There are three versions of this report: [1.a] for audiences familiar with the Biological Weapons Convention; [1.b] with additional background material for those less familiar with the Biological Weapons Convention; and [1.c] a summary version.

The Centre for the Study of Existential Risk is an interdisciplinary research centre within the University of Cambridge dedicated to the study and mitigation of human extinction-level risks that may emerge from technological advances and human activity.

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WORKSHOP REPORT
Eighth Review Conference of The Biological Weapons Convention: Where Next?

CONTENTS

Overview 1
Summary points 2
Background to the Biological Weapons Convention 3
Section 1: Main Discussion Areas 8
  Stumbling blocks 8
  Capacity / resourcing 11
  Opportunities 13
  Inside / outside (boundaries and balance) 13
  Disappointment, not disaster 16
Section 2: Actions 17
Concluding Remarks 23
Appendix 1: Scenarios 24
Appendix 2: List of Participants 26
ACRONYMS AND USE OF TERMS

**Article VII** – this article of the Biological Weapons Convention contains a commitment by States Parties to support and assist other States Parties ‘exposed to danger as a result of violation of the Convention’.

**Article X** – this article of the Biological Weapons Convention relates to its implementation ‘in a manner designed to avoid hampering the economic or technological development of States Parties’ and promotes international cooperation and the facilitation of / right to participate in ‘the fullest possible exchange of equipment, materials, and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes’.

**BW** – biological weapons

**BWC** – the Biological Weapons Convention

**CBMs** – A system of ‘Confidence-building Measures’ based on exchange of information was agreed by the Second Review Conference ‘in order to reduce the occurrence of ambiguities, doubts and suspicions and in order to improve international cooperation in the field of peaceful biological activities’. The current set of CBMs are:

- **CBM A Part 1**: Exchange of data on research centres and laboratories;
- **Part 2**: Exchange of information on national biological defence research and development programmes.
- **CBM B**: Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins.
- **CBM C**: Encouragement of publication of results and promotion of use of knowledge.
- **CBM E**: Declaration of legislation, regulations and other measures.
- **CBM F**: Declaration of past activities in offensive and / or defensive biological research and development programmes.
- **CBM G**: Declaration of vaccine production facilities.
The CWC is the Chemical Weapons Convention; and the OPCW its associated Organisation for the Prohibition of Chemical Weapons; the Science Advisory Board (SAB) is a subsidiary body of the OPCW, which provides specialised scientific and technological advice.

ISP – The Intersessional Process for the Biological Weapons Convention – see pp.4-5 for further information.

ISU – The Implementation Support Unit for the Biological Weapons Convention – see p.4 for further information.

MSP – Meeting of States Parties. Annual Meetings of States Parties have taken place during each of the intersessional processes. The next Meeting of States Parties is scheduled for early December 2017.

MXP – Meeting of Experts. In the Intersessional Process, there have been annual Meetings of Experts, which prepare factual reports for in preparation for the Meetings of States Parties.

SAI – Standing agenda item. The 2012-2015 Intersessional Process included standing agenda items on cooperation and assistance, review of science and technology developments related to the Convention, and strengthening national implementation.

S&T – science and technology

SDGs – the Sustainable Development Goals

States Parties – states that have signed and ratified the Convention

UNESCO – the United Nations Educational, Scientific and Cultural Organization

Universalisation – refers to the objective of having all states as parties to the Convention (currently there are 178 states parties).

WHO – the World Health Organization
OVERVIEW

While there was potential to make progress in several areas, the Eighth Review Conference of the Biological Weapons Convention (BWC) failed to move things forward, and has left the process for the next few years largely undirected. The purpose of this workshop was to inform activities of civil society in support of the aims of the Convention over the next few years. Many of the issues raised and actions suggested by participants also have relevance to activities that might usefully be undertaken by states parties and other groups, such as science and technology communities.

The initial framing of the workshop gave priority to identifying actions that could be taken by participants to promote progress in the lead up to the 2017 Meeting of States Parties (MSP). It was clear from early in workshop that there is a high likelihood that the 2017 MSP (if it takes place) will result in a ‘more of the same’ or ‘nothing until 2021’ outcome (these scenarios are outlined in Appendix 1, p.24). We therefore paid greater attention to potential activities over the longer period, which will be needed anyway, and may help create a positive atmosphere for progress at the 2021 Review Conference.

The urgency of the current situation was not overlooked and it is still considered important to support more immediate efforts that might achieve a positive outcome this year.

This report summarises some of the key areas of discussion (Section 1), providing context and potentially guiding prioritisation for a range of potential actions for the next few years (Section 2), including some that are relevant in the lead up to the 2017 MSP. Appendix 1 covers a few scenarios outlined during the workshop, consideration of which will also inform selection of options.
SUMMARY POINTS

• Preparations by states parties for the Eighth Review Conference were substantial and largely positive. Productive use of the Preparatory Committee sessions in April and August 2016 led to expectations that substantive progress would be achieved in several areas.

• The frustration of that progress by the blocking actions of a handful of states led to what has been described as a disappointing outcome, and may be viewed as a step backward for the formal Convention processes.

• In general, states parties still recognise the importance of the Convention and the need to pursue various lines of work to support it. Alongside this there continues to be a significant role for civil society.

• The balance of what is pursued within or outside of formal processes is likely to shift. The meaning, content and likely implications of this shift were one of the main areas of discussion at the workshop.

• There are things of value that states, the Implementation Support Unit (ISU) and civil society can do in preparation for the 2017 MSP, which could strengthen the chances of achieving a successful outcome, and there are some matters of particular urgency – including appointment of a chair and securing funding for the MSP.

• Even with such efforts, the chances of success (in terms of agreeing a more effective intersessional process) are low and, given limits to capacity and resources, this suggests that greater attention and effort be devoted to other activities through to 2021.

• Some of these activities would anyway take place alongside an expanded intersessional process (ISP), but additional actions may have higher value or warrant greater attention in the scenarios where this is not achieved.

• For this reason, a lot of discussion focused on the role that civil society can most usefully play and what its responses might be to different scenarios.
BACKGROUND ON THE BIOLOGICAL WEAPONS CONVENTION

The Biological Weapons Convention\(^1\) (BWC) was adopted in 1972 – in its first article, States Parties commit:

[N]ever in any circumstances to develop, produce, stockpile or otherwise acquire or retain:
(1) Microbial or other biological agents or toxins whatever their origin or method of production, of types or in quantities that have no justification for prophylactic, protective or other peaceful purposes;
(2) Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

(Through a reference in Article VIII to the 1925 Geneva Protocol\(^2\), this prohibition also extends to the use of such agents, toxins, weapons, equipment, or means of delivery.)

NO VERIFICATION MECHANISM:

Because activities for peaceful purposes may sometimes be difficult to distinguish from those for non-peaceful purposes, there would ideally be some way of verifying compliance with the Convention. However, unlike the Chemical Weapons Convention, the BWC has no associated verification system to check that activities and facilities are for permitted purposes. Extensive efforts to negotiate a verification protocol in the 1990s got very close to an agreed text, but failed in 2001. There is little prospect of this topic being revisited within the formal BWC processes.

\(^1\)The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.
\(^2\)1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare.
**REVIEW CONFERENCES:**

Conferences of States Parties are held every five years to review the operation of the Convention. These generally take place over a two-week period in Geneva. The Conferences generally produce a final document, including article-by-article statements outlining states’ understandings of the Convention, and a record of decisions made. The most recent – Eighth – Review Conference was held in November 2016.

**NO INTERNATIONAL ORGANISATION:**

Many international treaties have associated inter-governmental organisations that support their operation and implementation. For example, the Organisation for the Prohibition of Chemical Weapons performs this role for the Chemical Weapons Convention. The BWC is unusual in this respect – its small Implementation Support Unit, created in 2006, is not an international organisation. Its mandate includes: provision of administrative support to meetings; support for implementation and universalisation of the Convention, and exchange of confidence-building measures; and administration and facilitation of information exchange for the database for assistance.

**INTERSESSIONAL PROCESS:**

The Intersessional Process (ISP) is a series of annual meetings of States Parties (generally preceded by meetings of experts) that take place between Review Conferences. Their purpose is ‘to discuss and promote common understanding and effective action’ on issues set out by the Review Conference.

There have now been three intersessional programmes: 2003-2005; 2007-2010; and 2012-2015. The Fifth, Sixth, and Seventh Review Conferences set out agendas for the meetings – the 2012-2015 agenda, for example, included the topics:
• Cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X;

• Review of developments in the field of science and technology related to the Convention;

• Strengthening national implementation;

• How to enable fuller participation in the confidence building measures; and

• How to strengthen implementation of Article VII, including consideration of detailed procedures and mechanisms for the provision of assistance and cooperation by States Parties.

Other topics discussed in the ISP have included: processes for oversight, education and awareness-raising; development of codes of conduct; biosafety and biosecurity measures; and capacity-building for infectious disease surveillance, detection, diagnosis and containment.

The Eighth Review Conference did not set out an agenda for the next period, its decision was limited to: States Parties holding annual meetings, with the first meeting in December 2017 to ‘seek to make progress on issues of substance and process for the period before the next Review Conference, with a view to reaching consensus on an intersessional process’ (Final Document).

**SCIENCE AND TECHNOLOGY REVIEW:**

One of the purposes of the Review Conferences is ‘take into account any new scientific and technological developments relevant to the Convention’. This includes both developments that can support the aims of the Convention, and those with the potential for misuse. The Final Document generally includes a statement reaffirming that all relevant scientific and technological developments fall within the scope of Article I. The Eighth Review Conference, for example, stated that: ‘The Conference reaffirms that Article I applies to all scientific and technological developments in the life sciences and in other fields of science relevant to the Convention.’
Some States Parties submit background documents on science and technology developments in advance of Review Conferences, and for meetings in the Intersessional Process. It is generally felt that this format for review is neither frequent nor in-depth enough to appropriately track scientific and technological developments and understand their implications for the Convention. ‘Review of developments in the field of science and technology related to the Convention’ has been a standing agenda item in the 2012-2015 Intersessional Process, but insufficient time has been available to adequately discuss the topic.

The value of having timely information about science and technology developments of relevance to the Convention is widely recognised, and this was one of the areas in which it was hoped that some progress might be achieved at the Eighth Review Conference.

**THE EIGHTH REVIEW CONFERENCE OF THE BWC:**

States Parties and civil society groups developed various proposals in the lead up to the Eighth Review Conference, aiming toward progress in several key areas. Some of the main proposals were:

- A more effective Intersessional Process arrangement
- An enhanced Implementation Support Unit
- Build on understanding of Article VII
- Progress on the implementation of Article X
- Improved science and technology review process
- Enhanced confidence in compliance
- Strengthened international organisation participation

While recognising that such achievements may well be limited, expectations were that some progress could be made in these areas. Unfortunately, this was not the case. Attempts at decision-making on some of these issues were obstructed by a
small number of states, with Iran playing a leading role. Actions of individual states can have significant impact during review conferences because these generally operate on a consensus basis. It is possible to shift to vote-based decision making, but a high value is assigned to consensus in such processes; voting is rarely used and only as a last resort.

The main motivation for the workshop was to work out practical steps that can be taken – particularly by civil society groups – to move forward and to gain insight about what might be achieved within and beyond the formal BWC processes over the next few years.
SECTION 1: MAIN DISCUSSION AREAS

These discussion summaries are designed to provide context for understanding and prioritising the actions outlined in Section 2.

STUMBLING BLOCKS

There was a substantial gap between expectations and outcomes of the Eighth Review Conference, largely as the result of blocking action by a small number of states. This is one indicator that there are barriers that are likely to arise and which should be considered when trying to develop ways forward. Anticipating and identifying potential problems will help us to find ways of resolving them, working around them, or may lead us to decide that efforts would best be diverted to other routes.

(Issues relating to capacity and resourcing, which are frequently a stumbling block, are mainly addressed under the next sub-heading on p.11.)

Stumbling blocks considered significant to achieving a positive outcome for the 2017 Meeting of States Parties include:

The set up and mandate of the MSP. The Final Document of the Eighth Review Conference did not provide much detail about the format for the Meeting of States Parties in 2017\(^3\), and it is unclear what action the Meeting will be able to take – particularly the extent to which it will be able to make decisions. A chair for the Meeting has not yet been appointed and this is delaying necessary discussion and consultation on these issues. Such work needs to fit around a lot of other diplomatic activity scheduled for the year, and this adds to the urgency of addressing this problem. (States often have a limited number of representatives to United Nations...

\(^3\) “The first such meeting... will seek to make progress on issues of substance and process for the period before the next Review Conference, with a view to reaching consensus on an intersessional process.” Final Document of the Eighth Review Conference, Section III: Decisions and Recommendation, Part B, paragraph 6.
processes, so diplomats frequently have to deal with multiple issues in multiple forums.)

**Securing funding for the MSP.** Funding for the MSP needs to be provided by states parties. This should be achieved in time for the December meeting, but the situation remains uncertain at present.

**Momentum for progress.** Many states parties were frustrated at the outcome of the Eighth Review Conference, however the momentum that may have come from this is likely to dissipate rapidly, particularly because of the multi-issue focus of diplomacy.

**Expectations of the intersessional process.** There are a lot of expectations associated with the intersessional process: to be active in many areas, and be many things to many people. It may well be difficult to balance these expectations with what can realistically be achieved by an ISP over the next few years. Proposals to strengthen the ISP aimed to extend its capacity, for example by creating technical working groups to support its work. This wasn’t agreed at the Review Conference – a positive outcome of this year’s MSP would be for it to reach agreement on an improved ISP.

**Stumbling blocks considered significant beyond the 2017 MSP include:**

**Format of and engagement with formal processes**

- The main output from review conferences is a Final Document, including a Final Declaration containing statements detailing states’ understandings of each article of the Convention, and a record of any decisions made. The review conferences limited time in which to do this work, and discussion tends to be very outcome focused in relation to the language of the final declaration. This can cause difficulty because it provides an immediate and easy opportunity for blocking. It can also mean that the process is quite removed from discussion of the threat.
• Individual personalities in delegations and national policy positioning can play a significant role in outcomes of review conferences. There is also a risk of such problems spreading in representation across treaties.

• The fact that so little was achieved following such a positive preparatory process may be a disincentive to states contributing the same efforts in advance of the next Review Conference in 2021.

• The formal process (that is, what is done by states within the review conferences, any formal preparatory meetings and within the ISPs) may be perceived as increasingly irrelevant and as a low diplomatic priority in disarmament. Biological warfare is not a main, compelling, security risk for many states, so there is little incentive for them to devote time, money and effort in this area. This is connected to problems of compartmentalisation – where work on biological weapons (BW) issues is not joined up to relevant efforts in related areas, such as global health security and the sustainable development goals (SDGs).

• States parties’ engagement with formal processes may also decline because they don’t know what to do in order to move toward a situation in which effective deliberations can lead to concrete actions that may be taken in support of the Convention.

• The diversity of biology may be another deterrent to action – with so many scientific disciplines involved, it’s everywhere, and it’s very difficult to know where to draw lines.

The lack of an international organisation for the BWC is referred to as an institutional deficit. Its persistence and particularly the failure to expand the capacity of and secure sustainable funding for the ISU, is limiting what can be achieved in formal processes.

Difficulty in achieving a collective voice for civil society. Issues in this area are complex and there are not many simple messages for civil society to transmit. The groups involved have various perspectives and no single aim, which
also means that there are different metrics for success and failure. Transferring approaches from other areas that have a simpler message may be problematic.

*Diminishing role of UK civil society.* In the UK, the civil society groups associated with the BWC are generally not campaigning organisations. There is a strong link between active civil society groups in this area and universities. Operating within this environment is impacting civil society’s role and has an effect on metrics for success, which are shaped by academic priorities such as the current focus on publications that fit requirements of the Research Excellence Framework, and on achieving ‘impact’ in quite a narrowly conceived way. This includes demand for measurable outcomes that pushes academic work towards prioritisation of quick, concrete outcomes rather than those that reflect long-term sustainability and e.g. influence on behaviour over time. In general, there is a narrowing of opportunities for policy-oriented work by academics.

**CAPACITY / RESOURCING**

While there is a clear connection between capacity and resourcing and stumbling blocks, the extent of discussion at the workshop has meant that it’s worth covering these issues separately. The discussion on this topic related to various actors (including civil society, states parties, and the ISU); and to various factors – particularly time pressures, financial pressures, and the impact of multiple issues facing diplomats.

An overarching point is the need for sustainable resourcing, which may be very difficult to achieve, but some possibilities are picked up under points on funding in Section 2 (p.21).

Generally, effective forward planning of activities within and beyond the formal Convention processes requires additional funds and resources. Some more specific issues discussed include:
The Implementation Support Unit

- Given adequate resourcing, there is a lot more that the ISU could be doing. Its present levels of personnel and funding are not viewed as sufficient for its current mandate; any extension to its mandate needs to address this issue.
- At the time of the workshop, funding for the ISU staff through 2017 had not been secured – this is now in place until the end of the year. The future situation is still unstable, even if the ISU stays at its current staffing levels.

Civil society

- There is limited civil society and NGO activity and presence in Geneva, for disarmament in general as well as specific to the BWC. There are some signs that this is growing with, for example, the Geneva Disarmament Platform, but more funding is needed. There is also a lack of funding to support the role of BW civil society in the UK.
- As well as improvement to its funding situation, civil society capacity could be enhanced through greater coordination and there are efforts underway to work out how to build a stronger collective focus going forward.

Industry

- Industry could play a useful role in support of the Convention, but much of industry is either not very enthusiastic about or resistant to the idea. There are some exceptions, with the example given of the work of Desktop Genetics and Biosecure looking at science-security community links in the United States and what might be done in the UK.
OPPORTUNITIES

There is a lot that can be done both within and outside the formal BWC processes, and there are positive indications that many states parties are interested in continuing actions to support the Convention – for example in the level of interest in the EU programme to assist national implementation, and in the final statements delivered at the Eighth Review Conference.

In the scenarios where the outcome of the 2017 MSP is ‘more of the same’ or ‘nothing until 2021’ (see Appendix 1), this potentially opens up additional freedom of action, including to imagine different futures for the Convention. For example, if no ISP is agreed, but a series of MSPs remains, working papers might be submitted on any topic, unconstrained by an ISP agenda.

Civil society does not need to be limited by developments in the formal BWC processes. It can work in parallel and with shared objectives, but take different paths going forward. Civil society has historically not played an advocacy role in this area – this could change.

Through broadening engagement with other actors, civil society may reduce the dominance of academic actors and the constraints associated with their usual sources of funding.

Because Article VII was one area of the Final Declaration in which language was updated, there are likely to be particular opportunities in this area.

INSIDE / OUTSIDE (BOUNDARIES AND BALANCE)

One of the questions participants were asked to reflect on was whether there should be a more realistic expectation of the extent to which effective action can be achieved through formal processes, and how progress might instead be made through a shift to more activity ‘outside’ of the formal BWC arena.\(^1\) It is recognised that care is needed not to diminish the core value of the BWC as such a shift takes place.
This topic was returned to at several points during the workshop. It does appear likely that such a shift will take place (and while this was likely to happen anyway, it will probably gain further impetus if no new ISP is agreed in December). For many activities, the boundaries between ‘inside’ and ‘outside’ are unclear, and it may not be useful to make a strong distinction between the two. One suggested boundary was that ‘inside’ activities are those that are officially mandated and / or endorsed (although this still leaves the status of some activities, such as regional meetings supported by the European Union and run by the ISU, unclear). The distinction does not directly relate to value of activities, there may be activities that are formally endorsed but have lower value in furthering the object and purpose of the Convention than those undertaken in the outside space.

Some concerns were raised about the implications that such a shift might have, and this appears to be an area in which further exploration is warranted, for example investigating the potential advantages and disadvantages of ‘out-sourcing’ certain activities. It was also noted that power relations and their impact on prioritisation and agenda-setting can sometimes be opaque in activities in the outside space.

There is wide agreement that there are separate and complementary things that can and are being done in both spaces, and an appreciation that some activities outside the Convention can contribute things that the Convention can’t. To some extent there is a continuation of a historical mix of activities with the shared objective of supporting the Convention. The outside space has grown over time, and is likely to expand further. Within these spaces, a number of actors (states, regional organisations, international organisations, science academies, civil society, etc.) usefully play different roles. The different weight, meaning, authority and validity associated with these actors and their activities was identified as an area requiring further consideration.
The area of science and technology (S&T) review is one in which there is already work on-going outside (and feeding into) formal processes – for example in the work of science academies on implications of S&T advances⁴. These activities are likely to continue and may expand, but it is still important that the formal processes improve their consideration of these issues – both as a key task that review conferences should undertake, and for which technical expertise can be drawn on at more regular intervals. While, arguably, the most important thing is that this work is going on somewhere, maintaining a strong link to formal processes is of high value. If we face a situation where there is only a short annual MSP through to 2021, there is still the opportunity for working papers to be put forward, which can have value even if there is little opportunity to discuss them, for example by facilitating access to information for states parties that lack capacity to do extensive work tracking S&T developments themselves.

Even in the situation where many activities shift to the outside space, achieving expansion of the ISU will be necessary to effectively support the Convention going forward. Until ISU resourcing changes, we have to get there by other means.

Several international organisations undertake activities that support the Convention’s aims in ways that might have been part of the role of an Organisation for the Prohibition of Biological Weapons (including the 1540 Committee⁵, the World Health Organization, World Animal Health Organization, Interpol, etc.). One of the major missing elements from this is S&T review, where perhaps the United Nations Educational, Scientific and Cultural Organization (UNESCO) could have played a role.

⁵ UN Security Council Resolution 1540(2004) – extended in time by several subsequent resolutions – obliges states “to refrain from supporting by any means non-State actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological weapons and their delivery systems” (http://www.un.org/en/sc/1540/). Responsibilities of the 1540 Committee (of the UN Security Council) include reviewing and reporting on its implementation, and acting as a clearing house and facilitating technical assistance.
Operationally, this aspect has been picked up to an extent by the European Union and science academies, however their work doesn’t necessarily have the same weight that work led by an international organisation might. In the situation in which a significant proportion of activities are taken up by other international organisations, this could reduce incentives for states’ engagement with BWC processes.

**DISAPPOINTMENT, NOT DISASTER?**

Generally, official statements about the outcome of the Eighth Review Conference have taken the line that it was a disappointment, rather than a disaster. There is value to adopting this perspective – overstating potential damage to the Convention may dis-incentivise future efforts to achieve progress, and further diminish the perceived relevance of its formal processes. There is also a risk associated with understating the seriousness of the situation, and civil society in particular may choose not to ‘paper over the cracks’, particularly if the most minimal outcome is achieved at the 2017 MSP.

It is not clear whether states parties will be prepared to act to ensure that a similar outcome will not occur again, e.g. at the 2021 Review Conference, for example by voting to overcome blocking behaviour (this will partly depend on whether states parties believe that efforts at consensus have been exhausted). It is also not clear whether states parties will be prepared to put such constructive efforts into preparing for future review conferences, given the lack of progress achieved despite substantial preparatory work in 2016.

Whether or not the outcome of the Eighth Review Conference should be considered to be more serious than a disappointment, will partly depend on what can be achieved anyway and the extent to which it matters where it is done (which connects closely to the inside/outside discussion summarised above). While the norm against BW appears robust, there are grounds for concern about major shortcomings in the international system for dealing with deliberate disease threats,
particularly while there are continuing deficiencies in our ability to incorporate up-to-date information on BW threats and vulnerabilities.

It’s useful when considering this topic to place the Eighth Review Conference into broader context. There are positive indicators that states continue to place value on the Convention, but there are other indicators that certain aspects of the formal processes are perceived to have diminishing returns for states parties because a substantive shift to concrete practical actions has not been achieved.

SECTION 2: ACTIONS

A lot of ideas emerged at very different levels and time-scales and for many different types of action. Many of the ideas presented require further work. Some of them are specific or more suited to particular actors; others can be worked on collaboratively by like-minded states, civil society, science and technology communities, and other groups. The scope of what is achievable depends heavily on availability of funds to support such actions.

To make the most of the opportunities provided by updating of the language on Article VII in the Final Declaration of the Eighth Review Conference, it makes sense to understand where developing countries are looking for help. Linking up with groups working on Sustainable Development Goal 3\(^6\) (Good Health and Well-being) could be beneficial – it contains some similar wording to the Final Declaration. More broadly, building connections with groups such as the Global Health Security Initiative could be helpful.

Work on education and training initiatives is most likely to remain concentrated in civil society (for example building on work by Bradford) but with its

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value recognised by states parties\(^7\). The scientific community might lead on further work on codes of conduct, supported by civil society and like-minded states, to get principles agreed going forward\(^8\). In both cases, there is potential to feed into meetings of states parties, for example through national working papers and statements, and possible side events.

Serious work on S&T review will be going on, including work led by the National Academies and the Royal Society, and in European Union funded regional meetings. These activities can also feed reports into MSPs, and there is strong potential for such activities to continue over the next few years.

To inform thinking on what can be achieved, there will be value to further exploration of what it is that states parties want from science and technology review. There was widespread support for strengthening S&T review (with a link to Article X), more so than for any other proposal. There were some differences around the composition of the advisory process, but compromise appeared possible on these. But it isn’t clear what it was that brought in this broad support, and how much states’ motivations might vary, and there wasn’t much discussion on what the processes would cover, what would be useful from it, etc.

**CIVIL SOCIETY FOCUSED ACTIONS**

Particularly in the ‘more of the same’ or ‘nothing until 2021’ scenarios, civil society may need to be more active and take leadership in some areas. In any scenario, there is still high value to civil society working with formal BWC processes, but the main focus of its efforts may shift.

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\(^7\) For example, see BWC/CONF.VIII/WP.10 - *Working Paper 10* from Ukraine and the United Kingdom “Awareness-raising, education, outreach: examples of best practice”.

\(^8\) Building, for example, on BWC/CONF.VIII/WP.30 - *Working Paper 30* from China and Pakistan “Proposal for the Development of a Model Code of Conduct for Biological Scientists under the Biological Weapons Convention”.
Work undertaken / led by civil society might, more specifically, include:

- Further developing shared aims and objectives to coalesce around.
- Engaging a younger generation of civil society actors, for example in the life science community, to help revitalise discussion and take messages back out. There is a positive example in the expanding engagement of iGEM teams.
- More generally broadening the base of civil society engagement in the area, for example by linking up with communities engaged in related areas (such as the sustainable development goals, biodiversity, antimicrobial resistance, biodefense, global health security).
- Establishing productive routes to raising public awareness enough to influence policy agendas.
- Further investigation of the landscape of projects relating to different articles of the Convention, and the roles and activities of various actors (including international organisations, states and regional organisations, science and technology communities, and civil society groups), to establish what tasks need doing, and what is and isn’t being done at present.
- Working out how to effectively understand, evaluate and capture the value of civil society activities. Particularly to get a sense of the relative value of different activities and the most productive routes for feeding back into formal processes.
- Investigating how more severe or complex scenarios than a one-time attack might impact the scope of activities needed in support of the Convention, e.g. capacities needed for effective implementation of Article VII. This should fit within the context of broader work – drawing on local knowledge, and expertise in fields such as public health field – to increase understanding of what does and doesn’t work in terms of responses to disease outbreaks, and how this shapes our vulnerabilities to BW threats. (A recent call for proposals by the Open Philanthropy Foundation includes these sorts of activities.)
This work should be informed by further consideration of whether and which activities have the same weight or meaning when conducted inside or outside formal BWC processes. And it will be helpful to produce a guide for practical action by a coalition of the willing (states parties, ISU, academia, industry) as an outcome at some point, particularly to identify what civil society could usefully do in practical terms from this point forward.

Civil society could also undertake some form of report card type analysis. This should be done with state party engagement (for example in fact-checking), to avoid some of the shortcomings of previous initiatives. It would not be done as a naming and shaming activity, but would, for example, pick up on un-actioned points from the intersessional process. This work would be supported by development of indicators and metrics of success, and developing ways of automating some elements of such analysis would be useful. Similar work might be done to follow up on ideas presented by civil society and states parties in the lead up to the Eighth Review Conference and whether these are being carried forward. (The way that metrics, goals and indicators are used for the SDGs might provide a useful example for how things might be done in a more practical way for the BWC.)

Work began in the lead up to the Eighth Review Conference on considering whether there is a different role civil society might play (for example by moving toward a more advocacy based role), and what might be learnt from activities in other disarmament regimes. Further work is needed on this over the next few years. In whatever future form it takes, civil society should continue to be an active part of the solution, and to have impact through e.g. the policy papers and recommendations it produces.

**PROFILE-RAISING AND BROADENING AND SUSTAINING ENGAGEMENT**

Action is needed to raise the profile of BWC-related issues. For the purpose of broadening engagement over the longer-term, civil society should explore increased use of social media. Suggestions included developing a YouTube channel
with a range of experts on bio-weapons issues, posting every couple of weeks; and moving beyond poisons and diseases, to engage with more sci-fi stuff. Existing websites of civil society groups could also take a more outward looking focus. There is scope for enhanced engagement of industry too.

Efforts that provide a more coherent view to world leaders of the connections between global health security and disarmament should also have value in this area.

There are also various means that might be explored for more sustained engagement and to address the ‘compartmentalisation’ problem (see p.10), for example by sensitising politicians and diplomats on a rolling basis. This is something the ISU can play a key role in, if adequately resourced. Civil society can also play an important role in supporting smaller delegations, providing back up and resources to encourage engagement and addressing some of the problems associated with multi-issue overload.

Another area in which action should be taken to broaden engagement is in building connections with and helping to foster more civil society discussion and activities, and academic inquiry, in other countries. This might, for example, draw on Commonwealth connections. Again, there is useful associated research to be done in order to identify what is being done elsewhere and how this is influencing roles and approaches and policy in relation to the BWC.

**FUNDING**

Attaining funding for some of these activities and the groups and organisations that undertake them is vital. As well as civil society needing to secure funding for its own activities, it can play a key role in bringing attention to resourcing needs of other actors (as it is currently doing in relation to the ISU and 2017 MSP).
Development of positive metrics to provide evidence of impact will be a useful supporting mechanism for efforts to acquire future funding. Work on this might include producing a guide on metrics and outcomes to aim for with long-term sustainable impacts.

Potential new sources of funding might come from the move of the Open Philanthropy Foundation into biological risks and biosecurity issues; the Global Challenges Foundation’s prize scheme for governance of global catastrophic risks; the Gates Foundation’s potential interest in preventing misuse of the life sciences; and – at the very ambitious end of the scale – the MacArthur Foundation’s 100&Change scheme ($100 million grants). It may also be worth engaging with the development of UK Research and Innovation (which is replacing the current structure of seven research councils in 2018).

One idea for larger scale funding that was discussed was an annual conference / series of workshops that might take up some of the work done by meetings of experts. If this idea is pursued it was argued that this would need to be done with care to make sure that (a) it could actually achieve something concrete (which might include, for example, making progress on Article VII) and sustainable, and (b) it doesn’t get seen as a replacement that could undermine meetings of experts within Convention processes.
CONCLUDING REMARKS

While collectively groups represented at the workshop will put effort into achieving the best possible outcome from the 2017 MSP, given the limited chances of success there, work that generally supports preparations and improves the climate for progress at the 2021 Review Conference should take higher priority, in terms of attention and resources, particularly for civil society.

If the 2017 MSP fails to agree a more effective intersessional process, this may create further space and freedom for activities (broadly conceived as ‘outside’ the Convention’s formal processes) over the next few years.

While there is a lot that can be done outside of formal processes to further the object and purpose of the Convention – as indicated in the actions outlined in Section 2 – funding is an embedded problem in sustainability of many processes and activities, and this affects all actors involved. In any scenario, achievement of sustainable resourcing is essential to ensuring real progress on effective action.
APPENDIX 1 – SCENARIOS

Three main scenarios – and the way in which they might shape the role of civil society – informed much of the workshop discussion, and are based on the outcome that might be achieved at the 2017 MSP:

1. **Positive outcome.** A more effective intersessional process is agreed and funded. Civil society will have a role in supporting this new process, for example through advocacy activities, support for small delegations, convening expertise, and developing policy recommendations.

2. ‘**More of the same**’ outcome. An intersessional process is agreed that is very much the same as the previous ISPs. Civil society will probably still provide some support to this process, but it is unlikely to be a priority in terms of achieving objectives, and focus is likely to shift to other approaches and routes to impact.

3. **Nothing through to 2021 outcome.** This includes situations in which there is agreement only to hold annual MSPs on a simple technical basis, or no decision is achieved. Civil society will probably be far more active through different forums and with a strong practical focus e.g. on tools and training, and campaigning on national policy.

It was suggested that we should also consider the impact on all of these scenarios if civil society’s scope for action is reduced because of problems with resourcing.

In the context of the ‘nothing through to 2021’ outcome, and the space and freedom this might give to imagine different futures for the BWC, there was some discussion of whether the topic of verification might be picked up. It was felt that this might be possible, in a different form, and using a broader understanding which includes activities such as compliance assessment, industry standardisation processes and
other aspects of the broader global regulatory environment, as well as ideas of ‘verification from below’ that, for example, utilise advances in microbial forensics to improve diagnosis, investigation and attribution.

Work can be done to further elaborate scenarios for the next few years and explore how these relate to various options for action mentioned in Section 2.
### Appendix 2: List of Participants

<table>
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