

## **SUSTAINING PROGRESS IN THE LIFE SCIENCES: Strategies for Managing Dual Use Research of Concern**

Remarks by Ambassador Georgi Avramchev  
Chairman of the 2008 Meetings of the Biological Weapons Convention

Distinguished delegates, ladies and gentlemen,

Biology is booming. Biotechnology is advancing at an unprecedented rate, and beginning to find applications that have a direct impact on the way we all live our lives. Biology offers us benefits for health, agriculture, industry, manufacturing, and the environment. We cannot afford to see progress in these fields impeded. Biotechnology capacity must continue to spread around the globe, and its benefits must be widely shared. The challenge that confronts us now is how best to ensure that these powerful new capabilities yield as many benefits as possible, while minimizing their potential for malign use.

These do not have to be mutually exclusive aims. The scientific community increasingly, and willingly, engages with efforts to look at the implications of its work. Scientists have a clear interest in ensuring they are perceived as part of the solution and not part of the problem. Experiences with genetically modified organisms, stem cell research and cloning all tell a cautionary tale about what happens when science becomes disjointed from policy and the societies in which it is practised. On the other hand, issues such as animal testing, the use of human subjects, and efforts to address the environment all show the clear benefits of a symbiotic relationship between scientific development and managed societal impact.

It is the active involvement of stakeholders that will make or break efforts to prevent biology being used for malign purposes. The scientific community must take the lead if we are to ensure that we address this issue effectively. But neither is it an area that the policy-making community can afford to ignore. We must develop oversight frameworks for safety and security that will provide firm foundations for collective and collaborative work in the biological sciences. Working together we can develop the culture of scientific responsibility and best practice so that it explicitly addresses the potential for malign use. We can develop robust regimes that allow us to feel confident that biological resources are being used responsibly, while allowing scientists to retain the necessary freedoms to pursue cutting-edge research, develop commercial applications, and continue to drive progress. This will not be an easy task.

It is, however, a task that the Biological Weapons Convention has already had some success in pursuing. The BWC benefits from being the natural home for such an effort. Created to ensure that the life sciences are used only for the benefit of humanity, it sits at the nexus between science and security. It matches prohibitions (ensuring that the life sciences are not used for malign purposes) against protections for scientific freedom (enshrining the right to conduct scientific activities for peaceful purposes).

Negotiated over 35 years ago, the BWC is an elegant and concise piece of international law which has largely succeeded in establishing a global norm against the development, acquisition or use of biological weapons. Today, no government would claim that biological weapons could ever play a legitimate role in national defence. This norm underpins all

successive efforts – both under the Convention and in other forums – to prevent and prohibit the acquisition or use of biological resources for malign purposes by groups or individuals.

The background information provided for this meeting highlights some of the more important ways in which strategies to manage dual-use resources are connected to the Convention. The aims and objectives of the BWC are closely linked to the purpose of this meeting, the work of the NSABB, and associated efforts of the World Health Organization. I know that many of you have already contributed to meetings of the BWC, and I hope that this meeting marks a new, closer working relationship between the Convention and all of you here today.

The BWC is an international legal instrument, and its terms are legally binding. Its 162 member states are legally bound to enact national measures to implement its provisions domestically. This requirement has been developed and elaborated by the six successive review conferences, so that member states are called upon to develop regulatory regimes to translate legislation into effective action. Such action includes safety and security regimes to ensure that the public, plants, animals and the environment are protected from accidental or deliberate misuse; national export and import controls for relevant resources; and commitments for education, awareness raising and outreach activities with key stakeholder communities such as biological scientists, engineers and the private sector.

But the Convention is more than a static piece of international law. It is a dynamic process, one that is owned collectively and that is continually evolving to best fit the needs of its stakeholders. It is very different from many parallel security arrangements – not only does its format make it much more flexible but its focus on stakeholder ownership has created an atmosphere of practical and constructive collaboration. In recent years it has increasingly focused on supplementing top-down regulatory approaches with community-building, bottom-up, stakeholder-based activities.

The BWC process is built around its review conferences. These happen every five years and provide an opportunity to assess how well the BWC meets the needs of international peace and security. An important part of this process is to review scientific and technological developments for their relevance to the Convention. Such horizon scanning efforts never stop. The BWC Implementation Support Unit consistently looks out for issues that might usefully be brought to the attention of member states, and regularly posts updates on its website. Through their working papers and statements, it is also clear that member states are constantly monitoring such issues.

These review conferences also set the course for the treaty. At present, the BWC is engaged in an intersessional process that provides for annual meetings – both at the expert level and at the diplomatic level. These meetings promote common understanding and effective action on a range of issues identified as being critical for improving how international obligations to prevent biological weapons are translated into effective national action. The meetings have proved highly successful in bridging gaps between the viewpoints of stakeholders and in identifying areas in which it is possible to move forward – even as other disarmament and non-proliferation processes have faltered.

The topics of the current intersessional process almost all relate directly to this meeting. Last year the BWC looked at national legal frameworks designed to prevent, interdict and punish those who use biology for malign ends. It also worked on building greater regional cooperation and coordination on these issues. This year, we are looking at biosafety and

biosecurity provisions, as well as at the oversight of science and related outreach activities. Next year we will turn our attention to building capacity around the world to deal with biological risks and threats. In 2010 we will be looking at what would happen if all other efforts fail and a biological weapon is actually used. All of these issues are critical to sustaining progress in the life sciences.

The BWC is increasingly drawing upon the very best international expertise irrespective of affiliation or geographic location. This has allowed our meetings to generate unparalleled collections of information, ideas and other resources. The BWC has learnt from its stakeholders: it uses tools more common in scientific workshops than at diplomatic meetings, such as dedicated poster sessions, to improve exchange and dialogue amongst participants. It has adopted approaches more familiar in senate hearings than disarmament treaties, such as expert discussion panels, to ensure that issues are explored fully and every benefit is extracted from expert participation. And it has used modern information technology, such as its secure website, to ensure that information is as freely available as possible, as accessible as is practical, and as safe and secure as needed.

The BWC does not cease to function between its meetings. Member states have nominated national contacts, and parallel focal points have been identified in international and regional organisations, professional and scientific bodies, academia, industry and other stakeholders. The BWC has brought together a real community of those interested in preventing the malign use of biology. The strength of the re-invigorated BWC comes from this network: it provides flexibility, durability and robustness while being resource-effective, dynamic and multilayered. This community takes part in numerous interconnected processes, meetings and discussions throughout the year. Some of these are tied directly to the BWC; others are more removed. Through this community network, however, all are brought into the process.

To build cohesion and to facilitate cooperation among members of the network, throughout the year the Implementation Support Unit coordinates communication between stakeholders and ensures that all have access to the most up-to-date information. The Unit's website ([www.unog.ch/bwc](http://www.unog.ch/bwc)) has become a central gateway for all those interested in ensuring that biology is not used for malign purposes. It offers access to information and resources across the full scope of issues connected to both the Convention and to this meeting. On the website, you can also find additional information about the Convention, its meetings and the activities of member states. I would encourage you all to check this resource regularly as it is constantly being updated.

What we have learnt through this process is that neither the BWC nor any other process or initiative can, by itself, hope to address the threats to global security posed by biological weapons. Although the BWC is a key forum on these issues, it works closely in concert with parallel international processes, regional initiatives, and national activities. Meetings, such as yours, perform a crucial role. They are an integral part of collective efforts to ensure that the life sciences are used solely for the benefit of humanity. I hope that after today, we can count on all of you as active members of our network, and I look forward to working with you again in the future.

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