BWC 2006: Building Transparency Through Confidence Building Measures

Nicolas Isla and Iris Hunger

Transparency is an integral component of arms control. It can dispel concerns of noncompliance by reassuring actors that others are not misusing technologies or goods for hostile purposes. It can also deter actors from engaging in banned activities for fear that their activities will be exposed. In biological arms control, transparency is of pronounced importance because dual-use material, equipment, and knowledge are extensively embedded in contemporary biotechnology.

The potential for the abuse of these technologies increases each year as they become more advanced and diffuse. As the Department of State recently reported, "[T]he fact that biotechnology equipment and materials can be used interchangeably for peaceful or nefarious purposes, and the ease and speed by which illegal activities can be concealed make verification of compliance with the [Biological Weapons Convention (BWC)] an especially difficult challenge."[1]

Although identifying illicit biological activities is difficult, a good starting point for building confidence in compliance is to increase transparency. Biological activities in a country must be open to other states-parties, particularly those activities that have a higher potential for misuse such as those conducted as part of a national biodefense program. This is an issue that has been promoted most recently by UN Secretary-General Kofi Annan.[2]

Currently, the only instrument under the BWC intended to enhance transparency is the confidence-building measure regime. This takes the form of an information exchange system covering themes relevant to biological arms control. Unfortunately, these confidence-building measures (CBMs) have done little to increase transparency since their inception 19 years ago. Few states have consistently participated, and many of those that have participated sporadically have also provided inadequate information.

Given the unsuccessful end of the Ad Hoc Group negotiations in 2001, which would have led, among other things, to a mandatory declaration system as part of the BWC, it is critically important to bolster the current mechanism. When states-parties gather for the BWC's sixth review conference at the end of this year, they need to take steps to enhance these measures and thus provide genuine support for the biological weapons ban itself.

CBMs: Past Performance

The purpose of the CBM regime is "to prevent or reduce the occurrence of ambiguities, doubts and suspicions."[3] These declarations are intended to serve the same purpose as those successfully implemented into other international treaties such as the Chemical Weapons Convention. As part of the BWC, CBMs were first agreed on at the second review conference in 1986[4] and were further expanded at the third review conference in 1991. This expansion provided the current form: seven declarations to be submitted annually before April 15.

Annual CBM submission is a political obligation, and failing to do so brings a country into technical noncompliance with the BWC.

A truly transparent environment can emerge only when there is universal participation by all actors. More than 40 percent of the member states, however, have never submitted a declaration, and the majority that have submitted did so on an irregular basis. Submissions between 1987 to 2005 were provided by only eight countries: Canada, Finland, Germany, the Netherlands, Norway, Russia, Spain, and the United States. The highest degree of participation occurred in 1996 when 53 countries submitted. This was followed by a downward trend to a low of 33 participating countries in 2003. To name just a few surprising examples: India participated only in 1997; Iran provided CBMs only in 1998, 1999 and 2002; Sweden failed to submit CBMs in 2002 and 2003; and the United Kingdom did not submit in 2001.

The mechanism is further weakened by the low quality of data, which is often incomplete, inaccurate, and at times misleading. Even those countries that have long been active proponents of the BWC are not putting much effort in submitting high-quality CBMs. For example, Italy declared a number of vaccine production sites but failed to name the diseases against which the vaccines were made, a requirement of the CBM. Spain's CBMs failed to mention the budget allocated to biodefense facilities.[5] And submissions on past bio weapons programs have often been lacking in critical detail, negligent of information requested, inconsistent at times with information presented in open sources, and often submitted only once with no effort at an update in subsequent years.

Improvements Needed

Clearly, improvements need to be discussed at the sixth review conference or later during a focused meeting on the future of CBMs. The declarations need to be altered to make their topics more relevant and to provide better data for analysis. Other steps should include ensuring CBMs are submitted on time; improving the accessability, verifiability, and the ease of use of submitted data; and ensuring that the CBMs remain relevant in a changing technological and political environment.

Some states-parties have argued that before revising the CBMs, more efforts should be made to increase participation in the current CBM system. Clearly, however, a vicious cycle is currently in place in which limited participation diminishes confidence in the CBM mechanism and impairs the quality of submissions. Therefore, participation in the CBM process and the quality of submissions are only likely to improve in unison.

Form Reform

The relevance of individual CBM topics has always been a matter of discussion. The addition of new topics was last discussed at the fifth review conference[6] in 2001, although broader political problems prevented any modifications from being adopted. Nevertheless, several new topics were proposed, including requesting information on plant inoculants and biocontrol-agent production sites, more information on research with animal pathogens, details on animal and plant disease outbreaks of concern, and lists of animal vaccine production sites.

Furthermore, there are a number of activities, such as aerosol generation and aerosol particle behavior studies, that are extremely relevant to biological arms control and not accommodated

by the current CBM topics. More comprehensive reporting on biotechnologies with a high potential for misuse is needed, regardless of whether they are undertaken as part of a national biodefense program. Other additions could include the incorporation of questions pertaining to codes of conduct for scientists and the future implementation of any export/import monitoring.

To focus the declarations on the most relevant issues, the elimination of particular topics also needs to be considered. During interviews conducted in December 2005, one Western European and Other Group (WEOG) country suggested that declarations of past offensive or defensive biological research and development programs are superfluous given that all of the activities declared should have been discontinued by now and will not help build current transparency.

Another WEOG government suggested ending the declaration of civilian vaccine production facilities because there are a number of other equally relevant processes that could indicate biological weapons capacity, including animal vaccine facilities and military vaccination programs. Most other states-parties, however, indicated that they would not favor the elimination of any topics because they are all relevant in building a comprehensive image of biological weapons potential in a country. Deletion of a particular topic should only be considered if this does not lead to a loss in comprehensiveness of the declared data. One possibility for deletion would be the declaration of annual case numbers of reportable diseases. Disease outbreak data is collected by the World Health Organization and need not also be requested in the CBMs.

For each form, the ability of the requested data to provide a comprehensive view of the topic in question should be assessed. This would highlight where superfluous information could be removed and where gaps in information need to be filled. In Form F, for example, details on organisms and facilities involved in the past biological weapons programs are not explicitly requested. Form structure and wording should be easily interpretable and serve as a guide for compiling the CBMs. Any confusion or ambiguities must be eliminated to facilitate submissions. For example, in one form the total number of staff workers at a biodefense facility is requested. The form subsequently asks for the number of contractor staff. It is not clear whether the total number of staff should be inclusive of contractor staff or not. States have interpreted these two questions differently in the past.

In terms of format, states-parties have suggested that it would be beneficial to simplify the forms in order for them to be more easily compiled. Such an attempt was already made with the addition of Form 0, which allows states to simply tick a box indicating for each of the other forms whether there is either “nothing to report” or “nothing new to report.” Further use of tick boxes could allow greater detail to be provided without adding undue burdens and would facilitate any consolidation of data for analytical purposes. Although the replacement of narratives with tick boxes risks “sterilizing” the CBMs and removing any incentive to put thought into the answer or volunteer information, forms should be reviewed with an effort to make them more logical and easier to compile, facilitating comparison and analysis.

CBM Process Reform: International Level

At the moment, the United Nations is mandated only to collect the CBM declarations, copy them, bind them, and return them to member states. No further processing, analyzing, or translation occurs. A number of reforms to this process could improve the usability, verifiability, and accessibility of the CBMs, thereby enhancing participation. The first reform

is to bring CBM submission and distribution into the digital age. Currently, all CBM data is still handled in paper form, including distribution, with more than 1,000 pages per year. Digitizing this process from start to finish would reduce costs and facilitate compilation, submission, and distribution. It may be an assumption that all government ministries and staff have access to computers. Most nations, however, would likely find digitizing the CBMs a welcome change. Ultimately, not every country needs to submit and receive digitally, but countries should be given the option to do so. The United Nations might shoulder the modest cost of scanning submissions that are made in paper form.

A next step from digitizing CBM submissions would be to create a central database where CBMs could be posted on the internet, thus maximizing their accessibility and making them available to a much wider audience. This would also allow studies by independent research organizations. Three countries have already posted this information, including the United States in 2004.[7] Yet, although much of the information contained in the CBMs is already publicly available through open sources, many states seem reluctant to publish their CBMs so widely. Several states-parties have expressed concern that this step would make the CBMs available to nonmember states and potentially terrorists. Furthermore, the knowledge that the CBMs could be scrutinized by many readers might have negative repercussions and discourage countries from participating. One possible compromise would be to provide a password-protected secure website with access limited to member states.

Translating CBMs would also make them more accessible to states-parties, allowing them to make use of all CBMs regardless of their origin. The main concern is naturally the cost. To make this a politically justifiable act, the CBMs would have to be translated into all six official UN languages, thus carrying a heavy price tag. States should at least be encouraged, where possible, to submit their CBMs in multiple UN languages. China submitted CBMs in Chinese and English at the beginning of the CBM process but has since stopped.

The most demanding CBM reform and therefore the one with the least consensus among states-parties is analysis. As a principle, there is no agreement among member states on a possible mandate of the United Nations for analyzing the CBMs. Several states-parties favored a neutral role for the United Nations and preferred that it refrain from engaging in any analysis that might reflect badly on any particular state. Furthermore, countries should be undertaking their own analysis and are most likely interested in different aspects of the CBMs, making a UN examination costly while providing little benefit. On the other hand, a significant number of states-parties favored a preliminary analysis by the United Nations. This could make the CBMs more accessible, identify misleading information, and demonstrate the usefulness of building transparency in countries that rarely participate and often do not even look at the CBMs.

Greater transparency in the system would be achieved if an analysis took place. Naturally, different degrees of analysis are possible. The simplest could take the form of an annual participation list, in contrast to the current five-year interval. These could be further developed to include information on submission dates and participation over years as well as details on which topics the CBMs provided answers. A medium-level analysis could involve a summary of the submitted data such as the number of facilities with maximum containment (BSL4) laboratories per country or types of vaccines produced. A high-level analysis could take the form of a comparison of submitted information with other sources. The most exhaustive form of analysis could be on-site visits for verifying submitted data. Any analysis would, naturally, be cost dependent and subject to debate on the BWC floor. Nevertheless, implementing yearly participation lists to be included in the compendium should be less

difficult to achieve and would bolster interest in the CBMs. Furthermore, such a list, highlighting countries whose submissions have been consistent and timely, would provide an incentive to participate as it identifies "good performers." This is particularly relevant for countries that have been accused of having had biological weapons programs in the past and want to demonstrate compliance with the biological weapons prohibition.

In providing the United Nations with a mandate to evaluate the CBMs, such as suggested above, a small task force consisting of three to four staff members would be sufficient initially. It could collect, process, assemble, and disseminate the CBMs as well as ensure timely submissions by sending annual reminders. It could also be given the authority to inquire about technical omissions such as missing pages. With a mandate to promote technical compliance to the BWC, this task force could also identify non-norm behavior and issue lists of "good performers."

In an effort to clarify any ambiguities or inconsistencies in a submitted CBM, a low-level discussion forum should be established. Several states-parties, however, have warned that any formal or informal discussion on the accuracy of the CBMs would invariably result in finger-pointing and accusations. A solution could be to hold these talks over the internet, on a UN discussion board, so to speak.

CBM Process Reform: National Level

Clearly, there are disincentives and obstacles to participation in the CBM process; otherwise, more states would take part. There are three classes of states that do not participate: those who do not know how or have trouble compiling data, those who do not care, and those who do not want to report. Persuading the first two types of states to participate is a matter of removing obstacles and raising awareness.

First, states need to provide assistance to countries struggling with data collection. For countries with financial or organizational hardships, compiling data can be a substantial barrier; even some EU states indicated that they had difficulties with data collection. This help could take the form of a guide, such as that recently put out by Canada; international workshops; or an e-mail hotline. International partnerships could also be created to provide data collection tutoring in the struggling country or to host a team from the struggling country to observe data collection techniques in another country. This help could be based on historic alliances or regional groupings. Such technical cooperation should be a part of any country's action plan to improve the implementation of the BWC by the states-parties. The EU's recently adopted joint action is a good example where this type of assistance could be offered.

Second, some states have obviously lost faith in the CBM mechanism and do not feel the need to participate. Another possibility is that the country has never had a biological weapons program and feels its participation is unimportant. To ensure that such states participate, the issue needs to be reframed in terms of the importance of transparency in biological arms control and the need for universal participation. Although a reform of the CBMs will make them easier to compile and be of use for analytical purposes, it is also important that the states feel ownership over issues of biological weapons nonproliferation. The importance of all countries' participation must be consistently and frequently emphasized in order to enhance confidence in the regime itself.

Third, the small number of countries that do not want to report because they have something to hide will not be persuaded to participate by the suggested reforms. With greater

participation and higher quality submissions, however, these countries will stand out more clearly, allowing the international community to focus on other nonproliferation efforts.

Conclusion

In the late 1990s, most states regarded the CBM mechanism as a dying instrument because they expected a verification protocol to be concluded and implemented, complete with mandatory declarations. Given that the protocol was not agreed on, however, CBMs remain the only multilaterally agreed mechanism to increase transparency in the area of biological arms control.

As the only source of relevant information exchange, it is vital that the CBMs work as efficiently as possible. Their importance needs to be reaffirmed at this year's review conference, and the necessary reforms have to be agreed on and implemented. Only then can CBMs play a more efficient role as part of a larger system for preventing the proliferation, development, and use of biological weapons.

Nicolas Isla is a researcher at the Hamburg Center for Biological Arms Control at Hamburg University and Iris Hunger is the head of the Hamburg Center and the author of *Bioweapons Control in a Multipolar World* (2005) (in German).

ENDNOTES

1. Bureau for Verification, Compliance and Implementation, Department of State, "Verification and Compliance With International Prohibitions Relating to Biological Weapons," November 1, 2005.

2. "In Larger Freedom: Towards Development, Security and Human Rights for All: Report of the Secretary-General," A/59/2005, March 21, 2005.

3. "Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction: Final Document, Part II, Final Declaration," BWC/CONF.II/13/II, 1986, p. 6.

4. Ibid.

5. Data is drawn from two studies conducted by the authors. See Iris Hunger, Confidence *Building Needs Transparency: A Summary of Data Submitted Under the Bioweapons Convention's Confidence Building Measures 1987-2003* (Austin and Hamburg: The Sunshine Project, 2005). Nicolas Isla, "Transparency in Past Offensive Biological Programmes. An Analysis of Confidence Building Measures Form F. 1992-2003," Occasional Paper No. 1, Hamburg Centre for Biological Arms Control, June 2006.

6. “Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, Report of the Committee of the Whole,” BWC/CONF.V/COW/1 and Annex 1.

7. In addition, Australia has made available CBMs from 2002, 2004, and 2005. The United Kingdom provided CBMs from 2003 and 2004.