influence in the BWC meetings and restores its function to the earlier one of trying to build bridges, explore common ground and actively promote pragmatic proposals for progress. This would have to include changing the representation of the EU as international organisation through the EEAS back to representation by the Council Presidency (whose delegation could include EEAS representatives). It would also include a more intense consultation and preparation process before meetings, including drafting of joint papers and proposals and encouraging more EU members to participate actively.

At future intersessional meetings, time could be set aside for debates among BWC members on principles and for a strategic dialogue regarding the future of the BWC (see Sims/Littlewood 2011: 505). This could be helpful, or even necessary, for two reasons: to reduce current polarisations and to help determine the direction in which the BWC should be steered.

While there have always been topics closer to the hearts of one or the other regional group or individual actor, a trend seems to have intensified at past meetings to think in terms of 'our issues' versus 'their issues', particularly among members of the Western Group and the NAM. This was manifest in the endgame negotiations at the Review Conference and even more so at the 2012 Meeting of States Parties, when many of the deliberations were concerned with achieving an adequate balance between the agenda items (and with deliberating on what would be 'adequate' in this context). This even included balancing the allotted meeting time and space in the Final Report among all agenda items and resulted in agreement on a minimal common denominator. Rather than jealously watching the treatment of 'their' issues, and consequently accepting minimal outcomes, states parties should focus more on the practical necessities of the individual items - some might simply require more time than others in some years – and on the interrelations between the agenda items - more intensive discussion of item A in one year might be fruitful for the discussion of item B in another year. To illustrate the most obvious case, S&T developments could become a crucial node in an approach that focusses on overlaps and mutual benefits: taking stock of relevant S&T developments

- is important in assessing whether national legislation and regulations are still up-todate and cover all necessary aspects;
- has implications for the assessment of the CBMs' relevance and the need for additional or revised forms;
- helps provide a factual context for the Article X debate;
- helps provide technical information for an assistance procedure under Article VII;
- would be needed for any discussion of practical and state-of-the art verification and compliance measures, including in relation to biodefence activities.

A similar list could be compiled for issues related to cooperation and assistance, which have emerged, partly through past intersessional discussions, as central themes now connected with most BWC elements, and for national implementation. Rather than fighting turf wars, states parties should be reminded of their common interests with regard to a large number of the issues on the table.

In addition to overcoming the WEOG-NAM dichotomy that is currently reflected in many contributions, a strategic dialogue would be needed to determine the future profile of the BWC regime. Currently, the regime seems to be in a state of transition with no clear end in sight. For almost a decade, states parties were preoccupied with negotiating a compliance protocol that was supposed to cover all major issues that persist at BWC meetings today (see Lennane 2011: 40). Once this fell apart, the holistic approach was replaced by a narrow focus on national measures to reduce the risk of bioterrorism and to enhance biosecurity; this proved ineffective in strengthening the BWC as a whole and too narrow to be acceptable in the long run for a number of regime actors. Hence, we are now back with almost the full set of issues on the table (minus the crucial topic of compliance), but without an overarching framework within which they may be tackled with all their interlinkages and intersections.

In addition to making maximum use of the potential of the current intersessional process (see proposals in section 3.4), a forum would be useful in which states parties could address basic concerns and conceptual ideas on issues such as compliance and the BWC, the role and function of the BWC in today's world, the scope of Article X, and the degree to which the BWC can or should address biosecurity and global health issues. It would be a highly demanding task for government officials alone to inititiate and sustain such a conceptual discourse. After all, most of them have to fulfil day-to-day tasks and often cover more than one issue area. Such a process would therefore need support and input from civil society experts and would benefit from practitioner insights. Initially, this would most probably have to take the form of informal workshops or seminars initiated by interested actors, either on the margins of intersessional meetings or inbetween them. If this kind of exchange proved useful to a sufficient number of states parties, the 8th Review Conference in 2016 could consider establishing a formal open-ended discussion group that could be mandated to come up with specific proposals, ideally to be decided upon by future meetings of states parties and not left to the 9th Review Conference in 2021.

Such a strategic dialogue would be helpful for another reason, too: The focus on biosafety, biosecurity and health preparedness has moved the BWC regime closer to the global health arena. Over the past years, BWC documents have increasingly merged discussions of risks posed by deliberate BW use by states, terrorists or criminals with those posed by naturally occurring infectious diseases, and measures geared towards domestic and/or regional preparedness have come to include all these categories. In part, this reflects the changing state of science and the effects of globalisation; in part, it is the result of unclear or diverging political preferences. For the BWC to remain (or become more) effective as a security instrument in the coming years, the biological weapons control community would need to define areas of overlap with other, health, biosafety and biosecurity-related forums and subsequently work out productive strategies for cooperation (see Sims/Littlewood 2011: 501;

Stroot/Jenal 2011). It would be equally important that they draw boundaries to preserve the BWC's distinct features and purpose as a biological disarmament regime.

Conceptual research has conceived of disarmament as both a process and a state (see e.g. Burns 1993: 3). In the current absence of control measures, absolute certainty cannot exist as to whether or not former BW possessors have destroyed all their stockpiles; but, with few exceptions, public sources do not expect former stocks to remain (and to remain operational).⁵² The challenge faced by the BWC and its regime is to ascertain that the *process* of global biological disarmament will be completed and to credibly ensure that the *state* of biological disarmament will remain for all times. The BWC is the only legal framework in which this challenge can be comprehensively addressed. The effort and political will that this requires are significant – but so are the potential consequences of failure. It is thus to be hoped that enough states parties will muster the will and resources necessary to steer the BWC towards being a strong and effective guarantor of complete biological disarmament, as it was once intended to be.

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Abbreviations

AHG Ad Hoc Group
BW Biological weapons

BWC Biological Weapons Convention
BWPP BioWeapons Prevention Project
CBW Chemical and Biological Weapons
CWC Chemical Weapons Convention
CBM Confidence-Building Measure
EEAS European External Action Service

EU European Union

GHSI Global Health Security Initiative ISU Implementation Support Unit

JACKSNNZ Japan, Australia, Canada, South Korea, Switzerland, Norway, New Zealand

NAM Non-Aligned Movement

OPCW Organisation for the Prohibition of Chemical Weapons

PrepCom Preparatory Committee S&T Science and Technology

UN United Nations

UNSG United Nations Secretary General WEOG Group of Western and Other States

WHO World Health Organisation