

Fighting the Proliferation of Biological Weapons: Beyond the BWC Protocol

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March 26, 2000 marked the twenty-fifth anniversary of the entry into force of the Biological and Toxin Weapons Convention (BWC). Although the BWC was an important step in post-war multilateral arms control, from the very beginning concerns existed about its effectiveness, particularly its lack of verification or enforcement measures. Those concerns were reinforced during the 1991 Gulf War when members of the international coalition against Iraq confronted an adversary that was known to have pursued a biological weapons (BW) programme.

Following the Gulf War, BWC states parties committed themselves to strengthening the agreement through negotiation of a legally binding protocol that would specify measures to bolster confidence in compliance with the BWC and enhance provisions to share information and technology for peaceful purposes. At the 1996 BWC Review Conference, states parties urged negotiators to conclude their work in time for any protocol to be considered at the next Review Conference, scheduled for 2001.

Will the negotiators meet the 2001 date? Will they agree to a protocol at all? What is the future of the international community's efforts to deal with the scourge of biological weapons?

The outlines of a protocol, but no guarantees

After five years of negotiation, the negotiators appear to have identified the basic elements of a potential protocol. They include:

- mandatory declarations of certain biological-related activities;
- investigations both of unusual outbreaks of disease and of facilities suspected of conducting activities in violation of the BWC;
- on-site visits of various kinds — e.g. clarification of declarations and provision of technical assistance in protocol implementation; and
- measures to promote information and technology sharing and co-operation for peaceful purposes.

While these elements are generally agreed, it remains uncertain that the negotiators will conclude a protocol by 2001 for two reasons. First, considerable disagreement exists on many of the specific details related to these elements, and it is not clear that all of these differences can be bridged.

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Second, even if agreement is achieved in Geneva, concern exists about whether some of the key players, including the United States, will support the resulting protocol.

Almost all of the elements of the potential protocol listed above are subject to disputes — some of them major. Among disagreements of greatest concern are those relating to:

- the future form and operation of biological-related export controls;
- the extent of commitments to sharing and co-operation for peaceful purposes;
- the purpose and effectiveness of certain kinds of visits and related activities;
- the level of detail of the information provided in declarations;
- the prospect for conducting clarification visits at undeclared sites; and
- procedures for initiating a challenge investigation at a facility or in the field.

These disputes might appear arcane. Many participants believe, however, that their outcomes will have a potentially profound impact on the way business is done under the protocol, and hence on its ultimate effectiveness as well as on the future success of the BWC more generally. The outcome of some of these disputes could also have a significant impact on the implementation of other arms control agreements, particularly the 1997 Chemical Weapons Convention (CWC).

The stakes involved in the outcome of these disagreements, therefore, are believed to be higher than they initially appear. Those perceived high stakes are the reason that key issues have remained unresolved for five years and why each side has clung tenaciously to its position. As the 2001 Review Conference comes closer, pressure is building to find some accommodation. While all parties in the negotiations feel that pressure, it does not yet appear to be sufficiently great to identify common ground acceptable to all sides or to promote the concessions needed to achieve mutually acceptable outcomes.

Even if the current disputes in Geneva are resolved, it is not clear that the resulting protocol will receive the support necessary to bring it into effect. Two problems are relevant in this regard. The first is political. The rejection of the Comprehensive Test Ban Treaty (CTBT) by the American Senate has generated concerns that with the American political system's current configuration, the United States will not support any new arms control agreement. Without American participation, any BWC protocol will surely fail, and some opposition to the protocol emerging in Geneva has already surfaced in the Senate. It would be futile to speculate, however, on the final posture of the United States toward a BWC protocol until after the November election. That vote could change the composition of the Senate or the party that controls the White House, or both. The first outcome is unlikely; the Senate balance following the election will probably be little different than it is today (and it is dubious that the Democrats will regain control). Nevertheless, even marginal changes could make a difference. After all, although the Republican Senate did not ratify the CTBT, it did support the CWC in 1997, albeit with some difficult conditions.

More important will be the outcome of the presidential election and the priority a new administration — Republican or Democrat — gives to fighting proliferation and promoting arms control. A Bush administration is not likely to determine whether it will support the outcome in Geneva without conducting a thorough review. A Gore administration may be more inclined to press the current process to a conclusion, but some modifications in its position should not be ruled out.

The second issue is more substantive than political and relates to whether the protocol as it is currently envisioned is appropriate for the world in which it will be applied. The biological sciences and biotechnology have been areas of incredibly rapid scientific and technological advances in

recent years, and, if anything, the pace of change is expected to accelerate. The five years since the beginning of the BWC protocol negotiations have witnessed a remarkable transformation in areas related to the BWC. It is not clear that the protocol adequately captures the dynamism that is the hallmark of today's biology and biotechnology. Rather, one could argue that the structure of the protocol is based on an approach more suitable for an earlier era.

There are several reasons for this view. First, the influence of the approach articulated in the CWC — especially regarding verification — is readily apparent in the draft BWC protocol. What is not so clear is whether that approach has been adequately modified to account for the major differences between activities in biology and biotechnology and those associated with chemistry and chemicals.

Second, many of the measures appear to reflect thinking shaped by the experience of discovering the illegal Soviet BW programme. For more than two decades, Moscow sponsored an illicit BW effort. It was the most extensive BW programme in history, involving dozens of facilities, thousands of people and billions of rubles. Much of the thinking that has shaped specific declaration and investigation procedures in the proposed protocol seems more attuned to dealing with that kind of programme than, say, the problems encountered by the inspectors of the United Nations Special Commission on Iraq (UNSCOM) in their efforts to account for Iraq's BW programme. Most people argue that Iraq's BW effort has been the dimension of Baghdad's pursuit of weapons of mass destruction that UNSCOM has accounted for with least success. How much the protocol is designed to deal with the kinds of problems UNSCOM confronted — which arguably are the most likely non-compliance challenges that would arise — is not clear.

Finally, the rapid changes in biotechnology could greatly affect how business related to biology is conducted, including the development and production of biological weapons. New scientific capabilities that will be seen in the next several years will shape new methods and practices far removed from those of today. If the measures in the BWC are too narrowly defined to focus on today's ways of doing business, will they be sufficiently flexible to be meaningful for tomorrow's?

These questions and concerns must be addressed satisfactorily before the BWC protocol will be endorsed, at least in the United States. If they are not, American Senate ratification of the protocol should not be expected.

If the protocol negotiations fall short, it is important to remember the difference between the talks on the BWC protocol and most other arms control negotiations. The BWC protocol is not designed to fill a void by adding an agreement that addresses a new problem. Rather, it is intended to strengthen an existing instrument of international policy. Therefore, even if the negotiations fail, the BWC will remain in place as a part of the tapestry of inter-related agreements that embody the international community's rejection of weapons of mass destruction.

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Following unsuccessful protocol negotiations, would the BWC have any credibility or utility? The protocol was believed necessary in the first place because the BWC was recognized to be a weak instrument that provided insufficient confidence that the international norm against biological weapons was being adequately maintained. In the wake of unsuccessful protocol negotiations, would the international community, through its actions and practice, discard the BWC? If that happened, would they try to do anything else to stop the spread of biological weapons?

It would be natural if states parties, which have expended considerable time, money and effort to conclude a protocol, became not only frustrated, but despairing about the international community's willingness or ability to do anything effective regarding BW proliferation. Disappointment

would be felt especially keenly by many countries that have invested heavily in arms control as the best means to combat BW proliferation. The letdown that would inevitably follow the collapse of the negotiations would probably make it difficult to mobilize further action in the short term.

The BW problem, however, will not go away. Action will still be required. Successful action will depend, to a great extent, on the leadership of the United States. Washington is the key player in the fight against BW proliferation, and has been long before it came to style itself “the world’s only superpower”. Many countries look to the United States to set the agenda, the tone and the sense of urgency with which the challenge will be attacked.

The United States will only be a successful leader, however, if it stresses co-operation with other countries. The willingness of states to work with Washington will depend in part on how they perceive the American commitment, including to biological weapon arms control. If the United States decides either at the time the final protocol draft is adopted or later that it cannot support the protocol, it must make intensive efforts to find alternative means to show that it is not “throwing in the towel”, turning its back on the rest of the international community, or downplaying the severity of the problem.

Even if Washington does accept a protocol concluded in Geneva, the United States must demonstrate to the rest of the world that much work remains to be done. That work relates not only to ensuring effective protocol implementation, but in a number of other areas as well.

The resulting challenge

With or without a BWC protocol, then, the international community will confront three major tasks in the period following the 2001 Review Conference. The key tasks include:

- sustaining the norm against BW proliferation;
- retaining arms control as a tool of policy; and
- bolstering capabilities to deter and defeat biological weapons.

Successfully meeting these tasks would serve to reduce the uncertainty and risks associated with BW proliferation to manageable levels. In achieving these goals, however, although the United States must take the lead, it will also require other countries committed to the fight against BW proliferation to foster substantial shifts in their perspective.

SHORING UP THE NORM

The norm against biological weapons will surely be strengthened if an effective protocol can be secured. But that result will be limited in time, so there should be no complacency about the need to continue to bolster the norm. Alternatively, the norm will be seen to have eroded if the protocol negotiations produce no result. People will raise questions about how seriously the international community — and the United States in particular if it is held responsible for the failure — views the problem of BW proliferation and how strongly it is committed to addressing that problem. In either case, then, a number of specific steps should be considered to continue to bolster the anti-BW norm.

First, the American political leadership should make clear to the international community the priority that combating BW proliferation will receive in Washington. In particular, the senior leadership must demonstrate that it is willing to invest political capital to get things done. This demonstration will address, at least in part, the view that an absence of American leadership during the protocol negotiations stemmed from lack of interest in the issue among senior American political leaders. Another view has suggested that the negotiations did not receive adequate attention in Washington because BW — at least the global proliferation dimension of the problem, in contrast to domestic bioterrorism — was never high enough on those leaders' list of priorities.

Washington will have to demonstrate its commitment through concrete action; anything else will be dismissed as empty rhetoric. Such action might focus on providing specific assistance packages to friends and allies in regions of BW proliferation concern to improve their defence capabilities, including detection and identification equipment, protective devices, and stocks of medical treatments. More money might also be committed for BW-related intelligence. The point is not so much the inherent value of any action taken, but that there is a commitment to action, leaving no doubt about the seriousness given to the fight against the spread of biological weapons.

A sense that the international community has lost interest or does not give the issue priority could encourage would-be proliferators to take further steps toward BW acquisition and utilization. States must work together, therefore, to insure that there will be a robust international response to BW proliferation, and in particular to violations of the BWC.

The historical record suggests that one should not be optimistic that a strong response to non-compliance would be forthcoming. Many states have been reluctant to take action unless evidence of violations meets very high standards of credibility. Few countries, for example, were convinced by American claims throughout the 1980s that the Soviet Union was not complying with the BWC. Even if they were concerned, they were unwilling to take any action because the evidence to support the American allegations was not deemed sufficient to provide incontrovertible proof of the charge.

Even if the evidence is convincing, governments will balance their response to the violation with other interests that may be in play. The Clinton administration, for example, has not pushed Moscow on resolving lingering issues related to the Soviet Union's violation of the BWC, apparently for fear that it could spark a backlash and jeopardize Russian co-operation deemed necessary for progress on other issues. Trade or other economic interests could also be affected — as appears to be the case for some countries in dealing with Iraq and Iran.

The international community must recognize, however, that whether and how it responds to the next instance of BW proliferation, particularly if that case involves BW use, could be the single most important factor in maintaining a strong norm against biological weapons. Failure to be clear about the gravity that is attached to BW proliferation and the certainty of a severe response should it occur will only promote the perception that engaging in such activities will be increasingly penalty-free. The attitude must be engendered, therefore, that any BW proliferation will provoke the strongest possible response from the international community. It will not be easy, however, to get members of the international community to think in such terms. But they must realize that not being prepared to act decisively in response to an instance of non-compliance could badly undermine future BW non-proliferation efforts.

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Another route for bolstering the norm against BW would be through a robust public information campaign. To ensure the success of a public effort, however, policy-makers must address two key issues. First, how much information should they be willing to provide publicly? The American government makes available only very limited amounts of information about BW proliferation, even regarding programmes in publicly identified countries of concern. Other governments provide even less. In some cases, appropriate information may not exist. In others, intelligence imperatives may constrain what can be said. Those are legitimate considerations; critical information that would endanger national security interests or valuable intelligence assets if made public must be kept secret. But the lack of detailed information makes it difficult to make a convincing case that helps mobilize effective responses. American government publications, for example, give virtually no specifics about the BW programme in Iran, yet American officials seem to expect that everyone will agree with the conclusion that Iran has a BW programme and support the policy steps that flow from that conclusion.

A second question is what balance should be drawn in public discussions between the global proliferation dimension of the problem and the domestic terrorism dimension? Concerned constituencies in the United States and abroad appear to see that balance differently. In particular, it appears that many governments — with some exceptions (such as France and Israel) — do not give the same emphasis to the threat of bioterrorism as does the United States. In the United States, it seems easier to capture attention of key audiences, including Congress, by focusing on the domestic threat rather than global BW proliferation. Even within the United States a discussion has emerged on whether the problem of bioterrorism, given the historical record and current technical and political realities, warrants current levels of investment and attention.

KEEPING ARMS CONTROL IN THE MIX

Particularly if the protocol negotiations produce no result, questions will inevitably be raised about the future credibility and utility of the BWC and the effectiveness of BW arms control. If governments want arms control to continue to make a contribution to the fight against BW proliferation, they would either have to seek a new agreement or find ways other than the protocol to bolster the BWC. The first option is politically unlikely on the heels of unsuccessful talks in Geneva. It would be surprising if any of the participants believed that the negotiation of any new agreement would produce a more positive result.

The remaining choice, then, would be to work with what is available and seek to strengthen the BWC in other areas. One area of emphasis could be the confidence-building measures (CBMs) that were approved at the 1986 and 1991 Review Conferences and which will remain on the books should the protocol negotiations fail. These measures require states parties to provide information regarding biological-related activities, including past offensive BW programmes, current biological defence activities and facilities at which that work is being conducted, unusual outbreaks of disease (to be reported to the World Health Organization), and facilities involved in human vaccine production, among others.

Some people might argue that any attempt to promote better implementation of the CBMs would be a waste of time. Because the measures are deemed politically rather than legally binding, only a relatively small number of countries have provided the information called for in the CBMs even once, let alone on an annual basis. Although the number of states parties participating in the CBMs has steadily increased, the generally poor performance suggests that, left to their own devices, states parties are unlikely to participate more than they have in the past.

The point, of course, is that states parties should not be left to their own devices, and concerned states must work together to promote better participation with existing CBMs. They might also consider promoting any new important CBMs that have been identified during the protocol negotiations as a candidate for adoption on a politically rather than legally binding basis. One suggestion, for example, is a declaration of significant outbreaks of disease that have been reported to human, animal or plant health organizations nationally, regionally or internationally.

Promoting existing or new CBMs, however, should be seen for what it is: a political effort to retain support for the BWC and increase transparency to build confidence among states parties. Even if efforts to foster more participation were successful, the information provided, while helpful, would be far from sufficient in terms of ensuring confidence in compliance with treaty commitments.

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Of course, this is not a problem if the protocol is concluded. Most of the important information now sought in the CBMs will be included in the mandatory declarations.

Even if the protocol is successfully concluded, however, the contribution of arms control to the fight against the spread of biological weapons must be kept in perspective. Arms control is not a panacea, and the provisions of the protocol will represent a modest improvement at best. That contribution could be even further circumscribed if attention to arms control becomes limited to those responsible for implementation of the BWC and the protocol.

One means to avoid this unhelpful limitation is to foster more consultation on BW issues in existing multilateral organizations. NATO's new emphasis on countering proliferation provides one mechanism for engaging in a focused discussion, especially through its new centre designed to promote more information exchange relating to weapons of mass destruction. The Senior Politico-Military Group on Proliferation and the Senior Defense Group on Proliferation could perhaps single out BW for special consideration. NATO's discussion could also be expanded to include other European states. NATO and Russia could have an exchange through the joint council established by the NATO-Russian Founding Act. The Organization for Security and Co-operation in Europe could expand the discussion still further, although the larger the forum, the more difficult it is to keep the discussion focused.

Outside Europe, the Organization for American States and the ASEAN Regional Forum could be encouraged to add an exchange on BW-related issues to their work. It may be difficult to get BW directly on their agendas, however, since few of the countries in either organization perceive a direct BW threat. A broader discussion of proliferation trends that included biological weapons, however, might be given more prominence.

The BWC identifies the UN Security Council as the ultimate mechanism for addressing instances of alleged non-compliance. Expecting the Security Council to play this role effectively in every situation is unrealistic given the political constraints under which it operates. The virtual certainty of a Soviet veto, for example, prevented the United States from asking the Security Council to address its concerns regarding Soviet non-compliance with the BWC throughout the 1980s. Differences among the permanent members regarding Iraq demonstrate how competing political interests can create Council gridlock.

Finding a means to overcome the constraints on effective Security Council action is an issue that transcends the BW problem. But some consideration should be given to exploiting those things the Security Council can do. One of those things is talk, and it might be beneficial for the Council to institutionalize an annual exchange on BW proliferation. This exchange could be a stand-alone exercise, but it is likely to be more palatable if it is cast as part of a broader annual review of the global proliferation situation.¹

ENHANCING NON-ARMS CONTROL MEASURES

As already argued, even if the Geneva negotiations prove successful, the arms control regime will not solve the BW problem on its own. Other tools of policy must also be brought to bear in the fight against BW proliferation. Doing so, however, may not be appealing to everyone. An emphasis on other necessary actions might be considered particularly American, because the United States has adopted an approach that views arms control and other tools of policy as mutually reinforcing. Other countries, however, including some countries in Europe, tend to see arms control and other policy tools as alternatives rather than as complementary measures. Recognizing the limitations of arms control and realizing the need for other action moves them toward options that are distinctly less preferable, including investing already limited resources to purchase more equipment and taking steps to enhance their anti-BW capabilities, entailing perhaps even counterforce options. To the extent that the United States believes it would have to emphasize other capabilities, tensions between Washington and other countries may emerge.

One set of non-arms control tools that could be promoted are legal measures, including criminalization in domestic legislation of activities prohibited by the BWC. The United States and some other countries have already done so. Some states parties to the BWC have been reluctant to make a commitment to passing such legislation, although efforts were made — unsuccessfully — to secure such a commitment at both the 1991 and 1996 Review Conferences. An article in the current draft protocol addresses this issue, but the question of whether states parties will agree to impose criminal penalties through domestic legislation on those caught violating the BWC remains unresolved. Given the historical record, one might be sceptical that focusing efforts in this area will pay dividends, but it remains an area in which progress should continue to be sought.

Intelligence capabilities must not be neglected regardless of arms control outcomes. The information that would flow from protocol procedures will not be, in and of itself, decisive in identifying BW proliferators or confirming suspicions. Together with other information available to the intelligence community, however, such information could fill in key gaps to provide a more comprehensive and comprehensible picture of biological-related activities in countries of concern, which can then guide further intelligence efforts.

Export controls are also likely to come under greater pressure, particularly if the current dispute in Geneva over the issue remains unresolved, as is likely to be the case. As a result, disagreements will play out in other forums. Calls from radical non-aligned countries to disband the Australia Group will continue. The continuation of this dispute is not likely to have an impact on the day-to-day business of the Australia Group, but it will create a more stressful environment in which its members must operate.

The continuing debate, however, may also provide an opportunity for an evaluation of biological export controls over the long term. The way in which technology is developed, produced and disseminated on a global basis has changed significantly in the last several decades. This is especially the case for biological activities and biotechnology. Most of the materials and equipment can be used for both legitimate commercial and medical purposes and making biological weapons. The private sector is responsible for most of the scientific and technical advances, and they are occurring at an incredibly rapid rate. Knowledge and capability will only become increasingly dispersed around the world as biology and biotechnology are applied to more aspects of life.

Under these circumstances, traditional export control systems may become less useful as a means for managing this global technology diffusion in the realm of biology. A major review that

examines the strengths and weaknesses of the current system and possible alternatives could be very helpful.

An important question that emerges after the 2001 Review Conference — with or without a protocol — is the issue of deterrence against biological weapons. Deterrence of biological weapons, however, is in many ways a more complex challenge than nuclear deterrence during the Cold War. This is the case for several reasons. First, by ratifying the BWC the United States has relinquished the option of retaliation in kind, which it retained in the nuclear arena. Second, there is a much wider range of actors that would be the target of deterrence in a BW context, and shaping a convincing message to all of them may prove difficult. Third, the variety of potential BW contingencies that would have to be deterred ranges from “demonstrations” against isolated military units to strategic attacks against cities to terrorist use.

During the Cold War, deterrence was sought exclusively through “deterrence by punishment” inherent in the threat of nuclear retaliation. “Deterrence by denial” was not a major component of the strategy because defence against a nuclear attack was not possible. In the BW arena, deterrence by denial should be a larger part of the strategy because defence is possible. Although not perfect, a combination of active and passive defensive measures poses a series of hurdles to a potential BW proliferator that progressively diminish his chances of success. The more robust those defensive measures, the greater the risk of failure for a potential BW user. The contribution of defensive measures to deterrence is one of the reasons that significant resources are being invested in them.

Counterforce operations also contribute to deterrence by denial. Pre-emptive attack against BW facilities (if they can be identified) is only one form of such operations which extend to the whole range of military targets that a potential BW user might possess.

Even if defensive measures and counterforce operations are enhanced, however, they will not be perfect. There will still be a need to incorporate “deterrence by punishment” into any BW deterrence strategy. How that component of the strategy is implemented, however, is problematic. Less at issue is the question of retaliation with conventional weapons, although there are some debates as to how effective conventional deterrence on its own would be, particularly against hard-core proliferators. But the role of nuclear weapons in BW deterrence is highly contentious. Whether and in what ways nuclear weapons should be a part of any strategy of extended deterrence against biological weapons have been strongly debated.² Ultimately, how the nuclear dimension of deterrence is handled will be a political decision.

Conclusions

The BWC protocol will make a useful contribution to the fight against the proliferation of biological weapons. But there is no certainty that an effective protocol will emerge from the negotiations in Geneva. Even if one does, policy-makers must appreciate that it will not be a panacea and they must take nothing for granted. Successfully fighting the spread of biological weapons will require their recognition of three fundamental realities.

First, even with a new BWC protocol, pressure will continue on the current international norm against biological weapons. However, the norm against BW will not collapse overnight — in fact the new protocol should strengthen it. But whether the norm can be sustained over time will depend on what nations do, and in particular what the United States does, in the face of non-compliance and other problems.

Second, and related, unless the Geneva negotiations can produce a remarkably robust regime, fundamental questions will be raised about the future role of arms control in the biological arena in particular, but more generally as well. Even a modest result, let alone failure of the protocol negotiations, will highlight some of the key objections raised about arms control in the post-Cold War era — that multilateral arms control efforts either cannot be successful or that they produce only “feel good” results without real teeth; that arms control regimes do not address the genuine problem countries; and that many countries in the world are far less committed to arms control than is the United States and some of its friends and allies. Indeed, bad arms control is worse than no arms control at all, particularly if agreed measures increase uncertainty and instability.

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The key to maintaining effective arms control, indeed the key to sustaining the norm against biological weapons, will be how the international community responds to violations of the BWC or other incidents. The next use of biological weapons could be a transforming event, totally changing the international context, *unless* the global community responds assertively and effectively. Allowing non-compliant behaviour short of use to persist could also have an insidious impact by eroding commitments and norms over time. Although this is a very difficult issue for countries to discuss before the fact, a dialogue is needed about responses to non-compliance. The reason that the protocol measures were deemed necessary in the first place is the uncertainty taught by experience that all states will live up to their treaty obligations.

Third, because arms control will make only a modest impact in the fight against the spread of biological weapons, other tools of policy are also necessary. Among the most critical capabilities are enhanced intelligence, robust defensive capabilities (both active and passive), and counterforce options needed to provide deterrence. The challenge is not so much identifying the critical tools, but combining them operationally into a genuinely integrated strategy of deterrence and defence.

Notes

Notes

- ¹ A variant of this idea was first suggested by Lewis Dunn of Science Applications International Corporation.
- ² For a summary of those arguments, see Michael Moodie, *Chemical and Biological Weapons: Will Deterrence Work?*, Alexandria, Chemical and Biological Arms Control Institute, 1998.