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BIOLOGICAL WEAPONS CONVENTION PROTOCOLS: STATUS AND IMPLICATIONS

HEARING

BEFORE THE

SUBCOMMITTEE ON NATIONAL SECURITY, VETERANS AFFAIRS AND INTERNATIONAL RELATIONS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

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BIOLOGICAL WEAPONS CONVENTION PROTOCOLS: STATUS AND IMPLICATIONS

TUESDAY, JULY 10, 2001

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON NATIONAL SECURITY, VETERANS AFFAIRS AND INTERNATIONAL RELATIONS,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 2 p.m., in room 2154, Rayburn House Office Building, Hon. Constance A. Morella (chairwoman of the subcommittee) presiding.

Present: Representatives Shays, Putnam, Otter, Schrock, Kucinich, and Tierney.

Staff present: Lawrence J. Halloran, staff director and counsel; R. Nicholas Palarino, senior policy advisor; Robert Newman and Thomas Costa, professional staff members; Alex Moore, fellow; Jason M. Chung, clerk; Kristin Taylor, intern; David Rapallo, minority counsel; and Earley Green, minority assistant clerk.

Mr. SHAYS. A quorum being present, the Subcommittee on National Security, Veterans Affairs and International Relations hearing entitled, "Biological Weapons Convention Protocol: Status and Implications," is called to order.

In the biological convention, BWC, the United States and 158 signatory nations pledge never, in any circumstance, to develop, produce, stockpile or otherwise acquire or retain biological agents or toxins for other than peaceful purposes.

But the disclosure of a vast Soviet bioweapons arsenal, continuing efforts by Saddam Hussein to acquire weapons of mass destruction and transnational terrorists' growing interest in what some call the poor man's atomic bomb, have amplified demands for more tangible means to monitor, and if necessary, enforce that pledge.

Other arms control treaties limit the production or possession of inherently destructive materials, like missiles and bombs. The BWC prohibits wrongful purposes on the part of those who produce and possess microbes and materials easily converted from humanitarian to inhumane uses.

So efforts to strengthen the BWC must confront the inherent difficulty of policing and enforcing a ban on bad intentions. Discussions have been underway in Geneva since 1995 on a compliance regime, or protocol, to increase confidence in the fundamental promise of the BWC, but agreement on a binding set of procedures has proven elusive.

Recently, the chairman of the negotiating body, Ambassador Tibor Toth offered a composite draft protocol in an effort to resolve

critical issues that stalled the talks. He hopes to present a final consensus document to the BWC review conference in November. But it appears serious questions remain whether this, or any, protocol can yield more than political or symbolic benefits while imposing very real and substantial costs.

On June 5th, we heard testimony from a panel of experts on the process and product of the BWC protocol negotiations. Witnesses testified on the potential benefits of the declaration and inspection regime being considered. They discussed the risks to national security facilities and private proprietary information under a broad intrusive system of filings and onsite activities modeled after the chemical weapons convention. We heard that the previous administration suffered internal policy conflicts that limited potential U.S. impact on the BWC negotiations.

Today we hear from the current administration. At the request of the White House, State Department testimony scheduled for June 5th was postponed pending completion of a high level policy review of the BWC protocol. It seems that review is still not complete, but U.S. reservations about the pending protocol are beginning to come into sharper relief.

This afternoon, State Department negotiators, past and present, will elaborate on the substantive benefits and verification standards that should be reflected in any BWC protocol.

The subcommittee appreciates the testimony of all our witnesses as we continue our oversight of biological defense and counter-proliferation programs.

At this time, I'd like to recognize the vice chairman, Mr. Putnam, for any statement.

[The prepared statement of Hon. Christopher Shays follows:]

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AND INTERNATIONAL RELATIONS
Christopher Shays, Connecticut
Chairman
Room B-372 Rayburn Building
Washington, D.C. 20515
Tel: 202 225-2548
Fax: 202 225-2382
GROC.NS@mail.house.gov
http://www.house.gov/reform/ns/

Statement of Rep. Christopher Shays
July 10, 2001

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But the disclosure of a vast Soviet bio-weapons arsenal, continuing efforts by Saddam Hussein to acquire weapons of mass destruction, and transnational terrorists' growing interest in what some call "the poor man's atom bomb," have amplified demands for more tangible means to monitor, and if necessary enforce, that pledge.

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The Subcommittee appreciates the testimony of all our witnesses as we continue our oversight of biological defense and counter-proliferation programs.

Mr. PUTNAM. Thank you, Mr. Chairman. I appreciate the cooperation of the administration in joining us with their testimony. This will be an outstanding complement to our first hearing on the topic where we heard from outside witnesses. I look forward to this additional testimony. I thank you for reconvening this topic.

Mr. SHAYS. I thank the gentleman. I also thank him for chairing so many of the other hearings. And I will be leaving probably in the midst of this hearing, and Mr. Putnam will continue. Mr. Schrock, I would—thank you.

We are fortunate to have an outstanding panel, and it is one panel. Ambassador Donald A. Mahley, Special Negotiator for Chemical and Biological Arms Control, Department of State; Dr. Edward Lacey, Principal Deputy Assistant Secretary of State for verification and compliance, Department of State; Ambassador James Leonard, former U.S. Ambassador, United Nations Conference on Disarmament.

Gentlemen, as you know, we swear in our witnesses. And I would ask you to stand and raise your right hands, please.

[Witnesses sworn.]

Mr. SHAYS. Note for the record that all of our witnesses have responded in the affirmative, and gentlemen, before I call on you, I just want to take care of some housekeeping. I ask unanimous consent that all members of the subcommittee be permitted to place an opening statement in the record and that the record remain open for 3 days for that purpose. Without objection, so ordered.

I ask further unanimous consent that all witnesses be permitted to include their written statements in the record. And without objection, so ordered.

Do we have anything to submit? We'll submit them later. Now are we starting with Ambassador Mahley? And then we'll go to you, Dr. Lacey and then Ambassador Leonard. You know, if I could, I do have—if I could, I ask unanimous consent the following be included in the hearing record: Testimony of Ambassador Tibor Toth, chairman of the Ad Hoc Group of State parties to the Biological Weapons Convention urging all State parties not to dismiss the opportunity to strengthen the biological weapons convention, various correspondence to and from representatives of the ad hoc group of the State parties concerning their participation in the hearing.

[The prepared statement of Mr. Toth follows:]

WRITTEN TESTIMONY

BY

AMBASSADOR TIBOR TÓTH

CHAIRMAN OF THE AD HOC GROUP OF THE STATES PARTIES TO THE
BIOLOGICAL AND TOXIN WEAPONS CONVENTION

AND

PERMANENT REPRESENTATIVE OF HUNGARY
TO THE UNITED NATIONS OFFICE IN VIENNA

AND PREVIOUSLY

DEPUTY SECRETARY OF STATE,
MINISTRY OF DEFENCE, BUDAPEST, HUNGARY

TO THE

SUBCOMMITTEE ON NATIONAL SECURITY, VETERANS AFFAIRS, AND
INTERNATIONAL RELATIONS
OF THE COMMITTEE ON GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES

10 JULY 2001

It is an honour and a privilege to provide you a written testimony on the issue of the Ad Hoc Group negotiations. I am Tibor Tóth, Chairman of the Ad Hoc Group of States Parties to the Biological and Toxin Weapons Convention (BTWC). I also served as Chairman to the 1992-93 VEREX talks preceding the AHG negotiations, to the 1994 BTWC Special Conference giving the mandate to the AHG negotiations, to the Drafting Committee of both the 1991 and 1996 BTWC Review Conferences. I participated in the Chemical Weapons Convention negotiations, assisted the Chairman of the CWC negotiations as a Friend of the Chair and served as a Permanent Representative to the Preparatory Commission of the Organization for the Prohibition of Chemical Weapons. Since 1997 I am chairing the subsidiary organ of the Preparatory Commission of the Comprehensive Test Ban Treaty responsible for administrative, financial and legal matters. In between 1990-93 and 1997-2001 I served as Ambassador to the United Nations Office in Geneva and Vienna, respectively. During 1994-96 I served in the Ministry of Defense as Deputy Secretary of State in charge of international matters and NATO expansion.

The Ad Hoc Group has been negotiating since January 1995. Predecessors of the Ad Hoc Group include the Confidence Building Measures agreed at the Second Review Conference of the BTWC in 1986 and amended and enlarged at the Third Review Conference of the BTWC in 1991. The Third Review Conference set up by consensus the VEREX group, which identified and assessed possible verification measures for the BTWC and worked in 1992 and 1993. The Ad Hoc Group moved to a draft Protocol text (the Rolling Text) in mid 1997. The Rolling Text developed and matured over the next three years. Since the autumn of 2000 progress has been very slow; the remaining differences were inter-linked and interdependent and required compromises across issues in the text. It was with that situation in mind, and conscious of the long history of the negotiations and the fast approaching 2001 Review Conference timeline that I introduced a Composite Text in which I have adopted compromises to address the remaining outstanding issues in March this year. The presentation of my Composite Text was preceded since the middle of 2000 in three AHG sessions by long series of informal bilateral consultations with all delegations – including the United States – in which I explored conceptual solutions to the differences in views. This lead to the production of written elements for virtually the whole of the Protocol by the March AHG session.

There are different views among the around 60 delegations participating in the Ad Hoc Group negotiations in Geneva, to what degree the term "verification" is appropriate in respect of the BTWC. A number of delegations, among them your country, have repeatedly expressed their view, that the BTWC is either impossible or very difficult to verify. As the negotiating history reflects this view has been taken into account while the mandate for the Ad Hoc Group was drafted. The Ad Hoc Group is not working on a "verification instrument" to the BTWC, but - as the mandate, agreed by all the States Parties, specifies - on "draft proposals to strengthen the Convention, to be included, as appropriate, in a legally binding instrument".

Therefore, the ultimate aim of the Protocol can not be and is not verification of the BTWC, certainly not in terms of how verification is understood in the United States. Instead the Protocol will create enhanced transparency of relevant areas of dual-use civilian and military activities. One key objective, which I believe the Composite text fulfils, is to create a mechanism which will improve our ability to deal with compliance questions. It will do this firstly by improving the availability of information on microbiological activities, and secondly by providing a mechanism to investigate serous case of potential non-compliance with the BWC. These aspects of the Protocol are distinct mechanisms with inherently different aims and therefore very different provisions and procedures. Together they will foster a stronger BTWC. When assessing the different measures in the Protocol, the difference between these two aspects has to firmly be kept in mind. One can not expect a measure that is conceived and designed to enhance transparency, for example, to address non-compliance concerns in regard to Article I of the BTWC. To be clear: randomly selected transparency visits are not intended to catch non-compliant activity. Another point that is well worth making is that randomly-selected visits and the declaration clarification procedures will together provide a significant deterrent effect to States contemplating breaches of the Convention as they run the risk of being exposed.

The transparency measures covering relevant areas of civilian and military activities consist of initial and annual declarations by States Parties to the Protocol and the necessary mechanisms to ensure the correct and complete fulfillment of these declarations - randomly-selected transparency visits and clarification procedures. The latter are an innovation in the Protocol and go further than the CWC. I should add here that a similar idea for this mechanism came from the United States, and its inclusion in the Composite text is one area

where US preferences have been reflected. Without these follow-up procedures we would create little more than reworded Confidence Building Measures - the limitations of which are obvious to everyone. When assessing the advantages of the follow-up procedures and their risks and burdens on declared facilities, one needs to keep in mind that they are not in any way connected to finding out about non-compliance with Article I of the BTWC. I would like to make a few observations on this point.

First, the limited size of the visiting team, the limited amount of equipment that the team can bring to the facility, and the limited range of on-site activities are perfectly adequate for the purpose of finding out whether the declaration of a facility is consistent with the activities of that facility, as has been demonstrated in trial visits carried out and reported in working papers by a number of States Parties. Second, not least due to the input of the United States, the definition of what a declarable facility is, differs from the common understanding of the term, considerably limiting the buildings and rooms that fall under the declaration requirement. A facility in the case of declarations is defined as "any room or suite of rooms, laboratory(ies), building(s), structure(s) or parts of a building(s) or other structures which is or are used to conduct activity(ies) as specified in Article 4", i.e. only the room where the declarable activity is carried out has to be declared, which can be the fermenter hall in an industrial facility, or the BL4 laboratory in a research facility. the declaration triggers are carefully focussed onto the most relevant set of activities and the places where those activities take place. There is therefore no requirement for a visiting team to visit other areas of what might well be a large and complex site.

The provisions for randomly-selected transparency visits in the Protocol reflect a balance between the limited purpose that these visits are designed and able to fulfil - namely to help ensure that the declared information that form the underlying basis of the work of States Parties in the future Organization are correct, reliable and complete - and the burden that they place on declared facilities, especially on industrial facilities. The interests of industry are fully protected at all stages of the visit. The protection of confidential business information has in fact guided most delegations' views on these visits right from the beginning of the negotiations. Let me point out some of the provisions that guarantee that randomly-selected transparency visits are under the full control of the visited State Party and facility:

1. Only a very limited range of specified equipment can be brought to the visited State Party, and the procedures for the use of such equipment guarantee that the visited State Party has full control over the amount and type of information collected.
2. The access provisions, while obliging the visited State Party to provide access within the facility, leave the nature and extent of all access at the discretion of the visited State Party.
3. Only a very limited range of on-site activities can be conducted by the visiting team, again guaranteeing that the visited State Party has full control over the amount and type of information collected.
4. The visiting team is not allowed to comment in its report on any requests for access or information that was made and which the visited State Party did not accede to.

It has also been argued that in general the transparency-oriented regime of declarations and visits is focussed on the wrong facilities and activities. The Ad Hoc Group has constantly focussed on the most relevant legitimate activities under the BTWC; these are activities, which beside their legitimate purposes are also essential components of an offensive biological and toxin weapons (BTW) program. These most relevant activities then need to be subject to the transparency regime under the Protocol. The first of these relevant activities are biological defensive activities; these are not only relevant because of their dual-use character, but also because effective biodefence would arguably be a necessary prerequisite for the use of BTW. Other necessary or likely elements of an offensive BTW programs are:

- work with especially dangerous pathogens and the biological containment that might or might not accompany such work – it should be noted that it is not the presence of these pathogens as such, but the particular type of work done with them that serves as the trigger (production above specific levels, certain types of genetic modification work and aerobiological experimental work);
- certain industrial microbiological production capabilities - here we do not talk only about the presence of big fermentation equipment, but more importantly about the know-how that large-scale production requires. The declaration triggers here and listing requirements in the Protocol reflect exactly these most relevant activities. The listing of specified industrial facilities is designed to limit the direct impact on the pharmaceutical industry since the information requirements are modest and there are no randomly-selected transparency visits.

The transparency provisions in the Protocol will, over time, create a climate of openness and candor around significant dual-use activities. We are about creating light where there is darkness. This is an environment in which proliferators may well find it more difficult to operate in flourish. Those who might wish to breach the Convention would rather do so in the shade rather than in the spotlight.

As Doug MacEachin (a former high-ranking CIA official) has pointed out, a would-be violator of the BTWC has two options. First, he can disguise the prohibited BTW program by putting it under the cover of legitimate activities. In that case it is likely that the relevant facility falls under the declaration obligations. It can convincingly be argued that the openness that is created through the declaration obligation, the declaration clarification procedures addressing any anomalies, uncertainties, ambiguities or omissions which can be initiated directly by a State Party as well as by the future Organization, and the possibility of randomly-selected transparency and clarification visits may well influence the decision making process of the would-be violator. He will at least have to live with the unquantifiable risk of exposing the hidden program, having the visiting team ask questions, and risking that his employees say the wrong thing in the wrong place at the wrong time. Please note that the argument and objective is not that the visiting team might uncover a hidden program during a visit. Instead we can, with some reason, submit that a would be violator might well have to think twice before putting a prohibited program in a legitimate and declarable facility. We are about shaping and re-directing intentions in the first instance and generating new information flows which aid understanding and serve as an adjunct to other efforts.

The second option that a would-be violator has is to conduct his prohibited program in a secret facility. In that case such a program has to be leak-proof, not just for today or tomorrow or throughout next week but for all time. The would-be violator has to conduct all activities in total secrecy, a task that will become increasingly difficult if the general transparency in relevant legitimate areas is growing. And even in a secret facility, the would-be violator runs the risk of on-site activities. Another State Party might have evidence that there are declarable activities going on in that facility and initiates the declaration clarification procedure. Alternatively, a State Party might possess compelling evidence of prohibited activities and in which case it can request a challenge investigation. Again, both options will make the life of a would-be violator more difficult. We are putting obstacle in his

path. Undoubtedly some of the obstacle we could have erected could have been higher, but the prevailing view in Geneva, including that of the United States, was that other national security and commercial equities could not be exposed to significant risk of compromise through the application of compliance measures. In the end we had to strike a balance.

As mentioned above the Protocol will provide States Parties to the BTWC not only with enhanced transparency of relevant legitimate activities, but also with instruments to address concerns over possible non-compliance with Article I of the BTWC. The most important mechanism in this regard is challenge investigation. Challenge investigations have nothing in common with visits as described so far. Investigations address non-compliance concerns in a rapid and thorough way. The Ad Hoc Group always was in agreement that provisions for investigations are one of the most important elements of the Protocol. Investigation teams consist of 25 to 30 investigators and remain on site between 84 hours in the case of a facility investigation and 30 days in a field investigation. Investigators are allowed to use a variety of on-site activities with relative freedom. In the most serious cases of investigation requests the investigation goes ahead unless a three-quarter majority of the members of the Executive Council present and voting decide against it. These provisions are just a few examples to illustrate the qualitative difference between this challenge on-site activity and visits. I should add here that managed access provisions apply to the conduct of all on-site activities. Inclusion of such a provision was certainly a requirement oft expressed by PhRMA. Indeed the initiation process for launching a facility investigation uses the "green light" approach, a policy requirement of the Untied States and its industry.

Let me also remind you, that in the case of the 1992 Joint Statement between the US/UK and Russia, addressing the remains of the Soviet BTW program, the possibility of being on-site was the ultimate proof of transparency and openness. The Protocol provides exactly for this, a non-refutable possibility for on-site activities, without the involvement of the Security Council of the United Nations.

Let me draw your attention also to the fact that the Protocol provides for additional mechanisms to strengthen the effectiveness and improve the implementation of the BTWC. First, it requires all States Parties to implement national penal legislation prohibiting natural and legal persons anywhere on its territory and its own nationals anywhere in the world to carry out activities that are prohibited for a State Party under the BTWC, and to report on this

to the Organization. This provision is valuable in countering the bio-terrorism problem. Second, the Protocol foresees extensive cooperation in "monitoring, diagnosis, detection, prevention and control of outbreaks of diseases". This activity will create information on the disease outbreak pattern around the world, thereby indirectly facilitate the identification of unusual outbreaks of disease which could be the result of BTW activities. Third, the Protocol requires all States Parties to establish and implement national export controls and report accordingly to the Organization.

The Protocol's scientific and technological cooperation provisions set out a framework in which a greater coordinated international effort on the surveillance, detection diagnosis and treatment of infectious disease can take place. This is the practical heart to Article 14. Such an emphasis does not undermine existing national or international efforts, which in any case are much less than they could be. Indeed this whole area, and greater efforts in it, are fully consistent with US national objectives. It is oft said that disease knows no frontiers. The outbreak of West Nile Fever in New York is but one illustration of this phenomenon. Therefore efforts to contain and improve the international community's ability to combat infectious disease is in everyone's interest. The Protocol provides a golden opportunity to combine in a complementary manner both public health and international security objectives.

Finally, I would like to address the question of review of the Protocol's transfer provisions. Article 7 were carefully drafted to take into account the compelling need to maintain national sovereignty on all decisions on transfer questions and not to interfere with arrangements that States Parties have to fulfill their obligations under the Convention. Article 7's Review mechanisms are just that, they cannot result in any new legal obligation. Any change must and can only be pursued the full Protocol amendment provisions.

In conclusion, let me point out that over the past 6.5 years the Ad Hoc Group has made great progress towards a viable and effective agreement to strengthen the BTWC. No delegation in the Ad Hoc Group is completely satisfied with the outcome, simply because their national positions are only partly reflected in my Composite Text. But this applies in any multilateral agreement. Of course all delegations would wish to write the text differently had they the opportunity to do so. It has at times been painful and difficult to overcome the differences in views among delegations on a multitude of issues. The draft instrument before the Ad Hoc Group will provide the international community with a permanent legally binding mechanism

to address the problem of biological weapons proliferation. It will not absolve us from all our worries in this regard, but with it we will have an additional and complementary tool to address the threat. Failure in Geneva will, I fear make other efforts, including unilateral ones, much more difficult to sustain and prosecute. I would therefore urge all States Parties not dismiss this opportunity of strengthening the international BTW control regime lightheartedly.

I sincerely hope that the United States will be able to further demonstrate its commitment to this process and provide the necessary leadership in the common struggle against biological weapons, as it did in the negotiation and completion of the Biological Weapons Convention three decades ago and the Chemical Weapons Convention nearly ten years ago.

I thank you.

Mr. SHAYS. I ask unanimous consent the following letters, faxes, and testimony be included in the hearing record: Letter, testimony and enclosures of Professor Graham S. Pearson, visiting professor of international security, University of Bradford, Department of Peace Studies stating the BWC protocol would help prevent the spread of biological weapons. And without objection so ordered.

[The prepared statement of Mr. Pearson follows:]

UNIVERSITY OF BRADFORD
DEPARTMENT OF PEACE STUDIES
Bradford
West Yorkshire, BD7 1DP
UK

Telephone No +44-1672-539382
Facsimile No +44-1672-539582
E-Mail: Graham_Pearson@Compuserve.com

3 July 2001

Rep. Christopher Shays
Chairman
Subcommittee on National Security, Veterans Affairs and International Relations
Committee on Government Reform
House of Representatives
Congress of the United States
2157 Rayburn House Office Building
Washington, D.C. 20515-6143

Dear Representative Shays

THE BIOLOGICAL WEAPONS CONVENTION PROTOCOL: STATUS AND IMPLICATIONS

1. Thank you very much indeed for your letters of 12 June and 20 June 2001 inviting me to testify, or submit written testimony for inclusion in the record of the hearing on *The Biological Weapons Convention Protocol: Status And Implications* to be held on 10 July 2001. I have much pleasure in submitting two pieces of written testimony:

a. Written testimony on my behalf, and

b. Written testimony on behalf of myself and eight of my colleagues in Europe who have closely been following the negotiation of the Protocol. Together, we have over 180 years of relevant experience in countering the danger from chemical and biological weapons proliferation.

2. I and my colleagues are very concerned that the United States appears not to recognize that the composite Protocol text presented by Ambassador Tibor Tóth to the States Parties engaged in its negotiation on 30th March 2001 represents a significant and valuable strengthening of the regime to counter the proliferation of biological weapons. For the United States to reject the Protocol would be short-sighted -- and **contrary** to the leadership that the United States has shown over the past 50 years in building a world in which weapons of mass destruction are increasingly prohibited and their proliferation countered by **all** possible measures. Rejection of the Protocol would cause irreparable damage to international security and not best serve the current or future interests of the United States or the world.

3. I am sorry that I am unable to be present at your hearing. However, should you or any member of your Committee have any questions relating to the enclosed testimony, I would be very glad to provide prompt responses to those queries.

Yours sincerely

(signed)

Graham S. Pearson
Visiting Professor of International Security

WRITTEN TESTIMONY

OF

PROFESSOR GRAHAM S. PEARSON

VISITING PROFESSOR OF INTERNATIONAL SECURITY
DEPARTMENT OF PEACE STUDIES
UNIVERSITY OF BRADFORD
BRADFORD, WEST YORKSHIRE, UNITED KINGDOM

AND PREVIOUSLY

DIRECTOR GENERAL AND CHIEF EXECUTIVE
CHEMICAL AND BIOLOGICAL DEFENCE ESTABLISHMENT
MINISTRY OF DEFENCE
PORTON DOWN, SALISBURY, WILTSHIRE, UNITED KINGDOM

**TO THE SUBCOMMITTEE ON NATIONAL SECURITY,
VETERAN AFFAIRS & INTERNATIONAL RELATIONS
OF THE COMMITTEE ON GOVERNMENT REFORM**

Washington, D.C.

10 July 2001

EXECUTIVE SUMMARY

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This testimony starts by examining the development of the Protocol showing how it has developed from the Confidence-Building Measures agreed at the Second Review Conference in 1986 and extended at the Third Review Conference in 1991 through the considerations by VEREX in 1992 and 1993 leading to the establishment of the Ad Hoc Group in 1994 and its subsequent negotiations.

It goes on to address the value of the composite Protocol text by making comparisons, first between the Biological and Toxin Weapons Convention (BTWC) with its Protocol regime and the BTWC alone, and then between the BTWC with its Protocol regime and the Chemical Weapons Convention (CWC) regime, given that both Conventions overlap -- and rightly so -- in the areas of toxins, bioregulators and peptides. The comparison with the BTWC alone shows that the Protocol brings significant and worthwhile benefits to all States Parties whilst the comparison with the CWC shows that in respect of the monitoring of dual-purpose materials and facilities, the two regimes are very comparable, with the Protocol regime imposing a less onerous but more focussed burden in respect of declarations and visits whilst the international cooperation provisions are much more extensive than those of the CWC.

Attention is then paid to a number of key issues:

a. The Effectiveness of the Protocol

b. Export Controls

c. The Burden of the Protocol

d. Industry Concerns

e. Additional Mechanisms under Discussion

f. Other International Monitoring Systems

g. More time needed?

In the final section, a tabular comparison is made between the costs and gains of signing the composite Protocol text and rejecting the composite Protocol. This leads to the conclusions that:

a. In signing the composite Protocol text, the US will be seen to have continued in its leadership role and **having taken all possible** multilateral **steps** to **prevent** biological weapons.

b. Signing the composite Protocol text will **reduce** the risk of biological weapons proliferation and use. Rejection of the Protocol would send the opposite signal and it can be argued that the risk of biological weapons proliferation and use will be increased.

c. Overall, signing the composite Protocol text **enhances** US security. It provides **a net gain** to US security. Rejection of the Protocol misses this opportunity and decreases US security.

Mr Chairman and members of the Subcommittee. It is an honour and a pleasure to be invited to submit written testimony on the "Biological Weapons Convention Protocol: Status and Implications".

I am Dr Graham S. Pearson, a Visiting Professor of International Security in the Department of Peace Studies of the University of Bradford in the United Kingdom. I was previously, from 1984 to 1995 when I reached the mandatory retirement age in the British Civil Service, the Director General and Chief Executive of the Chemical and Biological Defence Establishment of the United Kingdom Ministry of Defence at Porton Down, the oldest chemical and biological defence establishment in the world established in 1916.

During my time as Director-General at Porton Down, I was responsible for changing the name of the establishment from the Chemical Defence Establishment to the Chemical and Biological Defence Establishment reflecting the increased attention and effort paid to biological defence from 1986 onwards. I was responsible for the contributions of the Chemical and Biological Defence Establishment during the Gulf War of 1990/91 to ensuring that the Armed Forces of the United Kingdom were protected against the threat that Saddam Hussein might use chemical or biological weapons against them.

I was also a member of the UK delegation to the VEREX group identifying and evaluating potential verification measures in Geneva in 1992 and 1993: I served as the rapporteur to VEREX for "measures in combination". I was also a member of the UK delegation to the Ad Hoc Group prior to my retirement in 1995 and for a short period in 1995, I served as the Assistant Chief Scientific Adviser (Non-Proliferation) in the headquarters of the United Kingdom Ministry of Defence.

Since my retirement from the Ministry of Defence in 1995, I sought and was awarded a John D. and Catherine T. MacArthur Foundation grant for Research and Writing which enabled me to write a book "The UNSCOM Saga: Chemical and Biological Non-Proliferation" published in May 2000 by St. Martin's Press. In this I have examined the work of UNSCOM in respect of chemical and biological weapons in order to extract the lessons for chemical and biological weapons non-proliferation.

My principal activity over the past five years, which is currently financed by a grant from the Carnegie Corporation of New York, has, however, been to closely follow the negotiations in the Ad Hoc Group of a Protocol to strengthen the effectiveness and improve the implementation of the Biological and Toxin Weapons Convention. In this context, I have written or edited over 30 Briefing Papers and 20 Evaluation Papers which have been presented and distributed to the delegations engaged in the Ad Hoc Group negotiations in Geneva. I have visited Geneva to make these presentations to each session of the Ad Hoc Group and also to discuss with representatives of delegations the progress of the negotiations. I have consequently followed the negotiations and the developments in the Ad Hoc Group more closely than anyone else who is not a member of a delegation. I have written quarterly progress reports over the past four years on the negotiations which have been published in *The CBW Conventions Bulletin.*

In my written testimony to the Subcommittee, I am therefore drawing upon my experience as Director General and Chief Executive of the Chemical and Biological Defence Establishment, Porton Down where I was responsible for over ten years for the United Kingdom research and

development programme in chemical and biological defence, my detailed study and analysis of the work of UNSCOM in uncovering the Iraqi chemical and biological weapons programmes and my close involvement over the past decade, both within government and then outside government, in the negotiations first in VEREX and then in the Ad Hoc Group to strengthen the regime to prevent biological weapons.

The Development of the Protocol

The Biological and Toxin Weapons Convention (BTWC) was opened for signature in 1972 and entered into force in 1975. This totally prohibits the development, production, storage or acquisition of biological weapons and was the first international treaty to totally ban an entire class of weapons. This Convention has established an international norm that biological weapons are totally prohibited to which over 160 States have bound themselves -- 143 States Parties and 18 Signatory States. The United States together with the United Kingdom and the then Soviet Union are the co-Depositaries of the Convention which reflected an initiative by both the United States and the United Kingdom to ensure that biological weapons are totally banned.

It has, however, become increasingly clear over the past 25 years that the absence of an organization and of measures to demonstrate compliance and address non-compliance concerns is resulting in an erosion of confidence in the effectiveness of the Convention. This was highlighted by the admission in 1992 that the former Soviet Union, despite being a co-Depositary, had continued a massive offensive biological weapons programme until at least 1992. Further concerns about the Convention were underlined when the United States at the Fourth Review Conference in 1996 stated that twice as many states were currently seeking or had already obtained biological weapons than when the Convention entered into force in 1975.

The Convention, however, has no provisions for verification -- other than to take compliance concerns to the Security Council (which has not happened during the past 26 years) or for the monitoring of compliance. The developments in the 1970s and 1980s including the release of anthrax at Sverdlovsk (now Ekatinerburg) in 1980 and the advances in genetic engineering and biotechnology led the States Parties to the Biological and Toxin Weapons Convention at the Second Review Conference in 1986 to agree four politically binding Confidence Building Measures. These were extended and a further three Confidence Building Measures agreed at the Third Review Conference in 1991. As these Confidence Building Measures were not amended at the Fourth Review Conference in 1996, they have since 1991 been as follows:

* A simplified proforma on which to indicate "Nothing to declare" or "Nothing new to declare"

1. The exchange of data on research centres and laboratories (CBM A, Part 1 & Part 2), extended to include information on biological defence programmes and activities

2. The exchange of information on outbreaks of disease and similar occurrences caused by toxins (CBM B)

3. The encouragement of publication of results and promotion of use of knowledge (CBM C)

4. The active promotion of contacts (CBM D)

together with the three new confidence-building measures added in 1991:

5. Declaration of legislation, regulations and other measures (CBM E),

6. Declaration of past activities in offensive and/or defensive biological research and development programmes (CBM F), and

7. Declaration of vaccine production facilities (CBM G).

It has, however, become apparent that these Confidence Building Measures are of strictly limited value as the data submitted by the States Parties has been patchy and variable. Just over one half of all the States Parties have made a single submission and only about 11 have made the required annual submissions. The submissions are simply collated as and when they are received and circulated to the States Parties. They are not translated into the UN languages and there is no analysis of the information provided. In sum, they do not achieve their objective of building confidence because of the variability between States Parties as to what is considered appropriate to be submitted and the absence of any means of either seeking missing submissions or clarifying any uncertainties or ambiguities in the submissions.

At the Third Review Conference in 1991 following the Gulf War of 1990/91 and the changes in the Soviet Union and the Warsaw pact, the States Parties agreed to establish an Ad Hoc Group of Governmental Experts (known as VEREX) *"to identify and examine potential verification measures from a scientific and technical viewpoint"*. VEREX met twice in both 1992 and 1993 producing a Final Report evaluating 21 off-site and on-site measures. This report was considered by a Special Conference in September 1994 which established an Ad Hoc Group to consider appropriate measures, including possible verification measures, and draft proposals to strengthen the Convention, to be included, as appropriate, in a legally binding instrument.

The Ad Hoc Group first met in January 1995 and by the time of the last Ad Hoc Group session in April/May 2001 had held 23 sessions. Initially, Friends of the Chair (FOCs) examined issues such as compliance measures, definitions and objective criteria, confidence building measures and measures related to Article X of the Convention on international cooperation and technical exchange. It is worth recalling now precisely what the mandate of the Ad Hoc Group said about compliance measures:

> ***- A system of measures to promote compliance with the Convention****, including, as appropriate, measures identified, examined and evaluated in the VEREX Report. Such measures should apply to all relevant facilities and activities, be reliable, cost effective, non-discriminatory and as non-intrusive as possible, consistent with the effective implementation of the system and should not lead to abuse;*

It is thus clear that the mandate agreed by **all** States Parties is for a system of measures to **promote compliance** with the Convention. During the initial Ad Hoc Group sessions, the FOCs chaired sessions addressing their particular areas of responsibility and produced papers that reflected the discussions that had taken place yet were without prejudice to the positions of delegations on the issues under consideration in the AHG and did not imply agreement on the scope or content of the paper. However, these FOC papers were

considered by the Ad Hoc Group in plenary session and amended as requested by delegations so that they reflect the views expressed before they are accepted for attachment to the procedural reports of the meetings. It is also clear from the reports of the meetings that some FOC papers have gone through several iterations and have thus been refined and improved.

In July 1997, the Ad Hoc Group successfully transitioned to consideration of a rolling text of a draft Protocol in which square brackets were used to indicate alternative forms of language. This has now reached its sixteenth version. As might be expected, the number of square brackets has passed through a peak and has subsequently decreased as the language for a number of Articles satisfactorily met the requirements of States Parties and became free from square brackets. The remaining issues were, however, ones which could not be resolved in meetings chaired by individual Friends of the Chair and by mid 2000, the reduction in the number of square brackets had reached stagnation.

This led the Chairman, Ambassador Tibor Tóth, in mid 2000 to commence a series of extensive and intensive bilateral consultations with delegations and with Friends of the Chair in order to explore conceptual solutions to the outstanding issues. Following these consultations the Chairman provided written elements in a stripped down form of text which contained some ideas which might form the basis of a compromise in some of the areas where there were differing views. By the end of the February 2001 Ad Hoc Group session written elements had been provided for almost the whole of the Protocol. The stripped down text used in these written elements could not be readily compared with the rolling text and therefore forced a *de novo* consideration of the conceptual solutions identified by Ambassador Tóth in his bilateral consultations. This led in the February 2001 Ad Hoc Group session to calls by a number of States Parties for the provision of a complete text.

On 30th March 2001, in capitals as well as in Geneva, Ambassador Tóth provided the States Parties with the Chairman's composite Protocol text that is in its entirety based on language in the rolling text and incorporating compromises where necessary to strike a balance in those parts of the text where differing views still remained. It is important to stress that this composite text was based in very large measure on text that had already been agreed by all delegations during the negotiations, including the United States. At the 23rd session of the Ad Hoc Group in April/May 2001, Ambassador Tibor Tóth provided detailed explanations on an Article by Article basis of the compromises which were significant for delegations.

Ambassador Tóth in his press conference at the end of the 23rd Ad Hoc Group session on 11 May 2001 said that the States Parties at the Ad Hoc Group had welcomed the provision of the Chairman's composite Protocol text. In their view it demonstrated that it was possible to meet the mandate of the Ad Hoc group to complete the Protocol by the Fifth Review Conference in November/December 2001. He went on to say that quite a number of delegations had welcomed the balance of compromises although, as might be expected from the nature of compromises, there were delegations who were unhappy with the compromises. He said that:

> *"What was emerging as a climate in the negotiations was that the delegations which used to form a silent majority in the negotiations had spoken massively in the course of the session. They spoke in favour of the fulfilment of the mandate and concluding the negotiations in the next session. ... the question was whether delegations and capitals participating in these negotiations for practically seven*

plus three years would say yes or no to a Protocol, which in his judgement, would respect legitimate bio-defense, industrial and non-proliferation interests while providing for efficient, additional tools to strengthen the Biological Weapons Convention."

The Value of the Protocol

The Chairman's composite Protocol text is firmly based on the rolling text – indeed over 99% is identical to language in the rolling text – in which compromises have been adopted where necessary. . A detailed evaluation[1], Article by Article, of the Chairman's composite Protocol text prepared by Graham Pearson, Malcolm Dando[2] and Nicholas Sims[3] and distributed to the delegations to the Ad Hoc Group in April 2001 concluded that *"Whilst these compromises will not satisfy the aspirations of all the delegations to the Ad Hoc Group, they do, in our view, successfully ensure that the composite Protocol text achieves its mandate of strengthening the effectiveness and improving the implementation of the Convention. The* ***composite Protocol text has successfully retained all the essential elements for an effective Protocol*** *ranging from definitions and objective criteria, through compliance measures to measures for scientific and technological exchange for peaceful purposes and technical cooperation."* [Emphasis added]

It is critically important to consider what is **actually** in the Chairman's composite text and not to comment, as several testimonies have, on misperceptions based on incorrect or dated appreciations; the terminology used in several testimonies indicates a failure to read or study the Chairman's composite Protocol text. It has also to be recognized that the Protocol negotiations have seen the evolution of a text that reflects the inputs of the negotiators and the strengths and validity of the arguments put forward. It is, however, true that the elements identified in the first version of the rolling text in mid-1997 are all still there in the Chairman's composite Protocol text. It is the detail that has been developed and refined in the light of the negotiations.

It is **now timely and necessary** after years of detailed negotiation about words and paragraphs in the Articles to stand back and examine the Chairman's composite Protocol text as a whole in order to consider its value. It is also necessary to recognize that what has been negotiated is a Protocol to strengthen the effectiveness and improve the implementation of the Convention – it is not and never has been a "verification" Protocol. Rather its whole thrust has been to focus on compliance – to increase transparency as well as the quantity and quality of information about activities and facilities within States Parties of particular relevance to the Convention. Over time this transparency will help to build confidence between States Parties that they are in compliance with the Convention. Whilst the Protocol could have been stronger, it has to be recognized that stronger measures would not have attracted wide support and that the composite Protocol text is **the best** that can be negotiated at this time. A further period of negotiation would not strengthen the composite Protocol text and could well lead to unravelling of what is already a good Protocol. In standing back to examine the Protocol, a

[1] Graham S. Pearson, Malcolm R. Dando & Nicholas A. Sims, *The Composite Protocol Text: An Effective Strengthening of the Biological and Toxin Weapons Convention,* University of Bradford, Department of Peace Studies, Evaluation Paper No 20, April 2001.

[2] Malcolm R. Dando is Professor of International Security in the Department of Peace Studies at the University of Bradford, Bradford, West Yorkshire BD7 1DP, UK.

[3] Nicholas A. Sims is a Senior Lecturer in International Relations in the Department of International Relations at the London School of Economics and Political Science, University of London, Houghton Street, London WC2A 2AE, UK.

useful analogy is to a tree where the Ad Hoc Group have been considering which way the branches will go and what the shape of the leaves should be. It is now time to consider the whole tree.

In considering the Chairman's composite Protocol text, it is important to remember that the BTWC with its basic prohibitions and obligations has been **in force** for over 25 years and that the Protocol is to strengthen the effectiveness and improve the implementation of the Convention. The Protocol makes **no** changes to the basic prohibitions and obligations. The Protocol regime is supplementary and additional to the Convention. It does not undermine the prohibitions in Article I, but rather the Protocol safeguards Article I -- a long standing objective of the United States and other delegations.

The key comparison is thus between the BTWC Protocol regime and the BTWC alone (including the procedures devolved from its provisions). A tabulation of the principal measures in the regime, compared with the procedures of the BTWC alone, clearly brings out the significant benefits from the Protocol.

Table 1. Comparison of the Convention and its Protocol Regime with the Convention alone

BTWC and its Protocol Regime	**BTWC alone**
Mandatory declarations -- measures to ensure submission	Confidence-Building Measures -- patchy and variable (if made)
Declaration follow-up procedures -- analysis of declarations -- randomly-selected transparency visits	**None** **-- none** **-- none**
Declaration clarification procedures -- clarification visits	**None** **-- none**
Voluntary assistance visits	**None**
Non-compliance concerns -- Consultations >>> Investigations	Art V consultation procedures Art VI complaint to UN Security Council
Field investigation	Possible UN Secretary-General investigation if invited by State Party concerned
Facility investigation	**None**
Transfer procedures	**None**
Assistance -- provisions detailed	Art VII assistance if UN Security Council decides a Party has been exposed to danger
International Cooperation -- elaborated in detail -- Cooperation Committee	Art X provisions -- **no** implementation procedures -- **none**
Organization -- CoSP, ExC & Technical Secretariat	**None**
National implementation -- Penal legislation required -- National Authority	Art IV National implementation -- **No** penal legislation requirement -- **None**

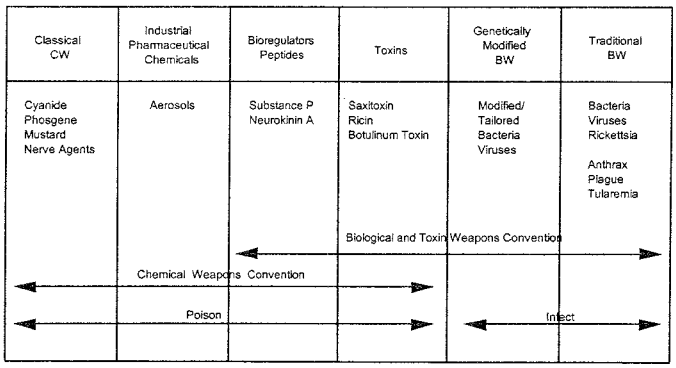
Considering all the elements that make up the BTWC Protocol regime as a whole, it is clear that there are overall **three** particularly significant benefits that will accrue from the BTWC Protocol regime and which are not available with the Convention alone:

Table 2: Principal benefits from the BTWC and its Protocol Regime compared to the BTWC alone.

BTWC and its Protocol Regime	BTWC alone
Measures to increase transparency and build confidence	Suspicions **not** addressed -- and over time **reduce** international confidence in the regime
Procedures to **address** non-compliance concerns	Art V consultations (**no** teeth) Art VI complaints to UN SC (**not** used)
International cooperation and assistance provisions enhancing infrastructure, transparency and building confidence	**No** action despite aspirations at successive Review Conferences

The above comparisons show that the Protocol regime brings significant and worthwhile benefits to **all** States Parties -- both developed and developing -- over and above the provisions to uphold the basic prohibitions and obligations of the BTWC, which remain unchanged. In addition, the Protocol will be effective, over time, in building confidence between States Parties that other States Parties are indeed in compliance with the Convention, thereby reinforcing the norm that work on biological weapons, whether directed against humans, animals or plants, is totally prohibited. The international cooperation and assistance provisions address a genuine need to counter outbreaks of disease and through improvements in infrastructure in areas such as biosafety and good manufacturing practice to meet internationally accepted standards bring benefits for health and safety as well as for prosperity. The Protocol as a whole thus brings improved health, safety, security and prosperity to all States Parties.

It is also appropriate to compare the BTWC Protocol regime with the CWC regime -- both Conventions address toxins, bioregulators and peptides and thus rightly have a significant area of overlap, both have general purpose criteria which embrace all possible agents, past, present and future, and both address dual use materials and technology.



The CWC regime is the one of **greatest** relevance to the BTWC Protocol regime and it is already evident that National Authorities for the two regimes are likely to be colocated in a number of countries.

It is hardly surprising that the BTWC Protocol regime has adopted some concepts where appropriate from the CWC regime. The Protocol is, however, much more elaborated than the CWC and has been finely tailored to address the fundamental difference in the nature of biological agents as well as to capture the facilities of greatest relevance to the Convention. If we ignore the chemical weapon and chemical weapon production facility elements[4] of the CWC, then the basic architecture of the BTWC Protocol regime and the CWC regime is the **same.** The qualitative differences between the regimes are in the detail: the BTWC Protocol regime has built on the confidence-building measures agreed by the States Parties including the United States at the Second Review Conference in 1986 and extended at the Third Review Conference in 1991. In respect of the monitoring of dual-purpose materials and facilities, the two regimes are very comparable, with the Protocol regime imposing a less onerous but more focussed burden in respect of declarations and visits whilst the international cooperation provisions are much more extensive than those of the CWC.

Table 3. Comparison of the BTWC and its Protocol Regime with that of the CWC

BTWC and its Protocol Regime	**CWC Regime**
Mandatory declarations -- range of facilities (BL-4, BL-3*, work with listed agents*, production, ...) -- requires declaration of biological defence -- measures to ensure submission	Mandatory declarations -- focussed on chemical production facilities -- **no** declarations yet of chemical defence -- **no** measures to ensure submission
Declaration follow-up procedures -- explicit and structured -- analysis of declarations -- randomly-selected transparency visits	Declaration follow-up procedures --implicit and unstructured -- routine inspections of production facilities for scheduled chemicals and DOCs (discrete organic chemical)
Declaration clarification procedures -- clarification visits	**No** declaration clarification procedures -- implicit not elaborated
Voluntary assistance visits	**No** provision for voluntary assistance visits -- implicit not elaborated
Non-compliance concerns -- Consultations >>> Investigations	Non-compliance concerns -- Consultations >>> Investigations

[4] This difference results because the CWC was negotiated when a number of States had admitted to having stockpiles of chemical weapons and to having chemical weapon production facilities which are required to be destroyed under the CWC. In contrast, when the BTWC was negotiated in the late 1960s and early 1970s no States Parties admitted to having stockpiles of biological weapons or to biological weapon production facilities. Consequently, Article II of the Convention states that:

> *Each State Party to this Convention undertakes to destroy, or to divert to peaceful purposes, as soon as possible but not later than nine months after entry into force of the Convention, all agents, toxins, weapons, equipment and means of delivery specified in article I of the Convention, which are in its possession or under its jurisdiction or control. In implementing the provisions of this article all necessary safety precautions shall be observed to protect populations and the environment.*

As the BTWC has been in force since 1975 and no State has admitted to a stockpile of biological weapons there are no provisions in the Protocol requiring the declaration and destruction under verification of such weapons.

BTWC and its Protocol Regime	CWC Regime
Field investigation -- includes investigation of releases	Investigation of alleged use -- **no** investigation of other releases
Facility investigation -- team size and duration limited	Challenge inspection -- duration limited
Transfer procedures	Transfer controls
Assistance -- provisions similar to CWC	Assistance
International Cooperation -- elaborated in detail -- Cooperation Committee --targeted on genuine need to counter disease -- real benefits over time >>health, prosperity	International Cooperation -- **not** elaborated in detail -- **no** provision for Cooperation Committee
Organization -- CoSP, ExC & Technical Secretariat -- TS has role to analyse epidemiological info	Organization -- CoSP, ExC & Technical Secretariat -- **no** parallel role
Confidentiality Provisions -- elaborated in detail in Article and Annex	Confidentiality Provisions -- **no** Article but an Annex -- not as elaborated
National implementation -- Penal legislation required -- National Authority	National implementation -- Penal legislation required -- National Authority

* Indicates that only selected facilities meeting certain combinations of conditions, **not** all such facilities are to be declared.

This comparison demonstrates that the two regimes are indeed comparable and effective. Indeed, the quality of the Protocol regime is certainly **as good as, if not better than**, that of the CWC. Both address dual purpose materials and technologies. Lessons have been learned from the CWC implementation experience. The Protocol text has successfully been crafted so that it will achieve the requirement for an effective and reliable regime which, in accordance with the AHG mandate, will strengthen the effectiveness and improve the implementation of the BTWC and thereby strengthen the norm against biological weapons. There is no doubt that the value of the Protocol will be of immense value to **all** States Parties -- both developed and developing – bringing improved health, safety, security and prosperity. Indeed it should be noted that there is a relationship between the co-operative measures and international security: improving the international community's ability to deal with the consequences of infectious disease will help make it easier to identify deliberate outbreaks of disease that are the result of the use of biological weapons. National improvements in biosafety, good manufacturing practice and the regulations covering the handling, transportation and use of biological agents and toxins through the Protocol cooperation measures will improve national infrastructure as well as transparency and over time will contribute to building confidence.

The Protocol is also important for its contribution to the web of deterrence which comprises:

- A strong international and national prohibition regime reinforcing the norm that biological weapons are totally prohibited

• Broad international and national controls on the handling, storage, use and transfer of dangerous pathogens

• Preparedness including both active and passive protective measures and response plans that have been exercised

• Determined national and international response to any use or threat of use of biological weapons ranging from diplomatic sanctions through to armed intervention,

which are together mutually reinforcing and lead a would-be possessor, whether a "rogue State" or a non-State actor to judge that acquisition and use of BW would not be valuable, would be detected and incur an unacceptable penalty. Any single element of the web of deterrence alone is insufficient -- all elements are vital and all need to be strengthened as they thereby reinforce the deterrent effect. The Protocol through its strengthening of the international prohibition regime not only reinforces the norm that biological weapons are totally prohibited. Its requirements also strengthen the international and national controls on the handling, storage, use and transfer of dangerous pathogens and the determined international response to any use or threat of use of biological weapons.

The States Parties to the Protocol will over time gain confidence in the compliance of the other States Parties and any State Party contemplating breaching the Convention will be deterred through the prospect that such a breach will be detected by the measures in the Protocol. Increasingly, States not Party to the Protocol will be isolated and will effectively be declaring themselves as rogue states -- who can be countered better by the multilateral body of the States Parties to the Protocol.

The Issues

The Effectiveness of the Protocol

The aim of the Protocol throughout has been to create a package of measures that will increase transparency and build confidence between States Parties that they are in compliance with the Convention. It is a **compliance** Protocol **not** a verification Protocol – it is misleading to suggest otherwise. The heart of the Protocol is thus made up of mandatory declarations, the declaration follow-up procedures and the provisions for investigations. A balance has necessarily to be struck as to which facilities are to be declared: the Protocol declaration triggers embrace a wide range of the facilities and activities of most relevance to the Convention:

a. Biodefence programmes and facilities.

b. Maximum biological containment facilities

c. High biological containment facilities engaged in certain specified production or genetic modification activities

d. Plant pathogen containment facilities over a particular floor area

e. Work with listed agents and/or toxins of a particular character: production above a certain capacity; genetic modification activities; and intentional aerosolisation

f. Production facilities in excess of certain capacities or producing human or animal vaccines.

The scope of the facilities to be declared is thus much broader than those required to be declared under the comparable elements of the CWC. The CWC declarations primarily address chemical production facilities and have yet to include agreed modalities, as required under Article X of the CWC, for declarations of chemical defence programmes or facilities required under Article X of the CWC. Furthermore, the Protocol has provisions to help ensure submissions of declarations – provisions that have no parallels in the CWC, with a variety of tiered penalties, some automatic and some after consideration – should declarations fail to be submitted.

Those who argue that the CWC regime is not relevant to considerations of the BTWC Protocol regime are ignoring the fact that **both** regimes address dual-use materials and technology, **both** have general purpose criteria in the basic prohibition which ensures that past, present and future agents are all covered and **both** cover the prohibition of toxins, bioregulators and peptides. It is evident that the Protocol regime has been developed from that of the CWC and had been tailored to address the particular nature of biological agents and toxins.

The declaration follow-up procedures comprising the randomly-selected transparency visits and the carefully tiered provisions for clarification of any ambiguity, uncertainty, anomaly or omission in a declaration made by a State Party are vital for ensuring the consistency of declarations. No State Party would make inaccurate or incomplete declarations if they recognize that the deficiencies in their declaration will be exposed either by the randomly-selected transparency visits or by the declaration clarification procedures. The Protocol provisions enable either the future Organization or individual States Parties to initiate the declaration clarification procedures. Consequently, a State Party to the Protocol contemplating violation of the Convention would have either to carry out its activities in a declared facility -- and risk exposure both through the Organization or through another State Party seeking clarification -- or to use an undeclared facility and again risk exposure both through the Organization or through another State Party seeking clarification of the omission of that facility from the declarations. A useful analogy in considering the necessity of backing up mandatory declarations with follow-up procedures comes from self assessment under the US (and the UK) tax systems – how accurate would self assessment be if there were to be no follow up by the IRS?

In considering the numbers of randomly-selected transparency visits carried out each year under the Protocol – limited to greater than 60 and less than 90 – their duration of no more than 2 days involving no more than 4 members in the visiting team. It has to be recognised that this is a remarkably effective way of enhancing transparency and generating confidence in the consistency of declarations. Remember that the purpose is to demonstrate compliance and to deter would-be violators rather than to find cheaters or catch out States Parties. In building compliance, there is indeed a bonus in that a State Party would be highly unlikely to carry out prohibited activities at declared facilities because of the risk that inconsistencies would be detected. If such prohibited activities were to be carried out at undeclared facilities, then again there would be a risk that inconsistencies would lead to clarification being sought about ambiguities, uncertainties, anomalies or omissions – and such clarification can be sought directly by a State Party and is not dependent on the future Organization. Regular visits to States Parties means that the inspectorate will develop an appreciation of how

regulatory frameworks apply in specific States parties, the national standards that apply and improve understanding of national processes. All this will be indispensable knowledge in the event of an investigation. If a facility investigation were ever called in the United States, would it not better if the inspectorate had some prior knowledge or the regulatory frameworks (FDA and EPA for example), norms, practices and degree of sophistication that applied? Such understandings will go a long way in preventing investigation teams misinterpreting what they see and reduce the risk that they might draw the wrong conclusion.

The investigation provisions are for both field and facility investigations of non-compliance concerns. The Protocol includes within field investigations provisions for the investigation of releases of biological agents or toxins.

In sum, the Protocol regime of declarations, follow-up procedures and investigations provides a structured and elaborated framework for the provision of accurate information about the activities and facilities of the most relevance to the Convention. This brings immense benefits as was noted by Dr John Gee, Deputy Director General of the OPCW when he spoke about the success of the declarations made under the CWC when he said that:

> *What is significant is the fact that declarations have been made and the key parts of each State Party's declarations are available to all other States Parties....This has been a considerable confidence-building measure....This process has answered a lot of questions that were out there prior to entry into force....all the other countries had to go on were press reports and intelligence estimates and so forth. The whole process of having declarations available to other States Parties has been a great success and a very substantial confidence-building measure.*

If the situation with the Protocol in place is compared with the alternative of simply continuing with the Convention, it is impossible to see how the conclusion -- in other testimony to your Committee -- can reached that "*a Protocol would not improve our ability to effectively verify compliance with the BWC either in terms of certifying that a country is in compliance with, or in violation of, its obligation*". Without the Protocol all that any country has to go on are press reports, intelligence estimates and so on; intelligence estimates have necessarily to be worst case assumptions and may well give undue credence to rumour and innuendo or simply fail to recognise perfectly legal reasons for an activity. However, with the Protocol in place, there will also be mandatory declarations from States Parties with the means to clarify any ambiguities, uncertainties, anomalies or uncertainties, providing hard evidence as to activities and facilities within the State Party. Any inconsistencies between parts of declarations can be addressed by States Parties as well as by the future Organization leading to a more comprehensive and soundly based appreciation of the activities and facilities within the State Party.

Export Controls

It is widely recognised that the provisions in the Protocol relating to controls of transfers of biological agents or equipment have been one of the most controversial issues. It is, however, essential to examine the issue in perspective and not to get carried away by unsound arguments. First of all, it has to be recognised that the formula adopted in the CWC in the early 1990s in its Article XI that the States Parties shall:

> *c. Not maintain among themselves any restrictions, including those in any international agreements, incompatible with the obligations undertaken with the*

> *Convention, which would restrict or impede trade and the development and promotion of scientific and technological knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical or other peaceful purpose.*

would not be acceptable some 10 years later for the Protocol. To think that time has stopped and the same language would be acceptable would be naïve. However, it is equally naïve to think that the world has moved to a situation in which controls of transfers are no longer required and can be dismantled. The facts are that governments around the world, especially in the developing countries, are increasingly requiring prior notification of the imports of any potentially harmful materials – whether these be banned and severely restricted chemicals under the Rotterdam Prior Informed Consent Convention, genetically modified organisms under the Cartagena Protocol on Biosafety, narcotic drugs and psychotropic chemicals and their precursors under the various UN Drug Conventions or chemical and biological materials relevant to chemical and biological weapons under the CWC and the Biological and Toxin Weapons Convention.

The obligation under Article III of the BTWC is very clear:

> *Each State Party to this Convention undertakes not to transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment or means of delivery specified in article I of this Convention.*

The mandate of the Ad Hoc Group – *to strengthen the effectiveness and improve the implementation of the Convention* -- is also clear. The language in the Chairman's composite Protocol text does precisely that – it seeks to improve the implementation of Article III of the Convention – by requiring *Each State Party...to review and, if necessary, amend or establish any legislation, regulatory or administrative provisions to regulate the transfer of agents, toxins, equipment and technologies relevant to Article III of the Convention....* There are thus clear benefits – both in countering proliferation and the availability of materials and equipment for bioterrorism – for the international community from this requirement for **all** States Parties to establish the regulation of such transfers.

The Burden of the Protocol

The mandate for the Ad Hoc Group required that consideration be given to:

> *A system of measures to promote compliance with the Convention, including, as appropriate, measures identified, examined and evaluated in the VEREX Report. Such measures should apply to all relevant facilities and activities, be reliable, cost effective, non-discriminatory and as non-intrusive as possible, consistent with the effective implementation of the system and should not lead to abuse;*

In addition, the mandate also required that

> *- Measures should be formulated and implemented in a manner designed to protect sensitive commercial proprietary information and legitimate national security needs.*

- Measures shall be formulated and implemented in a manner designed to avoid any negative impact on scientific research, international cooperation and industrial development.

The Ad Hoc Group have been aware throughout of these requirements in the mandate. It was evident that especially in developed countries there was concern that any requirements in the Protocol should be the minimum necessary for an effective Protocol so that the additional burden whether it be for declarations or for declaration follow-up procedures should be minimized. Consequently, there is no requirement for the provision of commercial proprietary information or national security information in the Protocol declarations. There was also widespread recognition that many of the facilities to be declared under the Protocol are already subject to visits from both national and international regulatory authorities be it for health and safety, for good manufacturing practice or for other reasons. Consequently, the declaration follow up procedures have been crafted to ensure that the measures are sufficient to encourage the consistency of declarations and the clarification procedures are carefully tiered again to minimise the burden. The declaration formats have been developed and elaborated in the Protocol – and not left as with the CWC to be developed during the Preparatory Commission stage. These formats have been trialled with industry in a number of developed countries to ensure that they are easy to complete and require the provision of relevant information that will contribute to the increasing of transparency between the States Parties. It is simply not true to allege that the Protocol's requirements compromise industry's ability to research and manufacture or that the Protocol establishes mechanisms to expose confidential information. Rather the opposite applies, in that the Protocol has gone to great lengths to protect confidential information, much more so than the CWC did when it emerged from Geneva.

In addition to all of this, the Chairman's composite Protocol text has introduced limits to the numbers of randomly-selected transparency visits as well as to clarification visits which skew the burden of the Protocol away from the United States towards those States with small numbers of declared facilities. There is an overall ceiling to the number of randomly-selected transparency visits of not more than 90 and not less than 60 a year. Within this ceiling, no State Party shall receive more that seven randomly-selected visits in any calendar year – given the range of declared facilities and the requirement that the randomly-selected visits be spread among a representative range of facilities, it follows that number of such visits to vaccine facilities in the US will depend on the numbers of facilities declared by the US in the different declaration categories and is unlikely to be more than three or four a year at most – yet this is alleged to be an undue burden on the United States. On the other hand, the composite Protocol text requires that each States Party that declares facilities shall receive at least two such randomly-selected visits in any five year period so it again cannot be argued that the burden is excessively placed upon the States Parties with the greatest number of declared facilities.

Industry Concerns

The concerns of industry have been borne in mind by the Ad Hoc Group throughout. In most countries, those engaged in the negotiations have maintained a dialogue on a continuing basis with their national industry to ensure that the emerging Protocol regime would be effective without being unduly burdensome. There is no sense in which it can be argued that vaccines are the bull's eye of the Protocol! The Protocol regime has evolved from the agreement by the States Parties some 10 years ago that declarations should be submitted under the Confidence-Building Measures for the facilities agreed to be of greatest relevance to the

Convention – maximum containment facilities, biological defence programmes, vaccine production facilities. The Protocol declaration requirements have built upon these and added the other most relevant activities and facilities.

There is a concern by industry in a number of countries, following on from the CWC experience, that there should be a uniform requirement on industry around the world to submit comparable information – or in other words, a level playing-field. The elaborated declaration formats coupled with the measures to ensure that declarations are submitted with its tiered automatic and considered penalties together with randomly-selected transparency visits will promote the consistency of declarations and, through the tiered declaration clarification procedures, that declarations are complete and comprehensive.

The argument that randomly-selected transparency visits to all declared facilities is not a useful concept is short-sighted as such visits help to ensure the consistency of declarations. Furthermore, in the absence of randomly-selected transparency visits, the probability will be high that when the first facility investigation is carried out in that State Party an incorrect conclusion may be reached because of the lack of knowledge of the future Organization of the normal approaches to microbiology and biotechnology in that country.

As the maximum number of randomly-selected transparency visits that any State Party can receive in a year is 7, this means that for the maximum number of such visits in any year to the United States is 7 in total to facilities out of **all** the facilities declared by the United States -- whether biological defence, maximum containment (BL-4), high containment, plant pathogen containment, work with listed agents and toxins or production. The burden on the vaccine industry is unlikely to be more than perhaps four visits per year -- lasting no longer than 2 days each and with no more than four members in a visiting team. This burden is pales into insignificance when compared to the numbers of FDA and other US regulatory body inspections of such vaccine facilities.

Additional Mechanisms under Discussion

The additional mechanisms being discussed all relate to the surveillance and reporting of disease through international or voluntary disease reporting systems. Whilst these disease surveillance and reporting systems are all helpful and provide information that is complementary to the Protocol, they are all **necessarily** voluntary in nature and cannot be **mandatory.** It would be unrealistic – and could actually harm the health monitoring regime of the international community which depends critically upon participating States having confidence that, in reporting outbreaks of disease, they will not in some way be penalised – if a situation were to be sought in which reporting to the WHO, FAO and OIE were to be made mandatory in order to enable a body associated with the Biological and Toxin Weapons Convention to use such data to try to determine whether some outbreak had been deliberate and thus in breach of the Convention. The Chairman's composite Protocol text requires the Technical Secretariat of the future Organization *inter alia* to collect, process and analyse relevant epidemiological information. Furthermore, the Technical Secretariat is also explicitly required to develop a framework for States Parties to support an international system for the global monitoring of emerging diseases in humans, animals and plants. It is **not** true to say that the Protocol does not have any provisions to create, expand or mandate systems to monitor disease occurrence.

It should be recalled that there has been agreement between the States Parties to submit information on outbreaks of disease as a confidence-building measure under the Biological and Toxin Weapons Convention. Few States have provided such information and the information submitted has been variable and raises more queries than answers – yet there is no mechanism by which such queries could be resolved. The **voluntary** nature of disease surveillance and reporting means that the data-sharing system mentioned as an additional mechanism would not be a credible contribution to biological weapons prohibition. However, improved disease surveillance and reporting would indeed be a valuable adjunct to the Protocol – but this is something that is best addressed through the relevant international organizations – the WHO, FAO and OIE – thereby making best use of their competencies and avoiding duplication.

Other International Monitoring Systems

There are no other existing international monitoring systems which could make a legally-binding contribution to the strengthening of the effectiveness and improving the implementation of the Biological and Toxin Weapons Convention. In other words, there is no credible or realistic alternative to the Protocol – and the Protocol is needed **now** to counter the increasing danger from the already prohibited misuse of microbiology and biotechnology.

In the longer term, the norm against chemical and biological weapons could be usefully enhanced by the international criminalization of work on chemical and biological weapons. This could be achieved by making such work into a crime against humanity in a similar way to piracy, hijacking and torture. A draft treaty to do this has been prepared by the Harvard-Sussex Program – this needs to be taken by one or more States to the UN General Assembly for consideration by the 6th Committee. Such an international criminalization would be complementary to the BTWC and its Protocol and the CWC.

More time needed?

The negotiations have already taken six years; if we include the VEREX process then we are looking at a decade of effort. In essence the core issues have not really changed. Many of the differences between delegations today are the same as they were in 1995. Another six months or a year or two of negotiations will not make any significant difference to, for example, the diverging views on export controls. More time will not make the text stronger, it will only lead to its unravelling. There were many Western and non-aligned delegations that would have wished to see stronger procedures for visits; this was one of the most intensely disputed part of the negotiations. More time is not going to lead to additional provisions in the visits text or to persuade others that they should be introduced. What we see is the best compromise that can be had now, and needed, for the foreseeable future given the reality of the diversity of views. The whole point of the Chairman's composite text was to break the logjam with a balanced text that is aimed at meeting the aspirations of all delegations, **including those** of the United States. While no one will have achieved all of their objectives, that in itself should not be the criteria by which this achievement is judged. It is vital that all States answer the question -- are they better with the Protocol regime than without it? Careful consideration shows that the Protocol provides a **net gain** to all States Parties with the benefits significantly outweighing the costs.

Conclusion: The Bottom Line

There is no doubt at all to those who have closely examined the intricacies of the Protocol and the details of the prohibition regime of closest relevance to the Biological and Toxin Weapons Convention – the Chemical Weapons Convention – that the Protocol brings significant benefits to the multilateral regime to prevent biological weapons. The world does not stand still and it is important to recognise that the international community reacts to what happens. The Chemical Weapons Convention with its attention to the dual use of chemicals was a significant step forward that is widely recognised as strengthening the security of **all** States Parties. The Protocol to the Biological and Toxin Weapons Convention in the form of the Chairman's composite Protocol text provides another opportunity to make the world a safer, more secure place. Absent a Protocol to the Convention, biological weapons will continue to present the greatest danger of all weapons of mass destruction – a point that is well recognised on both sides of the Atlantic. The Protocol provides **a net gain** to all States Parties. There is a real opportunity and a real benefit here for all States – for the United States to reject the Protocol would be short-sighted and foolish in the extreme and would not best serve the interests of the United States or the world.

The Table below provides a succinct comparison of the gains and costs of signing the Composite Protocol compared to the costs and gains of rejecting the Protocol. Overall conclusions are then drawn about the net value of signing the Composite Protocol -- and the net costs of rejecting it. Before examining the detail in the Table, it is important to recognise that there are areas where US interests will remain the same whether or not the US signs the Protocol. First, there is no change in respect of United States offensive weapons programmes as, unlike many other arms control treaties such as START or CFE, the United States has no biological weapons and has no intention to have any in accordance with its obligations under the Biological and Toxin Weapons Convention. Second, there is no change in the US intelligence priorities for collection and analysis of potential threats. The main impact of signing the Protocol will be to make available to the United States and to all other States Parties, an additional body of information which can be used nationally in guiding the employment of national intelligence resources.

The overall conclusions that emerge from examination of the Table are the following:

a. In signing the composite Protocol text, the US will be seen to have continued in its leadership role and **having taken all possible** multilateral **steps** to **prevent** biological weapons.

b. Signing the composite Protocol text will **reduce** the risk of biological weapons proliferation and use. Rejection of the Protocol would send the opposite signal and it can be argued that the risk of biological weapons proliferation and use are increased.

c. Overall, signing the composite Protocol text **enhances** US security. It provides **a net gain** to US security. Rejection of the Protocol misses this opportunity and decreases US security.

THE COSTS AND GAINS FROM THE COMPOSITE PROTOCOL

SIGN COMPOSITE PROTOCOL	REJECT COMPOSITE PROTOCOL
GAINS	**COSTS**
Reinforcement of international norm that biological weapons totally prohibited	**No** reinforcement of international norm that biological weapons totally prohibited **Risk** that norm is weakened as US seen to have declined opportunity to strengthen
Deterrence of would-be violator significantly **enhanced**	**Perception** that biological weapons unimportant Would-be violator **encouraged** by continued international inaction on BTWC
Increased transparency of activities in other States through mandatory declarations	Confidence-building measure submissions if the State decides to submit
Anomalies, uncertainties and **omissions** in declarations can be addressed	**No** means of addressing anomalies, uncertainties and omissions
Mechanisms established to address **non-compliance concerns** through investigations	Continuing **ineffective/unused** provisions (take concerns to UN Security Council)
All States required to enact **penal** legislation -- **reduced** possibility of bioterrorism	**No** requirement for penal legislation
All States required to establish **transfer controls** -- **reduced** possibility of agent/equipment acquisition by States or by non States actors	**No** requirement for establishment of transfer controls
COSTS	**GAINS**
Costs of Protocol implementation -- Modest. International organization half of OPCW National authority could be colocated with that for CWC -- additional data collection modest compared to that for existing CBMs	Avoidance of cost of Protocol implementation
OVERALL CONCLUSIONS	**OVERALL CONCLUSIONS**
US has taken **all possible** multilateral steps to prevent biological weapons -- continues leadership shown with negotiation of the BTWC	US **disinterest** in multilateral world community -- sets US at variance with collective security objectives of the rest of the world
Reduced risk of BW proliferation	**Continuing** (increased?) BW proliferation risk
Reduced risk of BW use	**Continuing** (increased?) risk of BW use
US security **enhanced**	Opportunity **missed**

The Protocol is an opportunity that is available **now** – to reject it would be to send the message unequivocally that the United States does not care about establishing a stronger regime to prevent biological weapons and their proliferation. It would be **contrary** to the leadership that the United States has shown over the past 50 years in building a world in which weapons of mass destruction are increasingly prohibited and their proliferation countered by **all** possible measures. . If the composite Protocol text is rejected, the United States is:

-- **Missing** the opportunity to make a big step forward to make work on biological weapons a penal offence around the world with benefits for both international security and for countering biological terrorism wherever it occurs;

-- **Failing** to take the opportunity to require all States Parties to review, amend or establish controls of the transfers of pathogens and dual use technologies;

-- **Failing** to move forward to a world in which there is much greater transparency about activities and facilities relevant to the Biological and Toxin Weapons Convention and in which over time confidence will be built between States Parties that they are indeed compliant with the obligations and undertakings under the Convention.

-- **Failing** to realize a world in which there is a mechanism to address concerns about non-compliance with the Convention. The quarter century since the entry into force of the Convention has been marked by the inability of the States Parties to address such non-compliance concerns – a situation in which the United States at the Fourth Review Conference in 1996 said that twice as many States were then seeking or had biological weapons than when the Convention entered into force in 1975 is hardly a testimony to a successful and effective regime; and, finally,

Indeed, US rejection of the Protocol will undermine any other efforts that the US might wish to pursue internationally at the bilateral, regional or multilateral level. Diplomatic leverage may be weakened and attempts to mobilize international opinion and support will be made much more difficult if the US has cast aside an internationally negotiated text, especially one which protects so many avowed US interests. Rejection of the Protocol sets the US at variance with every other nation in the world who recognizes that **collective** security is vital for peace and security in the 21st Century.

A summary of the key points is provided in the Box:

• The United States, just like the United Kingdom, **needs** this Protocol to enhance its security against the deliberate use of disease against humans, animals or plants – biological weapons.

• Why do we need this Protocol? Without it, there is no mechanism to challenge the potential violator. With the Protocol, there are mechanisms to challenge the potential violator – by facility or field investigations – and thereby raise the cost to the violator of pursuing this option.

• To make the challenge mechanism effective, we must have declarations. Why? Because they offer the possibility of finding the smoking gun and if the smoking gun is not found then may find equipment – such as fermenters or facilities – that should have been declared and is thus a violation. And uncertainties, ambiguities, anomalies – or **omissions** – in declarations can all be addressed through the clarification mechanisms.

• To make challenge and declarations effective, we must – as in other security agreements such as the Chemical Weapons Convention designed under the administration of President George Bush, Senior – have visits (inspections) to let the potential violator know that work on biological weapons at a declared site exposes the violator to the risk of discovery. In the United States, as in the United Kingdom, the possibility of auditing of income tax returns keeps the self-assessment tax system from being disregarded.

• All three elements – challenge investigations, declarations and visits – create an architecture within which the potential violator faces the risk of being exposed if he uses a declared facility and if he uses an undeclared facility even the mere presence of undeclared agents or equipment would raise serious questions.

The composite Protocol text provides all of this – and more – efficiently and effectively so giving us worthwhile security gains whilst sending all would be violators a clear message that biological weapons are totally prohibited and that their acquisition will not be tolerated.

Any country which doesn't sign and ratify the Protocol has declared themselves as rogues, and as the Protocol gains members, such rogue States will become more and more isolated in many ways. The United States like the United Kingdom **needs** this Protocol. A failure to agree the Protocol sends the message that the United States is does not care about the danger from biological weapons.

WRITTEN TESTIMONY

OF

DR DAVID ATWOOD

QUAKER UNITED NATIONS OFFICE, GENEVA, SWITZERLAND

PROFESSOR MALCOLM R. DANDO

PROFESSOR OF INTERNATIONAL SECURITY
DEPARTMENT OF PEACE STUDIES, UNIVERSITY OF BRADFORD
BRADFORD, WEST YORKSHIRE, UNITED KINGDOM

DR ALASTAIR HAY

READER IN CHEMICAL PATHOLOGY
SCHOOL OF MEDICINE, UNIVERSITY OF LEEDS
LEEDS, WEST YORKSHIRE, UNITED KINGDOM

DR ALEXANDER KELLE

SCHOLAR, INSTITUTE FOR COMPARATIVE POLITICS AND INTERNATIONAL RELATIONS, FRANKFURT, GERMANY

AND

VISITING FELLOW, PEACE RESEARCH INSTITUTE FRANKFURT
FRANKFURT, GERMANY

IAN KENYON

SENIOR VISITING FELLOW
MOUNTBATTEN CENTRE FOR INTERNATIONAL STUDIES,
DEPARTMENT OF POLITICS, UNIVERSITY OF SOUTHAMPTON,
SOUTHAMPTON, UK

AND PREVIOUSLY

EXECUTIVE SECRETARY
PREPARATORY COMMISSION FOR THE ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS
THE HAGUE, THE NETHERLANDS

PROFESSOR KATHRYN NIXDORFF

DEPARTMENT OF MICROBIOLOGY AND GENETICS
DARMSTADT UNIVERSITY OF TECHNOLOGY
DARMSTADT, GERMANY

AND

INTERNATIONAL NETWORK OF ENGINEERS AND SCIENTISTS FOR GLOBAL RESPONSIBILITY (INES)

PROFESSOR GRAHAM S. PEARSON

VISITING PROFESSOR OF INTERNATIONAL SECURITY
DEPARTMENT OF PEACE STUDIES, UNIVERSITY OF BRADFORD
BRADFORD, WEST YORKSHIRE, UNITED KINGDOM

AND PREVIOUSLY

DIRECTOR GENERAL AND CHIEF EXECUTIVE
CHEMICAL AND BIOLOGICAL DEFENCE ESTABLISHMENT
MINISTRY OF DEFENCE, PORTON DOWN, SALISBURY, WILTSHIRE, UNITED KINGDOM

PROFESSOR JULIAN PERRY ROBINSON

FELLOW, SPRU -- SCIENCE AND TECHNOLOGY POLICY RESEARCH,
UNIVERSITY OF SUSSEX, FALMER, BRIGHTON, SUSSEX, UNITED KINGDOM

NICHOLAS A. SIMS

SENIOR LECTURER IN INTERNATIONAL RELATIONS
DEPARTMENT OF INTERNATIONAL RELATIONS
LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE
UNIVERSITY OF LONDON, HOUGHTON STREET, LONDON, UK

**TO THE SUBCOMMITTEE ON NATIONAL SECURITY,
VETERAN AFFAIRS & INTERNATIONAL RELATIONS
OF THE HOUSE COMMITTEE ON GOVERNMENT REFORM**

Washington, D.C.

10 July 2001

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EXECUTIVE SUMMARY

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This testimony addresses the development of the Protocol, goes on to examine the value of the Protocol, briefly considers the additional mechanisms under discussion and then draws some conclusions.

Key points drawn in the testimony include:

- The Protocol has been carefully crafted to strengthen the effectiveness and improve the implementation of the Biological and Toxin Weapons Convention (BTWC).

- The Protocol is additional to and supplementary to the BTWC -- it does not change the fundamental prohibitions and obligations of the Convention which have been in force for over 25 years.

- The Protocol will increase transparency and build confidence between States Parties and will deter States Parties from becoming a violator of the Convention

- The Protocol merits careful, informed and considered attention before any decision is reached which might run counter to the political judgements of the rest of NATO and send quite the wrong message to the wider international community -- and potentially cause irreparable damage to international security.

- The Protocol regime is certainly worthy to function in parallel with the Chemical Weapons Convention.

- The Protocol is **the best** that can be negotiated at this time. Delay in completion could well result in unravelling what is already a **good** Protocol.

- Additional mechanisms under discussion are **not credible** as an alternative to the Protocol.

- The Protocol brings significant and worthwhile benefits to the multilateral regime to prevent biological weapons. Rejection of the Protocol would cause irreparable damage to international security and **not** best serve the current or future interests of the United States or of the world.

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Mr Chairman and members of the Subcommittee. It is an honour and a pleasure to submit written testimony on the "Biological Weapons Convention Protocol: Status and Implications".

We are a group of European-based experts from various Universities and other non-governmental foundations who have been engaged for a number of years -- totalling over 180

years -- in promoting the strengthening of the regimes against weapons of mass destruction and in particular against biological weapons.

Dr David Atwood is President of the NGO Committee for Disarmament in Geneva and is also the representative of the Quaker UN Office in Geneva dealing with disarmament matters. He has been active in this field for over 20 years. **Professor Malcolm R. Dando** has been active in the field of arms control for the past 20 years and the Biological and Toxin Weapons Convention for the past ten years. He has published several books including "Biological Warfare in the 21st Century", Brassey's (1994), and "The New Biological Weapons", Lynne Rienner (2001). **Dr Alastair Hay** has been active in the field of chemical and biological weapons prohibition and arms control for the past 25 years. **Dr Alexander Kelle** has been active in the field for 7 years particularly in regard to the development of the Chemical Weapons Convention and its implementation as well as following the ongoing work of the Ad Hoc Group negotiating a Protocol to strengthen the effectiveness and improve the implementation of the Biological Weapons Convention. **Ian Kenyon** was the Executive Secretary of the Preparatory Commission for the Organisation for the Prohibition of Chemical Weapons and previously as a senior member of the United Kingdom Foreign Office engaged in arms control both in London and Geneva. He has been active for over 25 years in arms control. **Professor Kathryn Nixdorff** of the Department of Microbiology and Genetics at the Darmstadt University of Technology has been active in this field for 15 years. She also heads a working group on the prohibition of biological and toxin weapons in the International Network of Engineers and Scientists for Global Responsibility (INES), an NGO with over 90 member organisations as well as individual members in 50 countries. **Professor Graham S. Pearson** was the Director General and Chief Executive of the Chemical and Biological Defence Establishment, Porton Down from 1984 until 1995 and has been active in this field for over 17 years. He has published "The UNSCOM Saga: Chemical and Biological Weapons Non-Proliferation", Macmillan/St. Martin's Press (2000). **Professor Julian Perry Robinson** has spent over 35 years in this field and is currently an Editor of the CBW Conventions Bulletin. **Nicholas Sims** has spent over 30 years in following the negotiation of and the development of the Biological and Toxin Weapons Convention since its entry into force as well as following the ongoing work of the Ad Hoc Group to negotiate the Protocol. He has published several books including "International Organization for Chemical Disarmament", Oxford University Press (1987) and "The Diplomacy of Biological Disarmament: Vicissitudes of a Treaty in Force, 1975-1985", Macmillan/St. Martin's Press (1988).

Introduction

We are all aware of and fully support the immense importance of the Biological and Toxin Weapons Convention which totally prohibits development, production, and stockpiling of biological weapons. The Convention opened for signature in 1972 and entered into force in 1975. This established an international norm that biological weapons are totally prohibited to which over 160 States have bound themselves -- 143 States Parties and 18 Signatory States. The United States together with the United Kingdom and the then Soviet Union are the co-Depositaries of the Convention which reflected an initiative by both the United States and the United Kingdom to ensure that biological weapons are totally banned. It has, however, become increasingly clear over the past 25 years that the absence of an organization and of measures to demonstrate compliance and address non-compliance concerns is resulting in an erosion of confidence in the effectiveness of the Convention. This was highlighted by the admission in 1992 that the former Soviet Union, despite being a co-Depositary, had continued

a massive offensive biological weapons programme until at least 1992. Further concerns about the Convention were underlined when the United States at the Fourth Review Conference in 1996 stated that twice as many states were currently seeking or had already obtained biological weapons than when the Convention entered into force in 1975. We welcomed the steps taken by the States Parties at the Second Review Conference in 1986 and extended at the Third Review Conference to agree a series of politically binding Confidence-Building Measures. However, the variability and patchiness of the information submitted by the relatively few States Parties which have made these annual Confidence-Building Measure submissions, which are simply collated and distributed to States Parties in the language in which the submission is made, have rendered the CBMs ineffective and has left the Convention in need of further strengthening.

Consequently, the agreement in 1991 to establish the Ad Hoc Group Of Governmental Experts, known as VEREX, to examine and identify potential verification measures was welcomed as was its production of a Final Report agreed by consensus in 1993. This concluded that measures to increase confidence in compliance with the Convention are technically feasible. The Final Report was considered at a Special Conference in September 1994 which agreed by consensus to establish an Ad Hoc Group to negotiate a legally-binding instrument to strengthen the effectiveness and improve the implementation of the Convention.

Development of the Protocol

We have all visited Geneva several times in order to gain an appreciation at first hand of the developments in the Protocol and to discuss the key issues with representatives of the delegations. We are aware of the way in which the delegations have had to adjust their national positions and aspirations during the course of the negotiations as new and clearer appreciations have been gained by all participants. Several of us have written Briefing Papers and Evaluation Papers which have been presented to and distributed to the delegations participating in the Ad Hoc Group.

We have watched the development and evolution of the Protocol in the Ad Hoc Group negotiations over the past seven years. It is evident to us that it has been carefully crafted to be an effective and efficient instrument that addresses those activities and facilities of greatest relevance to the Biological and Toxin Weapons Convention. We stress the importance when considering the Protocol of remembering that the fundamental prohibitions and obligations of the Biological and Toxin Weapons Convention are already in force – and have been so for over 25 years. The Protocol makes **no** changes to the fundamental prohibitions and obligations of the Convention. The Protocol to strengthen the effectiveness and improve the implementation of the Convention is additional and supplementary to the Convention – it provides a framework and an organisation that will increase transparency and over time build confidence between States Parties that they are indeed in compliance with the Convention. We also stress that the Protocol will thereby contribute significantly to the deterrence of would-be possessors as they will become increasingly isolated.

It is evident to us that the Protocol will significantly strengthen the regime to ensure compliance with the complete prohibition of biological weapons as over time it will strengthen confidence in compliance between States Parties and provides an organization and measures that can address non-compliance concerns. We had followed the slowing down in the finding of compromise language for the rolling text reaching stagnation in mid 2000 and welcomed the intensive bilateral informal consultations undertaken by the Chairman,

Ambassador Tibor Tóth, to explore holistic solutions to the remaining issues requiring resolution. Consequently, we were encouraged greatly by the introduction on 30 March 2001 of the Chairman's composite Protocol text, based in its entirety on the language in the rolling text, to break the logjam in the negotiations and showing that it should indeed be possible to complete the negotiation of the Protocol by the time of the Fifth Review Conference as had been agreed by all States Parties at the Fourth Review Conference in 1996. We were delighted by the response by so many of the delegations engaged in the Ad Hoc Group. Although, as might be expected in any composite text in which compromises have been adopted to address the remaining issues, they had reservations about some of the compromises, they nevertheless considered that the Chairman's composite Protocol text represented a good basis for further negotiations to complete the Protocol before the Fifth Review Conference.

We were therefore gravely concerned by the press reports, such as that in *The New York Times* on 20 May 2001, that the outcome of a US interagency review of the Protocol was negative. We welcome the initiative taken by your Committee to seek an informed view of "The Biological Weapons Convention Protocol: Status and Implications" although we are dismayed at the misunderstandings and misperceptions in many of the submissions to your hearings.

The Protocol and its benefits are simply too valuable for the United States to reject this – should this be the final decision – on the basis of misunderstandings and misperceptions. It is very clear that at the highest level in the United States there is concern – and rightly so – about the proliferation of weapons of mass destruction in general and of biological weapons in particular. President George W. Bush earlier this month said that "Our United States and our allies ought to develop the capacity to address the true threats of the 21st Century. The true threats are **biological** and information **warfare**." [Emphasis added] The counter to such threats lies in harnessing all the tools – as Ambassador Donald Mahley stated in his written testimony of 26 June 2001 to your Committee, albeit in a different context, "The United States believes that all the tools currently available to reduce the threat, as well as any we would be prepared to accept in a Protocol, are complementary. While none alone may be a sufficient answer to the threat, none should be discarded or weakened – it is a price much too dear to pay for any multilateral regime."

The NATO strategy to counter weapons of mass destruction has been reiterated for several years in NATO Summits at the Heads of State and Government level as well as at NATO Foreign and Defence Ministerial meetings along the following lines:

> *The proliferation of nuclear, biological and chemical (NBC) weapons and their means of delivery can pose a direct military threat to Allies' populations, territory, and forces and therefore continues to be a matter of serious concern for the Alliance.* ***The principal non-proliferation goal of the Alliance and its members is to prevent proliferation from occurring, or, should it occur, to reverse it through diplomatic means. We reiterate our full support for the international non-proliferation regimes and their strengthening.***
>
> ***Arms control, disarmament and non-proliferation will continue to play a major role in the achievement of the Alliance's security objectives…. All Allies are States Parties to the central treaties related to disarmament and non-proliferation of weapons of mass destruction, the Nuclear Non-Proliferation Treaty, the***

> ***Biological and Toxin Weapons Convention and the Chemical Weapons Convention, and are committed to the full implementation of these treaties....*** *As part of its broad approach to security, NATO actively supports arms control and disarmament, both conventional and nuclear, and pursues its approach against the proliferation of weapons of mass destruction and their delivery means. In the light of overall strategic developments and the reduced salience of nuclear weapons, the Alliance will consider options for confidence and security building measures, verification, non-proliferation and arms control and disarmament.* [Emphasis added]

Against such a background, the Protocol to strengthen the effectiveness and improve the implementation of the Biological and Toxin Weapons Convention merits careful, informed and considered attention before any decision is reached which might run counter to the political judgements of the rest of NATO and send quite the wrong message to the wider international community about the objectives and aspirations of the United States – and potentially cause irreparable damage to international security.

The Value of the Protocol

In considering the value of the Protocol, it is necessary to stand back and examine the Chairman's composite Protocol text as a whole. Care needs to be taken not to be biased by perceptions that may reflect a short term view or fail to recognize that the world does not stand still whilst a Protocol is negotiated – there have been significant changes over the past decade. The CWC has been completed, opened for signature, entered into force and has now had four years of implementation resulting in changed international perceptions about what should be incorporated into such instruments. The Earth Summit took place in Rio in 1992 and the Convention on Biological Diversity which opened then for signature has entered into force and a Protocol on Biosafety has been negotiated; these bring significant changes to international objectives and perceptions. It is also necessary to recognize that what has been negotiated is a Protocol to strengthen the effectiveness and improve the implementation of the Convention – it is not and never has been a "verification" Protocol in the narrow sense of only being designed to catch outright violations. Rather its whole thrust has been to focus on compliance – to increase transparency about activities and facilities within States Parties of particular relevance to the Convention and thereby over time to build confidence between States Parties that they are in compliance with the Convention. This increased transparency will deter any State Party from becoming a violator as that Party would run the risk of being exposed whether a declared or an undeclared facility was used as well as through the mechanisms and investigations to address non-compliance concerns. And a State not Party to the Protocol which is engaged in or contemplating prohibited activities will increasingly be isolated. In standing back to examine the Protocol, a useful analogy is to a tree where the Ad Hoc Group have been considering which way the branches will go and what the shape of the leaves should be. It is now time to consider the whole tree.

The key comparison is between the BTWC Protocol regime and the BTWC alone (including the procedures devolved from its provisions). A comparison of the principal measures in the regime, compared with the procedures of the BTWC alone, demonstrates clearly that the Protocol regime brings significant benefits. It requires mandatory declarations of a range of facilities of particular relevance to the Convention: biodefence facilities, BL-4 maximum containment facilities, certain BL-3 high containment facilities with specified production capabilities or engaged in genetic modification, plant pathogen containment facilities, work with listed agents and/or toxins involving production above a certain capacity, genetic

modification activities or aerosolization, and production facilities in excess of certain capacities or producing human or animal vaccines. These are underpinned by measures to ensure submission with tiered penalties, both automatic and after consideration, for late submission. There are then structured and elaborated follow-up activities after submission of declarations including randomly-selected transparency visits skewed to avoid any undue burden so that no State Party shall receive more than 7 in any calendar year whilst at the other extreme a State Party with any declared facilities shall receive at least two randomly-selected transparency visits in any five year period. The effectiveness and efficiency of such transparency visits have been clearly demonstrated in trial visits carried out by several States, frequently with observers present from other States. There are also structured and tiered provisions for clarification of any ambiguity, uncertainty, anomaly or omission in a declaration. Then the provisions for addressing concerns about non-compliance include consultation procedures and provisions for field investigations (including of releases of agents) and facility investigations. These compliance measures are complemented by technical cooperation and assistance provisions that focus on a real need – the countering of infectious diseases – and will, over time, help States Parties develop the national infrastructure that will bring benefits for health, safety and prosperity. In addition, because of both the increased transparency and the involvement of national health, safety and quality authorities, this also contributes over time to increased security.

It is clear to us that the regime is certainly worthy to function in parallel with the CWC regime for the monitoring of compliance in respect of dual-purpose agents. Whilst the Protocol could have been stronger, we recognize that, realistically, stronger measures would not attract wide support and thus that the composite Protocol text is **the best** that can be negotiated at this time. A further period of negotiation would not strengthen the composite Protocol text and could well lead to unravelling what is already a good Protocol. We recognize that the Protocol regime will significantly augment the non-proliferation regime addressing the total prohibition of biological weapons. The future Organization to implement the Protocol will also bring significant benefits to the regime as it will collect information from States Parties and assist them in achieving effective national implementation measures. We disagree with the conclusion in testimony submitted to your committee that "*a Protocol would not improve our ability to effectively verify compliance with the BWC either in terms of certifying that a country is in compliance with, or in violation of, its obligation*". In the absence of the Protocol all that any country has to go on in assessing whether another country is in compliance with the Convention are press reports, intelligence estimates and unsubstantiated information of doubtful credence. Intelligence estimates must necessarily be worst case assumptions and may well give undue credence to rumour and innuendo or simply fail to recognise perfectly legal reasons for an activity because of a lack of appreciation of different approaches taken in that country. With the Protocol in place, there will be mandatory declarations from States Parties with the means for both States Parties or the Organization to clarify any ambiguities, uncertainties, anomalies or uncertainties, providing hard evidence as to activities and facilities within the State Party. Any inconsistencies between parts of declarations can be addressed, leading to a more comprehensive and soundly based appreciation of the activities and facilities within the State Party.

Additional Mechanisms under Discussion

We are aware that your committee is also considering whether there are additional mechanisms that should be considered as a possible alternative to a Protocol. Whilst improvements in the surveillance and reporting of disease through international or voluntary disease reporting systems are all helpful and provide information that is complementary to the

Protocol, they are all **necessarily** voluntary in nature and cannot be **mandatory** – and certainly are **not credible** as a substitute for the Protocol nor are they even a possible alternative. It would be unrealistic – and could actually harm the health monitoring regime of the international community which depends critically upon participating States having confidence that, in reporting outbreaks of disease, they will not in some way be penalised – if a situation were to be sought in which reporting to the WHO, FAO and OIE were to be made mandatory in order to enable a body associated with the Biological and Toxin Weapons Convention to use such data to try to determine whether some outbreak had been deliberate and thus in breach of the Convention. The Chairman's composite Protocol text requires the Technical Secretariat of the future Organization *inter alia* to collect, process and analyse relevant epidemiological information. Furthermore, the Technical Secretariat is also explicitly required to develop a framework for States Parties to support an international system for the global monitoring of emerging diseases in humans, animals and plants. These provisions will ensure that the Protocol is augmented by analysis of disease surveillance and reporting whilst ensuring that the existing international arrangements relating to human, animal and plant health are not jeopardised.

Conclusion

Our unequivocal conclusion is that the Protocol brings significant and worthwhile benefits to the multilateral regime to prevent biological weapons. The package of measures in the Protocol has been skilfully crafted so that it should attract wide support from States Parties around the world – and thereby bring improved health, safety, security and prosperity to us all. Diseases recognize no frontiers and are spread rapidly through international travel and trade. An outbreak in one country can rapidly harm those on the other side of the world. We should all seize the opportunity that is available now to strengthen the regime against biological weapons. It would be a terrible mistake to let this opportunity pass – or wither on the vine – because of some unsound considerations. A multilateral solution to the danger of biological weapons proliferation reinforcing the total prohibition of such weapons is **greatly** to be preferred to any attempted unilateral solution. For the United States to reject the Protocol would be short-sighted -- and **contrary** to the leadership that the United States has shown over the past 50 years in building a world in which weapons of mass destruction are increasingly prohibited and their proliferation countered by **all** possible measures. Rejection of the Protocol would cause irreparable damage to international security and not best serve the current or future interests of the United States or the world.

Mr. SHAYS. Ambassador you're on, and welcome. You have a great voice, but I'm going to have you do what I have to do, turn on the mic, and I'm going to ask you to pull it a little closer to you.

Mr. MAHLEY. Does that work?

Mr. SHAYS. That works. It makes me feel good to tell you something to do here. Gives me a sense of authority.

STATEMENTS OF DONALD A. MAHLEY, SPECIAL NEGOTIATOR, CHEMICAL AND BIOLOGICAL ARMS CONTROL, DEPARTMENT OF STATE; EDWARD LACEY, PRINCIPAL DEPUTY ASSISTANT, SECRETARY OF STATE FOR VERIFICATION AND COMPLIANCE, DEPARTMENT OF STATE; AND JAMES LEONARD, FORMER U.S. AMBASSADOR, UNITED NATIONS CONFERENCE ON DISARMAMENT

Mr. MAHLEY. Thank you, Mr. Chairman. It is my great pleasure to reappear before you today to discuss the current state of play in the ongoing negotiations for protocol to the Biological Weapons Convention. I have prepared a written statement, and as you indicated before, I would, of course, like that to be incorporated into the record. I am not going to try to bother to read the entirety of it, but you had asked whether or not there were—what kind of substantial benefits and verification benefits might be expected from this protocol. In that respect, I, of course, will defer on the question of verification to my colleague, Dr. Lacey, who deals with that very specifically.

But let me simply say that it has been the U.S. objective throughout these negotiations to, No. 1, make sure that we always had reaffirmed the U.S. underlying commitment to the Biological Weapon Convention. And I want to make sure we specify the difference between the convention and the protocol. The protocol is an addition to the Biological Weapons Convention. And as such, it is forbidden by its own mandate from modifying, or otherwise changing the basic obligations of that convention. And the obligations of that convention, which the United States fully supports, do indeed remain fully in force, and that is, as you indicated in your opening statement, that there shall not be offensive biological weapons in the world.

Now in doing that, we believe that a protocol to that convention ought to provide, to the greatest extent that it can, some additional transparency and some additional confidence that countries are complying with the obligations which they have undertaken as parties to that convention. As such, we therefore would like to be able to have a system by which we could call into question any issues that one had brought up, and we would like to have a system in which we could confirm those kinds of concerns that we had developed.

The substantive difficulties that the United States has had with this negotiation throughout, and that we continue to have, even with the composite text that the chairman has presented, lie in the questions of whether those objectives can be or are achieved by the kind of protocol that we have before us. And indeed it is exactly those kind of substantive difficulties that we still challenge in terms of the state of the negotiations, whether we get those benefits. Other things that I think—and you heard this in the testimony

in June from expert witnesses—that certainly has governed our approach to the negotiations, are that it should do no harm. And in doing no harm, we believe that it is doing no harm to the underlying principles of the convention itself. That is to say, if there is a situation where some countries are attempting to undercut other parallel mechanisms that are existing to try to get at the question of biological weapons proliferation, in this case, I refer to export controls, allowing the protocol to undercut that kind of a thing, would indeed be to undercut the convention itself, that, we believe, is an unsatisfactory outcome and not one that the United States should support.

So it's that combination of what we're after in this negotiation, something that will enhance our ability and confidence that people are complying with convention, and something that will studiously avoid undercutting either the convention itself or any other parallel mechanisms in the world that are currently extant to try to address the threat of biological weapons.

I would stop at that point in terms of my opening oral statement, Mr. Chairman, and ask that my written testimony be read into the record. Thank you very much.

[The prepared statement of Mr. Mahley follows:]

TESTIMONY OF AMBASSADOR DONALD A. MAHLEY
SPECIAL NEGOTIATOR FOR CHEMICAL AND BIOLOGICAL ARMS CONTROL
DEPARTMENT OF STATE

BEFORE THE HOUSE GOVERNMENT REFORM COMMITTEE
SUBCOMMITTEE ON NATIONAL SECURITY, VETERANS AFFAIRS
AND INTERNATIONAL RELATIONS
THE BIOLOGICAL WEAPONS CONVENTION: STATUS AND IMPLICATIONS

JULY 10, 2001

MISTER CHAIRMAN. IT IS MY GREAT PLEASURE TO REAPPEAR BEFORE YOU TODAY TO DISCUSS THE CURRENT STATE OF PLAY IN THE ONGOING NEGOTIATIONS FOR A PROTOCOL TO THE BIOLOGICAL WEAPONS CONVENTION (BWC). YOU WILL RECALL FROM MY PREVIOUS APPEARANCES BEFORE THIS SUBCOMMITTEE THAT THE UNITED STATES IS PURSUING A POLICY THAT WILL STRENGTHEN THE CONVENTION AND AID IN EFFORTS TO COUNTER THE BIOLOGICAL WEAPONS THREAT IN THE WORLD.

THERE HAVE BEEN PRESS STORIES RECENTLY CONCERNING THESE NEGOTIATIONS, WHICH MAKE A NUMBER OF CLAIMS BOTH ABOUT THE POSITION OF THE UNITED STATES AND THE PROSPECTIVE OUTCOMES FOR THE NEGOTIATIONS. I WOULD LIKE TO TAKE THIS OPPORTUNITY TO CLARIFY SOME OF THE INFERENCES THAT MAY HAVE BEEN DRAWN FROM THOSE STORIES.

FIRST OF ALL, THE UNITED STATES HAS BEEN VERY CLEAR THROUGHOUT THE LAST SIX YEARS OF NEGOTIATIONS. WE UNRESERVEDLY SUPPORT THE 1975 BIOLOGICAL WEAPONS CONVENTION THAT UNDERPINS THESE NEGOTIATIONS, AND WE HAVE A STRONG DESIRE TO SEE THE ABILITY TO COUNTER THE GROWING BIOLOGICAL WEAPONS THREAT IN THE WORLD ENHANCED. THE UNITED STATES IS NOT THINKING ABOUT WITHDRAWING ITS SUPPORT FROM THE BIOLOGICAL WEAPONS CONVENTION, AND SUCH IMPLICATIONS ARE ABSOLUTELY FALSE AND UNFOUNDED.

IT IS SOMETIMES DIFFICULT TO UNDERSTAND THAT THESE NEGOTIATIONS ARE FOR A PROTOCOL THAT IS TO BE SUPPLEMENTAL TO THE UNDERLYING CONVENTION. THE NEGOTIATIONS ARE ONLY OPEN TO STATES PARTIES TO THE CONVENTION, STATES THAT HAVE ALREADY FORSWORN BIOLOGICAL WEAPONS COMPLETELY. THE MANDATE FOR THE PROTOCOL NEGOTIATIONS SPECIFICALLY PROHIBITS ANY RESULT FROM MODIFYING, REDUCING, OR ALTERING THE BASIC OBLIGATIONS OF THE CONVENTION ITSELF. THUS, THE COMMITMENT OF THE STATES PARTIES TO THE BIOLOGICAL WEAPONS

CONVENTION, INCLUDING THE UNITED STATES, SHOULD NOT BE ALTERED BY THE OUTCOME OF THE PROTOCOL NEGOTIATIONS.

THE NEGOTIATIONS HAVE CONTINUED SINCE THE LAST TIME I APPEARED BEFORE THIS SUBCOMMITTEE. WHILE THE "ROLLING TEXT," A SET OF NATIONAL NEGOTIATING POSITIONS LOOSELY CONNECTED BY AGREED ELEMENTS OF A PROTOCOL, STILL EXISTS, NEGOTIATION ON THE BASIS OF THAT TEXT HAS NOW BECOME STERILE. THOSE ISSUES AMENABLE TO DRAFTING IMPROVEMENT OR INTERNAL COMPROMISE HAVE BEEN SETTLED. THE REMAINING ISSUES REFLECT SUBSTANTIVE DIFFERENCES AMONG COUNTRIES TO WHICH THOSE COUNTRIES ATTACH IMPORTANCE. THUS, IN A DISCUSSION OF DETAILED TEXTUAL PROPOSALS ON A SINGLE ISSUE, COUNTRIES HAVE BECOME UNWILLING TO RELINQUISH THEIR POSITIONS WITHOUT IDENTIFYING SOME COMPENSATING GAIN ELSEWHERE.

THE AD HOC GROUP CHAIRMAN, TIBOR TOTH OF HUNGARY, HAS ATTEMPTED TO RESOLVE THE DISAGREEMENT WITH THE "COMPOSITE TEXT" HE INTRODUCED AT THE LAST NEGOTIATING SESSION. IT IS A TEXT DESIGNED TO MAKE NO COUNTRY REALLY HAPPY, BUT TO OFFER SIMULTANEOUS WAYS FORWARD ON THE FULL RANGE OF COMPETING NATIONAL ISSUES AND NATIONAL POSITIONS.

AS I INDICATED TO THE OTHER AD HOC GROUP PARTIES DURING THE LAST ROUND, THE UNITED STATES HAS A NUMBER OF IMPORTANT SUBSTANTIVE AREAS IN THE "COMPOSITE TEXT" WHERE *OUR* LONG-STANDING NEGOTIATING POSITIONS HAVE NOT BEEN INCORPORATED. WE HAVE SERIOUS SUBSTANTIVE CONCERNS WITH THE TEXT AS AMBASSADOR TOTH PRESENTED IT. MANY CONTENTIOUS ISSUES STILL REMAIN TO BE SOLVED IN THE PROTOCOL NEGOTIATIONS. AMONG THEM, ONE ISSUE CONTINUES TO BE A LIGHTNING ROD FOR DISPARATE VIEWS OF THE UNDERLYING PURPOSE OF THE NEGOTIATIONS THEMSELVES. THAT IS THE ISSUE OF EXPORT CONTROLS. I HAVE PRESENTED THE UNITED STATES VIEW OF THIS ISSUE BEFORE -- BUT I WOULD LIKE TO REPRISE IT BRIEFLY. THE UNITED STATES DOES NOT VIEW NEGOTIATIONS ABOUT A PROTOCOL TO THE BIOLOGICAL WEAPONS CONVENTION TO BE A DISCUSSION OF TRADE ACCESS. IT IS A NEGOTIATION ABOUT NATIONAL SECURITY AND CONFIDENCE IN ATTEMPTS TO CONTROL AND ELIMINATE A PARTICULAR WEAPON OF MASS DESTRUCTION -- BIOLOGICAL WEAPONS. WE ARE NOT PREPARED TO UNDERMINE, WEAKEN, OR OTHERWISE COMPROMISE OUR OVERALL APPROACH TO COUNTERING PROLIFERATION OF BIOLOGICAL WEAPONS CAPABILITY THROUGH ANY PROTOCOL. THE UNITED STATES BELIEVES THAT ALL THE TOOLS CURRENTLY AVAILABLE TO REDUCE THIS THREAT, AS WELL AS ANY THAT WE WOULD BE PREPARED TO ACCEPT IN A

PROTOCOL, ARE COMPLEMENTARY. WHILE NONE ALONE MAY BE A SUFFICIENT ANSWER TO THE THREAT, NONE SHOULD BE DISCARDED OR WEAKENED -- IT IS A PRICE MUCH TOO DEAR TO PAY FOR ANY MULTILATERAL REGIME.

THE UNITED STATES ALSO HAS A NUMBER OF CONCERNS ABOUT BIODEFENSE AND PROPRIETARY INFORMATION THAT THE PROPOSED TEXT DOES NOT FULLY SATISFY.

THE UNITED STATES HAS AN EXTENSIVE BIODEFENSE PROGRAM DESIGNED TO PROTECT BOTH OUR ARMED FORCES AND OUR POPULATION FROM ROGUE STATES AND TERRORISTS. PROVIDING EXTENSIVE INFORMATION ABOUT THESE EFFORTS IN AN UNCLASSIFIED FORMAT TO AN INTERNATIONAL ORGANIZATION UNDER THE GUISE OF "TRANSPARENCY" RUNS THE RISK OF PROVIDING A PROLIFERATOR OR TERRORIST WITH A ROADMAP TO EXPLOIT OUR VULNERABILITIES. MANY OF OUR FRIENDS AND ALLIES AROUND THE WORLD SHARE IN THE BENEFITS OF OUR BIODEFENSE WORK. WE BELIEVE FIRMLY THAT PROTECTING IT IS ESSENTIAL NOT ONLY FOR OUR SECURITY, BUT ALSO TO THE SECURITY OF OTHERS.

THE UNITED STATES IS THE WORLD'S LEADER IN BIOTECHNOLOGY. THE COST OF EARLY RESEARCH AND DEVELOPMENT -- INCLUDING ALL THE EFFORTS THAT DO NOT RESULT IN VIABLE PRODUCTS -- IS ENORMOUS. PROVIDING OTHERS WITH THE MEANS TO AVOID SUCH SUNK COSTS OR TO OBTAIN PROCESS INFORMATION FOR UNFAIR COMPETITION WOULD ENDANGER NOT ONLY THE INDUSTRY, BUT THE BENEFITS THAT INDUSTRY PROVIDES TO THE ENTIRE WORLD. AGAIN, THE CURRENT TEXT DOES NOT OBVIATE THE CONCERNS ABOUT THE ISSUE WE HAVE EXPRESSED THROUGHOUT THE NEGOTIATION.

THE UNITED STATES IS STILL CONSIDERING ITS APPROACH. I WOULD REPEAT THE UNDERLYING PRINCIPLE OF THE UNITED STATES APPROACH TO THIS NEGOTIATION: WE SEEK IMPROVEMENT IN THE ABILITY TO IMPEDE THE THREAT AND REALITY OF BIOLOGICAL WEAPONS PROLIFERATION IN THE WORLD. WE RECOGNIZE THAT THERE IS SOME RISK INHERENT IN ANY SUCH EFFORT, GIVEN THE MAGNITUDE AND ADVANCED STATE OF UNITED STATES BIODEFENSE ACTIVITY AND THE BIOTECH INDUSTRY IN THE UNITED STATES. WHAT WE HAVE SOUGHT IS A BALANCE THAT WOULD ACHIEVE GREATER BENEFIT IN THE NON-PROLIFERATION AND ARMS CONTROL OBJECTIVES THAN COSTS TO LEGITIMATE NATIONAL SECURITY AND COMMERCIAL INTERESTS. THAT IS A JUDGMENT THAT WILL BE MADE FINALLY AT SENIOR POLITICAL LEVELS OF THE EXECUTIVE BRANCH, INFORMED BY BOTH THE SUBSTANTIVE ANALYSIS OF THE INTERAGENCY REVIEW I CHAIRED THIS SPRING AND THE POLITICAL CONTEXT OF THE NEGOTIATIONS.

THE PERCEIVED NEED TO SEARCH FOR A FORMAL WAY TO STRENGTHEN THE BIOLOGICAL WEAPONS CONVENTION ORIGINATED IN THE FRUSTRATION OF THE THIRD REVIEW CONFERENCE TO FIND OTHER WAYS TO ENHANCE IMPLEMENTATION OF THE CONVENTION. MANY OF THE ISSUES THAT HAVE CONSUMED THE BULK OF NEGOTIATING TIME IN THE AD HOC GROUP RELATE DIRECTLY TO CONCERNS ONE OR MORE COUNTRIES HAVE EXPRESSED IN PREVIOUS REVIEW CONFERENCES OF THE CONVENTION. CONTENTIOUS ARGUMENTS HAVE BEEN DIVERTED FROM THE FOURTH REVIEW CONFERENCE TO THE AD HOC GROUP. IF THERE IS NO SENSE DURING THE FIFTH REVIEW CONFERENCE IN NOVEMBER THAT A PROTOCOL ADDRESSING THESE ISSUES IS IN SIGHT, WE CAN EXPECT A VERY TROUBLESOME REVIEW CONFERENCE, WITH SOME BITTERLY FOUGHT ATTEMPTS TO INCORPORATE NATIONAL VIEWS IN THE FINAL DOCUMENT OF THE REVIEW CONFERENCE. THIS IS ANOTHER FACTOR THE UNITED STATES WILL TAKE INTO CONSIDERATION IN ITS APPROACH TO THE PROTOCOL.

THE UNITED STATES IS GRAPPLING WITH ITS FINAL DECISION, AND I WOULD END ON A REPETITION OF A POINT I MADE EARLIER: WE UNDERSTAND THE OBJECTIVE, AND WE UNDERSTAND THE BALANCING WE MUST DO IN EVALUATING THE AVAILABLE OPTIONS. THE UNITED STATES INTENDS TO MAKE THOSE DECISIONS IN THE LIGHT OF OUR LEGITIMATE NATIONAL SECURITY CONCERNS, AND HOW WELL THIS PROTOCOL WILL ADVANCE THE INTERESTS OF ALL COUNTRIES TOWARD DIMINISHING THE THREAT OF BIOLOGICAL WEAPONS.

Mr. SHAYS. Thank you, Ambassador. Your presentations are always very clear and helpful. Thank you.

Dr. Lacey.

Excuse me I'll use this opportunity to introduce Dennis Kucinich, who is the ranking member of this committee, and Mr. Tierney, both who have been wonderful participants in the National Security Committee. And if you all would like to make a statement, I would be happy to recognize you before recognizing Dr. Lacey. Shall we just go through?

Mr. KUCINICH. I'll include my statement in the record.

Mr. TIERNEY. I'll do the same.

Mr. SHAYS. Both gentlemen's statements will be included in the record. I thank you for that.

Dr. Lacey, you're on.

Mr. LACEY. Thank you, Mr. Chairman. It is an honor to address the subcommittee today on the issue of the negotiation of a protocol to the Biological Weapons Convention [BWC]. Ambassador Mahley has already addressed his remarks to the status of the negotiation and U.S. policy with respect to the negotiations. This is it my first opportunity to address this committee, so I will say a few more words, then my distinguished colleague, but I will focus——

Mr. SHAYS. Let me say, we should feel welcome. We just have one panel. We'll time you for 5 and roll it over for another 5. And that also, Ambassador, will be the case. So make your presentation. Happy to have you do it.

Mr. LACEY. Thank you, sir. Unlike Ambassador Mahley, I will focus exclusively on the issue of verifiability and specifically whether any protocol would improve the verifiability of the Biological Weapons Convention. The BWC is inherently difficult to verify. The problem stems from the language of the Convention, which hinges on intent and the nature of biology and biological weapons. Any protocol must grapple with these inherent verification problems.

The BWC does not establish a formal international mechanism for verifying compliance. Rather, it relies upon self-policing by the States' parties to the Convention. If a State party identifies a compliance breach by another State party, it may pursue this concern through bilateral consultations, or it may lodge a complaint with the U.S. Security Council, which, in turn, may initiate an onsite investigation.

In practice, this self-policing system labors under two fundamental limitations. First, assessing compliance with the BWC requires detailed information on the intent of biological programs and activities. The BWC prohibits the development, production, stockpiling, and acquisition of biological agents and toxins for hostile purposes, but it does not prohibit such activities if conducted for peaceful purposes. In fact, the BWC not only allows peaceful work utilizing the very substances that it was designed to control, it encourages such peaceful applications.

Since almost all biotechnology activities are dual use in nature, both they and the facility at which they are conducted could be used for legitimate purposes or for offensive biological warfare purposes. This requires a judgment as to whether the intent of a dual-capable activity is legitimate or illicit. Intent is very difficult to de-

termine and typically requires detailed information from sources who had direct knowledge of the purpose of a program.

National intelligence, such as from human sources, is essential to detect violations of the BWC. However, such information is often very difficult to collect.

The second limitation is that the nature and scale of biological weapons activities preclude readily identifiable external signatures. Whereas many tons of chemical agent are needed for a militarily significant chemical warfare capability, a comparable biological warfare capability would be measured in pounds of the agent. Furthermore, the equipment needed to produce such amounts of biological agent could be housed in a relatively small space inside a building without specific distinguishing features. Given the potentially small scale and unremarkable features of biological production, the physical signatures that aid us in verifying compliance are simply not present for biological weapons. In the absence of physical signatures, once again it is necessary to acquire detailed information from sources which had direct knowledge about the location and nature of illicit biological warfare activities.

These two fundamental considerations virtually preclude the achievement of an effective international verification regime. An international BWC organization would not be able to collect the detailed intelligence information essential for uncovering illicit intent. Moreover, the absence of external signatures at biological warfare facilities makes it impossible to identify all of the facilities capable of conducting illicit BW activities so that they could then be made subject to declaration and routine inspection.

As a consequence, a protocol would not improve our ability to effectively verify compliance with the BWC, either in terms of certifying that a country is in compliance with, or in violation of, its obligations.

The U.S. Government has consistently recognized the inability of any protocol to improve the verifiability of the BWC. This position was reaffirmed by the previous administration before the negotiations began in 1995. Instead, the goal established by the previous administration was to promote measures that would provide some degree of increased transparency of potential biological weapons-related activities and facilities. I will refrain from commenting on the level of transparency achieved in Chairman Toth's composite text and the potential value of that transparency.

Instead, let me provide my views on the key components of the chairman's text: National declarations, visits and challenge inspections. And let me explain why these measures would not improve the verifiability of the Biological Weapons Convention itself. The chairman's text would require annual national declarations of biological activities in the following areas: Biodefense, maximum and high containment laboratories, work with listed agents and toxins, and micro biological production facilities. The criteria for declaration are, of necessity, highly selective and as a result, only a small fraction of the pool of facilities in a country that could potentially be used for offensive biological warfare purposes would be declared. It is simply impractical to declare all potential dual capable facilities, as these would encompass countless legitimate enterprises such as beer brewers, yogurt makers and many academic labora-

tories. Furthermore, it is a certainty that States conducting offensive biological warfare activities will either not declare such facilities or will embed illicit activities at declared facilities beneath an effective cover of legitimate biological activities.

The chairman's text also provides for an annual series of so-called, randomly selected transparency visits to declared facilities. As their name suggests, these visits are intended to enhance transparency and not to improve our ability to verify compliance or noncompliance with the Convention. These visits are directly tied to the annual declaration submission, and therefore, suffer from the same verification failings. Only a small fraction of the facilities declared as potentially relevant to conducting offensive biological warfare activities would be subject to visits on a random basis. Even at visited facilities, illicit biological warfare work could be easily concealed or cleaned up, rendering it highly improbable that international inspectors would detect evidence of noncompliance. Moreover, violators could remove any risk associated with such visits by engaging in illicit biological warfare activities at non-declared facilities.

Finally, the chairman's text establishes a challenge investigation mechanism for addressing violations of article 1 of the BWC, the central prohibitions of the Convention. There are two types of challenge inspection in the chairman's text. The first type is a facility investigation conducted at a particular facility to address concerns that facility is engaged in biological warfare activities prohibited by the Convention. The second type is a field investigation of the release or exposure of humans, animals or plants to biological agents or toxins in violation of the Convention. Field investigations encompass allegations of biological weapons use and in addition, concerns about an accidental release of biological agents or toxins or suspicious outbreaks of disease connected to prohibited biological warfare activities.

Generally challenge inspections could help to defer cheating. However, they have inherent limitations. The inherent delay in securing approval for an investigation request from the implementing organization, and in getting an investigative team physically on the ground, would likely permit more than enough time to clean up or otherwise conceal evidence of a BWC violation.

In addition, the dual capable nature of biological activities and equipment could readily be exploited by a violator to explain away any concerns with managed access rights available as a last resort to deny access to any incriminating evidence.

Let me sum up. Regardless of whatever transparency value a protocol to the Biological Weapons Convention might provide, it would not improve our ability to verify compliance with the BWC. The dual capable nature of biology and the advance as well as the worldwide spread of biotechnology have conspired to make the BWC not amenable to effective verification, especially by an international organization. It is possible to determine that a country is conducting an offensive biological weapons program. In fact, after years of compiling intelligence information, the United States established that the Soviet Union, and subsequently Iraq, were engaged in such activities. National intelligence is essential to detect BWC cheating. U.S. efforts to strengthen the verifiability of the Bi-

ological Weapons Convention should always proceed from that fundamental reality. Thank you, Mr. Chairman.

Mr. SHAYS. Thank you, Dr. Lacey. I'm going to thank you for not raising a protocol issue of whether someone who is an active employee of the government should be at the same panel with someone who is a former employee. Sometimes we encounter that. And that endears you to me that you haven't done that.

[The prepared statement of Mr. Lacey follows:]

Testimony of Dr. Edward J. Lacey,
Principal Deputy Assistant Secretary of State for Verification and Compliance,
before the
Subcommittee on National Security, Veterans Affairs, and International Relations
Committee on Government Reform
U.S. House of Representatives

July 10, 2001

Thank you, Mr. Chairman.

It is an honor to address the Subcommittee today on the issue of the negotiation of a protocol to the Biological Weapons Convention (BWC). Since Ambassador Mahley, the head of the U.S. delegation, has addressed his remarks to the status of the negotiations, I will focus instead on the issue of verifiability – specifically, whether any protocol would improve the verifiability of the Biological Weapons Convention.

The BWC is inherently difficult to verify. The problem stems from the language of the Convention, which hinges on intent, and the nature of biology and biological weapons. Any protocol must grapple with these inherent verification problems.

The BWC does not establish a formal international mechanism for verifying compliance. Instead, it relies upon self-policing by the States Parties to the Convention. If a State Party identifies a compliance breach by another State Party, it may pursue this concern through bilateral consultations or it may lodge a complaint with the United Nations Security Council which in turn may initiate an on-site investigation. In practice, the self-policing system labors under two fundamental limitations.

First, assessing compliance with the BWC requires detailed information on the intent of biological programs and activities. The BWC prohibits the development, production, stockpiling, and acquisition of biological agents and toxins for *hostile* purposes, but it does not prohibit such activities if conducted for *peaceful* purposes. In fact, the BWC not only allows peaceful work utilizing the very substances that it was designed to control, it encourages such peaceful applications. Since almost all biotechnology activities are dual-use in nature, both the activities and the facility at which they are conducted could be used for legitimate purposes or for offensive biological warfare purposes. This requires a judgment as to whether the intent of a dual-capable activity is legitimate or illicit. Intent is very difficult to determine, and typically requires detailed information from sources who had direct knowledge of the purpose of a program. National intelligence, such as from human sources, is essential to detect violations of the BWC. However, such information is often very difficult to collect.

The second limitation is that the nature and scale of biological weapons activities preclude readily identifiable external signatures. Whereas many tons of chemical agent are needed for a militarily significant chemical warfare capability, a comparable biological warfare capability would be measured in pounds of agent. Furthermore, the equipment needed to produce such amounts of biological agent could be housed in a relatively small space inside a building without specific distinguishing features. Given the potentially small-scale and unremarkable features of biological production, the physical signatures that aid us in verifying compliance are simply not present for biological

weapons. In the absence of physical signatures, once again it is necessary to acquire detailed information from sources which had direct knowledge about the location and nature of illicit biological warfare activities.

These two fundamental considerations virtually preclude the achievement of an effective international verification regime. An international BWC organization would not be able to collect the detailed intelligence information essential for uncovering illicit intent. Moreover, the absence of external signatures at biological warfare facilities makes it impossible to identify all of the facilities capable of conducting illicit biological warfare activities so that they could then be made subject to declaration and routine inspection. As a consequence, a protocol would not improve our ability to effectively verify compliance with the BWC either in terms of certifying that a country is in compliance with, or in violation of, its obligations.

The U.S. Government has consistently recognized the inability of any protocol to improve the verifiability of the BWC. This position was reaffirmed by the previous administration before the negotiations began in 1995. Instead, the goal established by the previous Administration was to promote measures that would provide some degree of increased *transparency* of potential biological weapons-related activities and facilities.

I will refrain from commenting on the level of transparency achieved in Chairman Toth's Composite Text and on the potential value of that transparency. Instead, I will provide my views on the key components of the Chairman's Composite Text -- national

declarations, visits, and challenge investigations -- and I will explain why these measures would not improve the *verifiability* of the Biological Weapons Convention.

The Chairman's Composite Text would require annual national declarations of biological activities in the following areas: biodefense, maximum and high containment laboratories, work with listed agents and toxins, and microbiological production facilities. The criteria for declaration are of necessity highly selective and, as a result, only a small fraction of the pool of facilities in a country that could potentially be used for offensive biological warfare purposes would be declared. It is simply impractical to declare all potential dual-capable facilities, as these would encompass beer brewers, yogurt makers, and many academic laboratories. Furthermore, it is an analytical certainty that states conducting offensive biological warfare activities will either not declare such facilities, or will embed illicit activities at declared facilities beneath an effective cover of legitimate biological activities.

The Chairman's Composite Text also provides for an annual series of so-called "Randomly-Selected Transparency Visits" to declared facilities. As their name suggests, these visits are intended to enhance *transparency* and not to improve our ability to verify compliance or non-compliance with the Convention. These visits are directly tied to the annual declaration submission and, therefore, suffer from the same verification failings. Only a small-fraction of the facilities declared as potentially relevant to conducting offensive biological warfare activities would be subject to visits on a random basis. Even at visited facilities, illicit biological warfare work could easily be concealed

or cleaned up, rendering it highly improbable that international inspectors would detect evidence of non-compliance. Moreover, violators could remove any risk associated with such visits by engaging in illicit biological warfare activities at non-declared facilities.

Finally, the Chairman's Composite Text establishes a challenge investigation mechanism for addressing violations of Article I of the BWC – the central prohibitions of the Convention. There are two types of challenge investigation in the Chairman's Text. The first type is a "facility investigation" conducted at a particular facility to address concerns that it is engaged in biological warfare activities prohibited by the Convention. The second type is a "field investigation" of the release of -- or exposure of, humans, animals or plants to -- biological agents or toxins in violation of the Convention. Field investigations encompass allegations of biological weapons use and, in addition, concerns about an accidental release of biological agents or toxins or suspicious outbreaks of disease connected to prohibited biological warfare activities.

Generally, challenge investigations could help to deter cheating. However, they have inherent limitations. The inherent delay in securing approval for the investigation request from the implementing organization and in getting an investigative team physically on the ground would likely permit more than enough time to clean up or otherwise conceal evidence of a BWC violation. In addition, the dual-capable nature of biological activities and equipment could readily be exploited by a violator to "explain away" any concerns, with "managed access" rights available as a last resort to deny access to any incriminating evidence.

Let me sum up. Regardless of whatever transparency value a protocol to the Biological Weapons Convention might provide, it would not improve our ability to verify compliance. The dual-capable nature of biology and the advance, as well as worldwide spread of biotechnology, have conspired to make the BWC not amenable to effective verification, especially by an international organization. However, it is possible to determine that a country is conducting an offensive biological weapons program. In fact, after years of compiling intelligence information, the United States established that the Soviet Union and Iraq were engaged in such activities. National intelligence is essential to detect BWC cheating. U.S. efforts to strengthen the verifiability of the Biological Weapons Convention should always proceed from that fundamental reality.

Thank you, Mr. Chairman.

Mr. SHAYS. Ambassador Leonard, it's great to have you here as a full participant in this panel. We really welcome your participation and thank you for being here. You have the floor for 10 minutes.

I need you to turn that mic on. Maybe get it a little closer to you as well.

Mr. LEONARD. I think that's on now.

Mr. SHAYS. Yeah but put it a little closer to you. Thank you very much. Is that OK?

Mr. LEONARD. Yes, fine.

Mr. SHAYS. We have a light for you. It will turn red at 5, and then we'll let it go another 5.

Mr. LEONARD. Thank you very much, Mr. Chairman. First of all, Mr. Chairman, may I say that I can't disagree with a word that Ambassador Mahley said with regard to the commitment of the United States and of the Bush administration to the Biological Weapons Convention, and to the desire to do no harm to the underlying treaty that this protocol would be attached to. And I certainly share that outlook. The objective of adding transparency and adding some degree of confidence is one I think we can all share.

I do, however, disagree with several of the points that were made by Dr. Lacey. And before giving my prepared testimony, perhaps I could just note those briefly. First of all, Dr. Lacey suggested that the problem arises because the Biological Weapons Convention hinges on the intent of the government that is being considered.

Mr. SHAYS. He's just lowering it a bit.

Mr. LEONARD. That it hinges on intent. That criterion of intent is as to what is legitimate and what is prohibited is also characteristic of the Chemical Weapons Convention and the Nonproliferation Treaty. Both of those are, I think, reasonably well verified. That's not to say that the BW Convention is not more difficult. It certainly is much more difficult. But it's not that criterion of intent that is the problem, nor is it the fact that the biological technology, biotech, is dual-capable, both nuclear science and chemistry are inherently dual-capable in their character. And yet, we have developed ways in both connection with the MPT and the Chemical Weapons Convention to deal with those problems in a relatively satisfactory way. That leaves, however, the problem that BW is much more difficult. And I don't wish to deny or pretend that's not the case.

With regard to the basic question would the completion of this negotiation and bringing into force a protocol along the lines of the one that has been submitted by the chairman of the ad hoc group, would that be in the national interest? Would that enhance our security? And I want to say that I think very clearly it would. This doesn't mean, of course, that the protocol is perfect. And there are many elements of it that even in the—after 7 years of negotiation still are in question and could be improved. But the—as one works a treaty, the successive drafts of it get better and better in terms of being more and more acceptable to a larger segment of the international community. And when the final treaty is done, of course it will still have flaws in it, but it will be something that is considered by a strong consensus of the international community to be better than no treaty at all, which is what we have today.

In one sense, of course, a treaty has to meet an even more demanding standard, because it generally is accustomed to ask that we get close to unanimity from the international community before a treaty is sent up to the general assembly in New York for endorsement and back to governments for ratification.

Now what are these potential benefits to our security? There's no need, I think, to argue with this committee the danger of BW. You have much more expert witnesses than I who can attest to that. I think it's enough to say that the potential damage to the United States is comparable to what nuclear weapons could do to the United States. And any reduction of that threat is obviously desirable unless the reduction, the measures to reduce the threat, entail some larger danger to our security; for example, making us less able to defend ourselves or less able to respond appropriately to an attack.

Now defense against BW is almost entirely a matter for each nation's health system, and there is nothing in the draft protocol that would, in any way, impair or impede the development of our defenses against biological weapons. In fact, working with other governments should enhance our own individual efforts.

On the question of how the United States would respond if we were attacked with biological weapons, that certainly would be a problem of great moment for any President. But there is nothing whatsoever in the protocol that would limit the President's options in any way. I have noted that we long ago renounced one option, that of retaliation in kind, when we gave up our own biological weapons.

Now, why do I think the draft protocol would serve to reduce the BW threat? Would it, for example, enable us to be confident that we could detect in advance a clandestine BW program anywhere in the world so we would then take preemptive action against it? Would the certainty of detection be sufficient to deter anyone from even contemplating a clandestine BW program? The answer to both questions clearly is no, absolutely not.

So if we can't deter and we can't detect with high confidence, what use is this protocol? Isn't that what a verification protocol is supposed to do? Well, let me first note, as Ambassador Mahley and Dr. Lacey have pointed out, that this is—the United States has, from the beginning, refused to call this a verification protocol. I think that has been correct to do so. The word "verification" can be defined in many ways, but it's common to say that verification could never be 100 percent, but if we're talking about a verification protocol, then we should have something that gives us substantial confidence that cheaters will be caught. And that is inherently extremely difficult in the BW field. It's not impossible, as we thought in 1970 and 1971 when we were doing the Biological Weapons Convention itself. But it surely is difficult. Even an intrusive protocol would not give us high confidence and the draft protocol is less intrusive, less demanding of potential parties than it should be.

Now, if high confidence is not attainable, does that mean the protocol would have zero deterrent value? Again, I think the answer is of course not. Cheaters would naturally try to hide a BW program. They would try to hide it in an undeclared facility or in a large legitimate plant. But could they be totally confident that they

could not be discovered? Would they be certain that no defector would emerge with incriminating information or perhaps even bringing samples. Of course they could not. Evaluating deterrence requires us to look at the matter not just from our viewpoint but also from the perspective of a government contemplating either the development of a BW program or the retention of an illicit BW program. I think such a government would simply not join the protocol rather than trying to outsmart the protocol's confidence-building regime.

Moreover, we're assisted by an interesting fact, that there's a widespread belief that the United States is omniscient and omnipotent. We know we are neither one of those. But I'm very glad to have our enemies think we're both. Caution and prudence on our side as to what we can—a verification system can deliver is very appropriate. But potential violators will tend to exaggerate and fear our capabilities. Seen in this light, a BW convention which has no verification provisions stands as a kind of open invitation to do BW while a BW convention with a protocol even if it's in our view rather weak, is a substantial deterrent.

Now what about terrorist groups? A treaty is after all an agreement among governments and terrorists are not invited to join to say the least. A key question is whether terrorists could develop a serious BW capability without help from any government. This question is much debated and I'm not an expert on it. I would urge you to get expert testimony. But I think it should be clear that a minor, modest, small BW capability could be done by almost anyone, in a kitchen as it is often said. But a large BW capability of the type that could devastate a major city that I would suggest is something quite different, and there, I think, assistance and support from a government is likely to be essential to a terrorist group.

However that may be, there is no disagreement on two points related to terrorism. One is that a group will be far more dangerous if it has even rather modest help from the government. And second, past BW programs like that in the former Soviet Union could provide invaluable assistance and invaluable expertise and pathogens to terrorists if there were to be leakage from them. The draft protocol has the potential to be helpful on both points. On both points, since the protocol is among governments, any government that helps a terrorist group or even a government that fails to uncover and prosecute a terrorist group would be violating its commitments. That responsibility to seek out and eliminate BW activity on its territory can only be a net plus for us and everyone else in the struggle against BW terrorism.

Mr. SHAYS. I would ask you just to conclude your testimony, if you would.

Mr. LEONARD. Has that been the 10 minutes?

Mr. SHAYS. It's gone by faster than you realize, actually. We are almost into 11 minutes. If you could spend 1 more minute if you could summarize.

Mr. LEONARD. Very well. In this connection, I want to point out the most dangerous reservoir of BW expertise anywhere in the world is in the former Soviet Union. And I think that the protocol would assist us in moving to deal with that.

One final point, if I may, Mr. Chairman, the protocol is not satisfactory to anyone, but I think it's very clear that to our European friends who have invested the most effort and so on in this, they believe that the draft protocol provides a basis for the final stage of negotiations. I have here a copy of a demarche that the European union delivered to the State Department recently. Be glad to make that available. And I think that underlines how strongly our allies in Europe feel about this matter and how much they want negotiations to move forward. Thank you, Mr. Chairman.

Mr. SHAYS. Thank you very much, Ambassador.

[The prepared statement of Mr. Leonard follows:]

THE PROTOCOL TO THE BIOLOGICAL WEAPONS CONVENTION

Testimony by James F. Leonard

Chairman Shays has asked me to address several questions relating to the draft protocol to the Biological Weapons Convention that has been under negotiation in Geneva since 1995. I will begin with the "bottom line" question: Would the completion of this negotiation and the signature, ratification, and bringing into force of a protocol along the lines of the current draft be in the national interest of the United States? Would the protocol enhance our security by making less likely a devastating attack on the United States with biological weapons either by a so-called "rogue state" or by some sub-national terrorist group? These are two forms of the same question, and my answer is clearly and strongly yes, our interests would be served and our security enhanced by the completion of the protocol.

Does this mean that the protocol is perfect, or even perfectly acceptable as it stands, in the draft text that the Chairman of the Ad Hoc Group, Ambassador Tibor Toth, put forward on March 30? Of course not. Drafting a treaty is much like drafting a law, and I doubt if the members of this committee could point to a single law whose text they would all agree is absolutely perfect, totally without a flaw. The successive drafts of a treaty get better and better, but that does not necessarily mean that they approach closer and closer to perfection; rather it means that they approach closer and closer to being acceptable to most of the potential parties. Even the final text that is signed and ratified will have flaws, but it will be accepted if it is seen by a strong consensus as substantially better than no treaty at all.

In one sense a treaty must meet a more demanding standard than a law, since most national legislatures operate by majority rule, while the international community is in the habit of requiring something close to unanimity before it sends treaties up to the U.N. General Assembly and then back to governments for final approval.

What are the potential benefits to our security from the completion of the protocol? The threat of BW attacks is a serious one. You can readily secure witnesses and documents more expert and authoritative than I to describe the threat, but I will simply say that the potential damage to the U.S., despite our high-quality public health system, is comparable to the threat posed by nuclear weapons. Any reduction in that threat is obviously desirable, unless it entails some larger danger to our security, for example by making us less able to defend ourselves or less able to respond to an attack.

Defense against a BW attack is almost entirely a task for each nation's public health system, and nothing in the draft protocol would impair or impede the development of these defenses. Indeed, by encouraging cooperation with other governments it should enhance our national efforts.

How the U.S. would respond if attacked with biological weapons would be a momentous political-military question for any president. Nothing in the draft protocol would limit the president's options in any way.

I should note that the United States long ago did renounce one option: the option of retaliating to a BW attack with our biological weapons. We have no biological weapons. President Nixon unilaterally eliminated the possibility of retaliation in his package of decisions on CBW in November 1969, and this renunciation was confirmed by treaty in the Biological Weapons Convention that was brought into force in 1975 during the Ford administration. Apart from that option of retaliation-in-kind, a future president's hands are free and would not be limited by the draft protocol in any way.

Why do I think that the draft protocol would serve to reduce the BW threat? Would it, for example, enable us to be confident that we would detect in advance a clandestine BW program anywhere in the world so that we could then take pre-emptive action against it? Would the certainty of detection serve to deter anyone from even contemplating a clandestine BW program? The answer to both questions is no, absolutely not.

So if we cannot detect and deter with high confidence, what use is this protocol? Isn't that what a "verification protocol" is supposed to do?

Let me first note that the U.S. Government has from the beginning refused to call this a "verification protocol." They have been right to do so. The word 'verification' can be defined in many ways. It is common and I think correct in arms control circles to say that verification can never be 100%. But if something is to be called a "verification protocol" then it should provide substantial confidence that cheaters will be caught. That is inherently difficult in the BW field. It is not impossible as we thought in 1970-71 when we were negotiating the BWC, but it is surely very difficult. Even a very intrusive protocol would not give us high confidence, and the draft protocol is less intrusive, less demanding of its potential parties, than it should be.

"High confidence" or "substantial confidence" that cheaters on the protocol would be caught is not attainable in today's world. But does that mean that the draft protocol would have zero deterrent value? Of course not. Cheaters would naturally try to hide a BW program in an undeclared facility or in a large, legitimate plant. But could they be totally confident that they would not be discovered? Could they be certain that no defector would emerge with incriminating information or even samples? Of course not. Evaluating deterrence requires us to look at the matter not just from our viewpoint but also from the perspective of a government contemplating the development or retention of an illicit BW program. I believe that such a government would simply not join the protocol, rather than trying to outsmart the protocol's confidence-building regime.

There is in the world today a widespread belief that the United States is omniscient and omnipotent. We know that we are neither, but I am very glad to have our enemies think that we are both. Just as caution and prudence on our side lead us to be reserved about what any verification system can deliver, potential violators will tend to exaggerate and to fear the system's

capabilities. Seen in this light, a BWC with zero verification provisions stands as a sort of open invitation to do BW, while a BWC with a protocol, even if we think it rather weak, is a substantial deterrent.

What about terrorist groups? A treaty is an agreement among governments, and terrorists are not invited to join. A key question here is whether terrorists could develop a serious BW capability without help from any government. This question is much debated and some assert strongly that any well-trained microbiologist, of which there are thousands in the world, could make BW in his or her kitchen. Other expert opinion is much more reserved and argues that the resources that only a government can mobilize are essential. I urge you to seek expert testimony on this point.

There is no disagreement, however, on two related points. One, a terrorist group is far more dangerous if it has even rather modest help from a government. Two, past BW programs, like that in the former Soviet Union, could provide invaluable expertise and invaluable pathogens to terrorists if such leakage were to occur.

The draft protocol has the potential to be helpful on both of the above points. On point one, since the protocol is among governments, any government helping a terrorist group, or even a government failing to uncover and prosecute a terrorist group, would be violating its commitments under the draft protocol. This governmental responsibility to seek out and eliminate any BW activity on its territory can only be a net plus in the struggle against BW terrorism. Governments not joining the protocol would expose themselves to suspicion that they were at least contemplating surreptitious help to terrorists.

Second, the most dangerous reservoir of BW expertise and materiel anywhere in the world is in the former Soviet Union, especially the Russian Federation. Even though Boris Yeltsin acknowledged the massive violation of the BWC of which the Soviet Union was guilty and asserted that it had been terminated, I am not satisfied and I do not believe that there are many experts inside or outside the U.S. Government who are satisfied that there are no pockets of continuing BW activity in Russia in contravention of the BWC.

A trilateral (U.S., U.K., U.S.S.R.) effort to clarify this matter was stalled some years ago. The draft protocol would re-energize such an effort, and a thorough exposure of the facts by the Russian Government should be a condition for our ratification of any protocol. Any "punishment" of the Soviet policymakers who directed their massive treaty violation would be impossible, no matter how desirable, but their successors in power in Moscow must be effectively called to clean up the mess that they were left and to satisfy world opinion on the genuine elimination of any offensive BW program. The draft protocol would provide a framework and a trigger for just such an operation.

An objection often made to the draft protocol is that states of concern--what we used to call rogue states--would simply stay out of the protocol. That is certainly true for some of them. In fact, it is regrettable that only 143 states are currently party to the underlying BW Convention. The non-parties include some states of concern, but it is noteworthy and most unfortunate that

some very good friends of the United States, particularly Egypt and Israel, are among the non-parties. The Clinton administration should have carried out a major campaign, joined by our allies, to make membership in the BWC virtually universal. It did not. The Bush administration, which asserts, I believe quite sincerely, that it strongly supports the BWC, should undertake just that sort of effort to universalize the BWC. That would be an appropriate companion piece to an effort to maximize signatures to the BWC protocol when its negotiation has been completed.

A few states will almost certainly stay out of the protocol and even out of the basic BWC. That will tell us where to concentrate our deterrent efforts and our intelligence work, as well as focusing international pressure to join.

I am concerned when some U.S. policymakers seem to suggest that we can best deal with a problem like BW on our own, unilaterally, while letting the rest of the world come up with multilateral measures if they wish. That is simply perverse, and very harmful to our international position.

We are the leader, the most powerful nation, whether we like it or not, and we should welcome opportunities to demonstrate that we understand and accept our responsibilities. Possible proliferation and even use of BW is a global problem, and we should not and cannot opt out of a leadership role in dealing with it.

Testimony of James F. Leonard
ANNEX
Comments on Additional Questions Posed by Chairman Shays

1. *How has the United States developed verification policy for the BWC protocol?*

At the time of President Nixon's decision-making process on CBW in 1969, it was widely accepted that any verification of a ban on BW was simply impossible. Verification in this field without on-site inspection was then and remains today quite meaningless. National technical means like satellite imaging have only modest capabilities at best, and in 1969 we knew that any on-site inspection inside the Soviet Union was out of the question.

The Nixon administration, having decided that we would unilaterally destroy our large BW stockpiles and permanently, totally abjure BW, faced the choice between a treaty without verification, as had been already suggested by our British allies, or no treaty. They selected the former and that is what our delegation in Geneva was directed to negotiate.

Subsequently, with the arrival of Mr. Gorbachev and then the collapse of the Soviet Union, much more intrusive verification, including on-site inspection, became imaginable. Various experts inside and outside of government continued to study the possibility of detecting BW programs, and scientists kept developing useful new technologies for detection purposes.

An intermediate stage was reached with the development in the 1980s of a number of "confidence-building measures" that were agreed but were not legally binding. That did not work very well. Meanwhile the successful negotiation in the first Bush administration of the Chemical Weapons Convention with a complex and intrusive verification regime encouraged an effort to do something analogous for Biological Weapons.

In 1994, the Clinton Administration gave its support to such an effort and the Ad Hoc Group was set up in Geneva to pursue that possibility. It is worth noting that within the Clinton administration there were serious misgivings about the concept of a legally binding protocol. The Commerce Department, to take one example, was concerned that the informal but very effective system of export controls known as the Australia Group would be sacrificed.

Nevertheless, negotiations went forward and a draft protocol began to take shape. As I prepare this testimony, the present administration has not yet stated publicly the results of the review that they have quite naturally been conducting.

This is, in summary form, the history of the U.S. Government's efforts to develop some sort of framework that could fill, at least in part, the verification blank left by the negotiation of the BWC in 1970-71.

2. *What have been U.S. agency and industry concerns about the BWC protocol?*

I have mentioned above the concern of the Commerce Department, shared I would assume, by State, that the protocol would substitute an ineffectual, leaky form of treaty-based export control for the quite effective Australia Group. Some members of the Non-Aligned Movement have, in fact, persistently pushed for provisions in the draft protocol that would have that effect. The members of the Australia Group have stoutly resisted these proposals and the Chairman's draft would not require any dismantling or weakening of the Australia Group.

The Commerce Department also reflected the concerns felt in the pharmaceutical industry that provisions in the protocol would be onerous and could lead to disastrous leaks or thefts of valuable proprietary information. The U.S. Delegation secured many modifications of proposals tabled by other delegations in order to assuage the fears of U.S. industry. How successful this process has been is a question that representatives of the government and the industry would have to address. From the viewpoint of most unofficial observers, the process went too far and the draft protocol is weaker than it should have been to best serve our security interests.

It has been reported that some elements in our Defense Department are concerned that the draft protocol would perhaps dangerously expose our classified preparations of vaccines, etc. designed to limit the effects of a BW attack. I have no further information on this matter.

3, 4, 5: Comments on the Chairman's questions 3, 4 and 5 are contained in the main body of my testimony.

6. *Are there additional mechanisms under discussion to strengthen the effectiveness and improve implementation of the BWC?*

There are two such proposals that I believe deserve serious consideration. Neither, so far as I know, has been formally on the agenda in Geneva, but both would, I believe, be appropriate for discussion in the BWC Review Conference this coming November. They have been put forward by very distinguished, long-time scholars of the BW problem.

The first of these is a suggested treaty to make any activity by individuals aimed at creating biological weapons an international crime, much as has been done with torture and piracy. The authors of this suggestion, Professors Matthew Meselson at Harvard and Professor Julian Perry-Robinson at Sussex University, are two of the most highly regarded experts in this field. They have developed their ideas with the aid of outstanding scholars of international law as well as high-ranking diplomats. I strongly commend this concept to you.

The second suggested mechanism is a proposal by Professor Nicholas Sims of the University of London, also a leading scholar on everything related to BW. Professor Sims' idea is to create a secretariat for the BW Convention even before the work on the protocol is completed. Such a secretariat would in any case come into existence along with the protocol, but there is no

bar to creating it ahead of time to fulfill certain tasks outlined by Professor Sims in his paper. Such a secretariat would be extremely small and inexpensive, but it could facilitate a smooth transition to the larger institution foreseen by the protocol if it were created in advance.

A final word of caution: Both of the above ideas are worthy, but they should not be used to draw attention and effort away from the primary immediate objective--the completion of the protocol.

Demarche by the European Union concerning the negotiations on a Protocol to strengthen the Biological and Toxin Weapons Convention

The European Union would like to emphasise its concern, shared with the USA, over the risk of proliferation of biological weapons, and especially over the lack of a mechanism to ensure compliance with the BTWC. The Union considers that such a risk needs to be minimised through the use of several means and regards the protocol to strenghten the convention as a much needed complementary tool to existing measures.

Therefore, the European Union would like to reiterate the high priority it attaches to the successful conclusion, this year, of the negotiations in the Ad Hoc Group in Geneva on a legally binding Protocol establishing a compliance regime to the BTWC as agreed upon in 1994 at the Special Conference and reaffirmed in 1996 by all States Parties to the BTWC.

The European Union has already accepted a lot of compromises in order to meet the concerns of the USA, especially on the declaration of biodefense programs and facilities, on the declaration of production facilities other than vaccine ones, as well as on the provisions related to the conduct of on site activities.

The European Union supports the composite text presented by the chairman, as being a much needed platform from which political decisions on compromises need to be taken on a consensus basis. This means that the European Union does not view the composite text as being flawless, especially when it comes to clarification visits to undeclared facilities as well as to the initiation procedures for investigations . Nevertheless, the European Union considers the composite text as a balanced compromise.

The European Union would like to make clear that it currently sees no chance of renegotiating a new mandate with a more "restricted" approach, i.e. with a main focus on investigations and legally binding Confidence Building Measures.

Having stated this, the European Union would like to re-emphasise that it therefore considers negotiations on the composite text, with a view of finalising it before the 5th Review Conference, as the best way forward, and that it hopes that the USA would consider the situation in a similar fashion.

Finally, the European Union also notes that negotiations in the Ad Hoc Group in Geneva is the only ongoing multilateral disarmament negotiation and wishes to emphasise that, from a wider perspective, the successful outcome of these negotiations would send a positive signal demonstrating the international community's commitment to strengthen the multilateral disarmament and non-proliferation regime.

Mr. SHAYS. Well, first let me recognize Congressman Otter is here and appreciate you being here. And we're going to proceed to questions. We'll start with Mr. Putnam and then we'll go to Mr. Kucinich.

Mr. PUTNAM. Thank you, Mr. Chairman.

Dr. Lacey, the premise of your testimony, as I understand it, was that sound intelligence is our first line of defense and that whatever transparency value may be derived from the protocol, it's undermined by the inherent inability to conduct sound verification of compliance or noncompliance. Is it your position that this protocol moving forward would be of no value, or is it your position that it would actually be counterproductive and could be used against the United States?

Mr. LACEY. Congressman, I think you captured my statement fairly accurately. My position, and I believe the executive branch's position, is that there is no benefits in terms of verifiability of the BWC. That this protocol, or quite frankly, any protocol that we can envision, would not enhance our ability to verify compliance with the BWC. We are not—I am not taking a position on the potential transparency or other benefits of the protocol. There may very well be other benefits to the protocol. That's not my purview. But this administration, the previous administration, and the administration before that, have consistently stated our view that we did not envision a protocol as a way to make the BWC effectively verifiable. And we have stood by that.

Mr. PUTNAM. So you do not wish to address transparency issues?

Mr. LACEY. I would have to turn that over to my distinguished colleague, the negotiator.

Mr. PUTNAM. Mr. Ambassador, on the transparency issues you've heard Dr. Lacey's testimony. Is there a potential for the transparency provisions to be used against the United States, pharmaceutical industry, academic and research institutions and other things of that nature? Are there dangers in that being used as a tool against our interests?

Mr. MAHLEY. Thank you, Mr. Putnam. That question is one which we have debated long in the negotiations. And I have to say in the end, that there is a risk any time that you put people onsite at places where proprietary information and national security information unconnected to biological weapons exists, that information may be divulged or may be discovered by the investigators.

Now, at the same time, there have been a number of provisions written into the draft protocol in a deliberate effort to try to minimize or nullify that risk. The question of managed access, which means that you have the ability to refuse to allow the investigating team to do what it has specifically asked, but instead find a different way to answer their question that has—that envisions a course of action which is not endangering a proprietary information, is one of the principles that has been used for all onsite activities.

Another one is that in terms of the so-called transparency visits that are now envisioned in the draft protocol, the site has the ability to dictate what access will be granted by the inspection team. So in that respect, we have attempted to minimize that, but I would always have to say that it is never the case that you can

completely nullify that. It's something that has to be balanced against the idea of the kind of information you will gain from being able to have people go onsite and other—in other places other than the United States.

Mr. PUTNAM. To what degree have the private industry stakeholders been consulted as these negotiations have moved forward?

Mr. MAHLEY. The stakeholders in this case are both the Department of Defense in the United States and the pharmaceutical industry in the United States. We have consulted regularly with the pharmaceutical industry in the United States since the very onset of negotiations. We have taken a number of inputs from them and reflected on them in the government to adopt negotiating positions for the United States that attempted to make sure that we aimed in the right direction. We have also, of course, had the regular inputs from the Department of Defense and the inner agency process throughout, and those have been used in development of U.S. negotiating positions. It is certainly the case that those stakeholders have been firmly, thoroughly and completely consulted.

Now, do our positions and those that we were able to get in the negotiation always reflect those positions 100 percent? I suspect they would all say no.

Mr. PUTNAM [presiding]. Thank you, Mr. Ambassador.

At this time I'll recognize the ranking member, Mr. Kucinich.

Mr. KUCINICH. Thank you. Ambassador, I want to welcome all of the witnesses. Ambassador—is it Mahley? Have there been any inspections of U.S. pharmaceutical companies?

Mr. MAHLEY. There have been no inspections conducted under the draft protocol of course, because it's only a draft protocol. If your question is have there been any practice activities or simulated activities taking place in United States pharmaceutical firms, there have been no official ones done for the U.S. Government. Let me embellish that answer slightly to say that one of the difficulties in terms of conducting simulated or practice activities or trial activities on the U.S. pharmaceutical firms has been the fact that in order to then promulgate any information from the result of such onsite activities, would require that information from one pharmaceutical firm that offered itself as a model would be given to some of its competitors.

Quite rightfully, I think the U.S. firms have been very, very leery of doing that kind of cross-fertilization with their competitors because what they're trying to protect are things from their competitors.

Mr. KUCINICH. Ambassador, do you think that pharmaceutical companies should be exempt?

Mr. MAHLEY. I think if pharmaceutical companies were exempt, the impact in the current state would probably be minimal, but at the same time, there's an open invitation that those are I think areas which certainly are relevant to biological production.

Mr. KUCINICH. Do you think they should be exempt?

Mr. MAHLEY. I think the impact would be minimal if they were exempt. Do I personally think they should be exempt? The answer is no.

Mr. KUCINICH. What about biodefense facilities?

Mr. MAHLEY. I don't think that you can expect anyone to think that we are being transparent if biodefense facilities categorically are exempt. I do believe that it is very important for U.S. national security that the activities on biodefense facilities be very carefully controlled and be subject to all of the kinds of protections that I've previously outlined.

Mr. KUCINICH. Thank you.

Ambassador Leonard, I have some basic questions about the effectiveness, and I was hoping perhaps you could help us. First, it seems that these types of transparency measures could cause potential violators to take one of two courses. They could either hide their work at the declared facilities or go underground. Would you agree?

Mr. LEONARD. That is correct, sir.

Mr. KUCINICH. And for the first option, Dr. Lacey said that, "illicit warfare work could easily be concealed or cleaned up, rendering it highly improbable that international inspectors would detect evidence of noncompliance." I'm not sure I agree. If this work was occurring at a declared facility, they would have to do a pretty good job of keeping the operation secret, wouldn't they?

Mr. LEONARD. It seems to me that there's a difference between improbable and impossible. I think that the violator would have to worry that his cleanup would slip in some way. And in fact I think there are from the efforts of UNSCOM in Iraq, there are examples where efforts to clean up a site failed and some traces of the activity remain.

Mr. KUCINICH. They have inspectors poking around asking questions about why certain capabilities exceeded their declared intent. I mean, isn't that obvious that would happen?

Mr. LEONARD. I'm sorry?

Mr. KUCINICH. That under the scenario, and Iraq might be an example you would have inspectors at least asking questions about why certain capabilities in the plant exceed their declared intent.

Mr. LEONARD. That's correct. And that's exactly what happened in Iraq. The UNSCOM discovered large quantities of material for fermenting biological substances. Asked what it was for, and the Iraqis responded that inadvertently a zero had been added to the purchase order so that they got 10 times as much as they needed. That's rather transparent.

Mr. KUCINICH. That sometimes happens at our Department of Defense.

Now, the second option would be to go underground. And here Dr. Lacey said, "violators could remove any risk associated with such visits by engaging in illicit biological warfare activities at nondeclared facilities." Do you agree that violators remove any risk when they go underground? What other risk would they face?

Mr. LEONARD. You mean literally, physically deep underground?

Mr. KUCINICH. Right. Underground in any way you want to take it.

Mr. LEONARD. No, I think that the danger that would be revealed, for example, by a defector and a request for an inspection therefore triggered would be not insubstantial. These regimes are regimes which in many ways do not command a high degree of loyalty from their people, and they therefore constantly have to worry

about defectors. And we have, as you may know, here in Iraq—in Washington a leading defector from the Iraqi nuclear program, very interesting person to talk to about this sort of thing.

Mr. PUTNAM. The gentleman's time has expired.

Mr. KUCINICH. I thank the Ambassador.

Mr. PUTNAM. Mr. Otter, you're recognized.

Mr. OTTER. Thank you, Mr. Chairman.

Let me join with my colleagues in expressing appreciation for you being here today and for the testimony that you've offered. I'm not sure exactly where I would direct this question—to the past present or the future—but perhaps I could get a communal response here.

Isn't it realistic to think that some countries that are not really willing to obey something that they may have agreed to, like such an agreement and treaty that we're talking about, to actually find surrogate sites and surrogate governments to do those things for them? And if those governments don't fall under the treaty, under the agreement, that they then wouldn't be subject to these same reviews and same investigations? Dr. Lacey.

Mr. LACEY. Thank you, Congressman Otter. I guess you have identified yet a third evasion scenario that I did not mention.

I think, as Ambassador Mahley mentioned, there are 143 states party to the Biological Weapons Convention. In order to be a party to the protocol, you would have to be a party to the BWC. But you don't necessarily have to be a party to the protocol if you're a member of the BWC. So there are—143 does not constitute all the nations in the world, obviously. There would be the possibility of violating the BWC itself by using third parties. I think that is a recognizable additional cheating possibility.

Mr. OTTER. Ambassador Mahley.

Mr. MAHLEY. Thank you, Congressman.

There is obviously in any kind of a well-subscribed international agreement a certain amount of political price to be paid for keeping yourself completely outside of the regime and therefore not subject to the controls of it.

However, certainly in cases of national security, that's very possible; and certainly again we have a number of states of concern in terms of biological weapons capability in terms of our own intelligence assessment who are not currently parties to the Biological Weapons Convention and therefore certainly are not subject to any kind of international sanction for not having done so. That's a sovereign decision that they have to take to make themselves subject to that kind of a treaty.

Mr. OTTER. Ambassador Leonard.

Mr. LEONARD. Thank you, Mr. Congressman.

First of all, I think in my prepared testimony I underline the need to make every effort to make the BWC and the protocol attached to it as universal as possible. It's really shameful that we have only 143 parties.

And the same applies to the Chemical Weapons Convention. These both should be—the U.S. Government should lead an effort to universalize these and to bring those few countries that really have some problem with it into high relief.

But, second, with regard to the particular scenario that you cited, I would suggest it's a rather unlikely one. Governments that engage—a government that might engage in creating a BW program would do so for very serious reasons relating to its own national security, and to put then this instrument for its security, for its defense on the soil of another country which might be friendly in one circumstance but not friendly 5 or 10 years later would be, it seems to me, an extremely rare sort of circumstance.

You take Iran, for example. Iran is a country which we say—our intelligence says has got a BW program. I'm not sure whether that's true, but the intelligence is presumably rather solid. But Iran is a country which has literally no friends anywhere where it could put such a facility. Its relations with its Arab neighbors are poisonous. Its relations with the countries to the north are traditionally very bad. And the same with Pakistan and so on to the east. So there simply is not a way that a country like Iran could credibly be thought to be in danger of doing that.

Mr. OTTER. Thank you, Mr. Ambassador.

Before my light turns red, I have one more that I would like each of the three of you to have an opportunity to answer.

You know, coming from the private sector and operating big operations, some of which could not be really considered a biological warfare manufacturing plant, but I know that on numerous occasions, almost daily, I had the USDA, the FDA, OSHA, EPA, the Department of Labor, and the list goes on and on and on, who investigated my plants and, in the investigation of my plants, if EPA found something that I was doing wrong with OSHA, reported the same to OSHA. If the OSHA found something that I was doing wrong with the U.S. Department of Agriculture, reported such to OSHA.

My question then has to do with, does the Department of State that operates through the national security under this protocol, do they have such a cross—pardon the term—fertilization program with other agencies of State?

Mr. MAHLEY. Congressman, I'll take a shot at that.

And, again, it doesn't apply to the biological area because there is no regime. But one of the things, for example, that you have there is the question about what happens in a Chemical Weapons Convention inspection of a U.S. chemical firm; and that's a question that was debated during the implementing legislation issue on the Chemical Weapons Convention. And essentially one of the ways in which we got around that was a hold blameless clause which simply says that we are not empowered to then inform on things that we observe during the course of a Chemical Weapons Convention inspection of the U.S. regulatory authorities.

Thank you.

Mr. OTTER. Thank you.

Thank you, Mr. Chairman.

Mr. PUTNAM. Thank you, Mr. Otter.

The gentleman from Massachusetts has graciously allowed the gentleman from Connecticut to proceed with his questions. Mr. Shays.

Mr. SHAYS. Thank you.

It's nice to have all of you here.

I thank you, Mr. Tierney. I have a 3 p.m., with a leader, and I just need to get to that meeting.

I'd like to ask you, Mr. Mahley, we have a deadline of November of this year. What's the significance of the deadline? Why do we have the deadline and what happens if we don't make it?

Mr. MAHLEY. Thank you, Mr. Chairman. A very good question.

First of all, the United States does not agree that we have a deadline of November. The United States has said that a November target was not a deadline. We have maintained that consistently throughout the negotiations.

Second, the confluence of events, if you will, for November is that, whatever the status of the protocol in November, there will be a review conference of the Convention in November.

Now I've indicated in my written testimony that a number of issues about Biological Weapons Convention implementation have been, if you will, assumed within the protocol over the last 6 years. One of those, for example, is the question about export controls, which has been one of the goals of some on the line, to get a multilateralization of export controls and the standardization of export controls written into the protocol. They have not been successful at this point.

But if there is no protocol I think it is only logical to expect that those same issues are going to arise in the context of the review conference in November, which is a review conference not of the protocol but a review conference of the Convention scheduled for every 5 years. So, therefore, we're going to have a very contentious set of debates in November in the environment within the context of the Convention, not within the context of the protocol. That's the reason for the November deadline, is to have things done prior to the review conference.

However, as I indicated, the United States does not agree and there is no legal basis as far as we can find for the mandate of the ad hoc group to expire come November.

Thank you.

Mr. SHAYS. This committee has had 19 hearings on terrorist issues, and some have related to biological weapons and chemical weapons and nuclear weapons and so on. But the one thing I am absolutely certain of is that there will be another terrorist attack on this country, be it nuclear, biological, chemical. I think it less likely nuclear.

At the time I believe this to be true, I believe you are negotiating in a sense with countries that, as we speak, are cheating, are not abiding by the Convention; and yet they in some cases can be your most outspoken critics, talking about how we need to abide by this system.

Which leads me to this point. Since a protocol—since the biological agent can have a dual use so—since the motive ultimately of how you use that agent is going to be the real issue, how is it possible to draft a protocol that actually will do the job?

Mr. MAHLEY. That's a question we're debating right now and for which we do not yet have a satisfactory answer.

It is a very difficult task. It certainly cannot be done in an unequivocal fashion. And so all you can do is to provide in some fashion additional information which will allow you, along with the

other kinds of information you get from what Dr. Lacey referred to as national means, intelligence means, to then try to draw some kind of national assessment about what the intent is in the target country. Anyone who believes that this protocol will provide in any fashion an unequivocal answer about whether or not someone is cheating on the Biological Weapons Convention is naively optimistic.

Mr. SHAYS. One of my—Ambassador Leonard, I'm going to ask you this question soon, but one of my concerns is that the very countries we know from our own information are not abiding by the Convention will be given under this protocol the opportunity, Mr. Mahley, to examine U.S. plants. What is to prevent them from just making an outlandish statement that this land is being used to produce biological agents and for them to come and inspect it and to still make that claim? What prevents them from doing that and not sensationalizing and putting focus on plants in the United States that simply are being used for the purposes intended, which is for commercial and legitimate reasons?

Mr. Mahley, what would be the answer to that question?

And then I'm going to ask the same question to you, Ambassador Leonard.

Mr. MAHLEY. First of all, let me make one technical correction, sir, and that is that it would be the international civil servants of the technical secretariat that would conduct the inspections, not the people from the accusing country. So in that sense it would—indeed, to get word from another country involved—a charge from another country involved in the inspection, it would require them to ask for an investigation which would require them to make an allegation of some kind of misconduct on the part of the United States.

Now, there is nothing which will prevent them from doing that; and I would point back to 1997 when the government of Cuba made a quite outlandish allegation against the United States for having employed biological weapons against them in the form of thrips palmi. It required us to go to a special conference of the states parties of the Biological Weapons Convention and spend an extended amount of time rebutting that charge.

Now, the conference of states parties believed our rebuttal. In that sense I think we are able to successfully defend ourselves. So there is a political judgment that will be weighed into that.

However, you are correct in the sense that if it were done domestically it would be—must have been more difficult for an individual firm to then allay itself or remove from itself the allegation or the taint of having been associated with a biological weapons accusation, even if unproven.

Mr. SHAYS. Could I, with your permission, Mr. Chairman, and your tolerance, Mr. Tierney, just ask the other two members of the panel to respond to that question; and then I'll be on my way. Ambassador Leonard.

Mr. LEONARD. I want to just add to what Ambassador Mahley said, that there is a series of arrangements set forth in the protocol—in the draft protocol for what are called triggers that an allegation has to pass through in the machinery of the Convention itself. The states parties have to vote, and it requires three-quar-

ters or two-thirds or half to—depending on the circumstances to permit this investigation to go forward or to deny it the ability to go forward. And those I think are rather well designed to prevent frivolous and purely propagandistic efforts of the sort that you rightly worry about.

Mr. SHAYS. Certainly that would minimize it.

Dr. Lacey.

Mr. LACEY. Congressman, I would just add that since we envision that there would be no utility whatsoever to such inspections I couldn't imagine any such inspection being called for a legitimate verification purpose. But I believe the protections that Ambassador Mahley and Ambassador Leonard have outlined in fact would be sufficient to protect the United States from frivolous inspections.

Mr. SHAYS. Thank you, Mr. Chairman.

Thank you, Mr. Tierney, very much.

Mr. PUTNAM. Thank you, Mr. Shays. I thank Mr. Tierney for his indulgence.

The gentleman from Massachusetts is recognized for 10 minutes.

Mr. TIERNEY. Thank you.

I want to thank all of you for coming and testifying this morning—this afternoon now.

Ambassador Mahley, at the end of your written testimony and verbal testimony today I think you hit the crux of the matter. That is, what you're trying to do is seek a balance. That, from what I gather you're telling us, the administration decided not to pull out from the attempt to reach a protocol that will be acceptable, but you're trying to seek a balance that will find the improvement and the ability to impede the threat and realty of the biological weapons proliferation. You understand that there is some risk inherent in that effort but that you intend to try and find some balance. Would that be a fair statement?

Mr. MAHLEY. I think that's a fair statement, Mr. Tierney, about the objective of the protocol negotiation overall, yes, sir.

Mr. TIERNEY. Now, back at the last hearing when the administration didn't allow the witnesses to come forward and testify, we were told that's because they needed a postponement until they were totally certain as to what the administration's decision was going to be, and that would take us 2 weeks. So here we are some 5 weeks later, Ambassador, and I'm quoting your testimony, you're still considering the administration's approach. Why hasn't that approach been finalized yet?

Mr. MAHLEY. All I can say, sir, is that it has been one that has engaged senior members of the U.S. executive branch in the deliberations; and, frankly, it's just one that is not an easy call because there are two things to balance from the U.S. perspective.

Now, the balance that I spoke of in my testimony is a balance between benefit and risk. Frankly, we do not believe that the provisions of this protocol as they are now drafted provide a good balance between benefit and risk. The question, though, is that there are other political issues that get engaged in addition to the substantive area and then it becomes a question of controllable risk as opposed to whether or not it's a natural balance. That's the issue with which we're still struggling.

Mr. TIERNEY. But I assume—maybe I shouldn't say that. But it looks to me as if you're trying to tell us that the administration has decided at least not to pull out of these negotiations and that the effort should be made to strike some position that recognizes the interest of the United States and strikes that balance which has so far eluded.

Mr. MAHLEY. We are trying to find a way in which we can preserve the process and certainly the attempt to try to find ways which will be beneficial. How to do that is, again, something which is much more difficult to come down with an answer which will be agreeable to a number of other countries.

Mr. TIERNEY. Ambassador, would you please provide us—this committee—with a record copy of the administration's review of the chairman's text, the one that you supervised?

Mr. MAHLEY. I think we can provide that in terms of—it will be classified, obviously, but certainly within those parameters. I will refer that to my legal people to provide.

Mr. TIERNEY. You believe it will be classified or you know that it's classified already.

Mr. MAHLEY. I know that it's classified.

Mr. TIERNEY. I would ask that be accepted and made a part of the record in the parameters of its classification.

Mr. PUTNAM. To the extent practicable, we'll certainly comply with all the classified document handling requirements. But certainly we'll be happy to get one provided to you.

Mr. TIERNEY. Thank you.

Now, Ambassador Mahley, in your testimony you listed three concerns with the chairman's text; and the first was concerning export controls. You said that was a lightening rod. Is that right?

Mr. MAHLEY. That is correct sir.

Mr. TIERNEY. Now, I would assume that you place those issues as one of your top concerns, but I've heard that at the last hearing at least that issue of export controls was determined largely in favor of the west or the U.S. position. Is that accurate?

Mr. MAHLEY. First of all, to say that has been resolved would be inaccurate. There have been a number of countries, including some of the nonaligned countries, that have indicated in the negotiations that is an area which they wish to readdress with respect to the chairman's text. The current chairman's text, in the area of the text which deals directly with the issue, which is article 7 of the text, sections A through D, does indeed in my judgment largely reflect Western values. The question that you have is whether or not there are other areas of the text in which ambiguities that are inherent in the text allow reintroducing by dedicated personnel of other countries some of the very things that we have objected to and managed to eliminate from article 7.

Mr. TIERNEY. Assuming no opening up of that, are you saying that the United States could oppose or support article 7 as it's certainly written?

Mr. MAHLEY. I would say the United States would oppose the article 7 as currently written because it contains a section E which we find unacceptable. If the article 7 as currently written were composed only of sections A through D, then I believe that United States would be prepared to support that particular article.

Mr. TIERNEY. Which you share with us what section E is?

Mr. MAHLEY. Section E requests that the first review conference of the protocol, not of the Convention but of the protocol, undertake to determine whether or not an export ban against—of all biological materials against all countries not states parties to the protocol should be instituted. Because it is something that would be taken up at a review conference of the protocol, that is a measure that would then be adopted by the two-thirds vote of the parties participating in the review conference. That is something which we believe is in violation of article 10 of the Convention itself and therefore is not something which is acceptably a measure which might be adopted by the protocol.

Mr. TIERNEY. Ambassador, another concern you raise is that concerning pharmaceutical companies; and the issue apparently is that spies would somehow infiltrate the inspection teams and steal the companies' secrets. I think you indicated that you don't think the current text obviates those concerns, is that correct?

Mr. MAHLEY. That is correct.

Mr. TIERNEY. Well, at the last hearing we also talked about that a bit and at least some indicated that the safeguards in the chairman's text were quite substantial in that regard. I think one of the examples they gave us was that the text forbids sampling in nonchallenged visits, is that right?

Mr. MAHLEY. That is correct, that sampling is prohibited in nonchallenged visits.

Mr. TIERNEY. And that the text exempts a declaration of certain facilities, too, such as some biodefense facilities.

Mr. MAHLEY. That is correct.

Mr. TIERNEY. It requires no significant information about production facilities other than license vaccines. It also exempts them from visits.

Mr. MAHLEY. I would have to check the text in its entirety. That does not sound correct to me. Vaccine production facilities, the last that I looked, are indeed subject to visits. Other production facilities are subject to visits if they are among those that are declared. There are indeed a number of exemptions to that—to declaration that are written into the text. But those facilities which are declared are subject to random routine visits.

Mr. TIERNEY. And the chairman's text seems to also provide that all onsite activities of inspectors during visits are at the discretion of the host government.

Mr. MAHLEY. Particular access is at the discretion of the visited facility. That is correct.

Mr. TIERNEY. Can you tell us what other specific provisions the United States would advocate in addition or instead of the ones that we just cited?

Mr. MAHLEY. One of the things that the United States would advocate in that is, again, not only that those provisions be mandated and enforced but also that those provisions would be made universal for all onsite activities.

Mr. TIERNEY. Thank you.

And I think, finally, the last concern that you talked about was protection of defense agencies. And I think I'm quoting you properly. It said, providing extensive information to an international or-

ganization under the guise of transparency runs the risk of providing a proliferator or terrorist with a road map to exploit our vulnerabilities. Can you still make that argument, even given all the protections in the chairman's text?

Mr. MAHLEY. I can make the argument because it now is an argument which hinges upon the determination of the proliferator. Some of the most obvious traps have indeed been eliminated.

The difficulty is, No. 1, that our program is dynamic and so therefore it's very difficult to predict exactly what information will be available in the future. But, No. 2, it is a case that there are combinations of elements, for example, there are requirements that biodefense activities be identified. There are separate requirements for declaration which are not the direct biodefense declaration which talk about the work with listed agents.

Now, if indeed you have a confluence of saying that you have a biodefense facility that is identified as a biodefense facility by location and you have a separate declaration that is required for that facility of the fact that it is working with listed agents and then you discover therefore that in biodefense we are working with the specific list of agents, that constitutes to the dedicated proliferator a vulnerability list of all those agents which we are now preparing to defend against and therefore tells him which agents he ought to be trying to exploit which are not on that list. That's a combination factor, not one specific declaration, but it still is a threat that I believe is something for our biodefense people to take into account.

Mr. TIERNEY. Are there others?

Mr. MAHLEY. That's the only example I can think of off the top of my head, but I would happy to go back and try and find some others.

Mr. TIERNEY. I was looking for general areas or important areas that you would be concerned about.

Thank you very much for your testimony, all of you. I appreciate it.

Mr. PUTNAM. Thank you, Mr. Tierney.

Ambassador Leonard, earlier I unfortunately cut you off and apologize for that. They moved me from the kids' table to the saddle, and I just totally lost my head.

You were elaborating on your written testimony with regards to Russia's ongoing weapons program. Would you care to elaborate on that some more, the ongoing efforts in the former Soviet Union?

Mr. LEONARD. Thank you, sir.

As I think is well known, there was an enormous BW program in the Soviet Union in contravention of the BW Convention. We have here among other defectors a detector from that program who was the deputy director or the research director of it. He has written extensively about the magnitude of the program. He and a number of others consider that the program has not been completely eliminated. There are still some pockets of activity within the Soviet Union—Russia principally that would be in contravention of the Convention if they were known, and I think very few people have been satisfied by the assurances we've had from the Russian officials in that regard.

I think that the protocol would trigger a thorough review of all of that and would require the Russian Federation to basically come

clean and to reveal what there is and to eliminate any of it that is actually not defensive in character but contravenes the treaty.

Since that activity, that former offensive program, is the most likely source of any terrorist activity, the most likely place from which either experts or biological substances could come that would be used by terrorists or by a government illicitly conducting a BW program, getting rid of that particular seed of infection, if I may put it that way, it seems to me is one of the most important tasks that we face. And we've tried to do it in a trilateral process ourselves, the British and the Soviet Union then, as the three depositories of the BWC, but it didn't work. We really need to go back at that, and I think that's one of the benefits that would derive from moving forward with the protocol.

Mr. PUTNAM. Thank you, Mr. Ambassador.

Ambassador Mahley, in our subcommittee meeting on June 5th, Mr. Zelicoff, the senior scientist for Sandia National Laboratories, said, quote, that there was intense friction between the National Security Council and the entirety of the interagency working group concerning biological weapons control. Essentially nothing in the way of tangible policy was put forward during this time because one or at most a few low-level staffers within the NSC sought to suppress the results of the mock inspections, break interagency consensus on negotiating strategy and impose an extraordinarily ill-suited vision for the BWC protocol which would make it like the Chemical Weapons Convention protocol.

Could you elaborate, to the extent that you are aware of, of the source of that friction in the previous administration over the protocol policy and what, if any, impact the NSC interference had on the development of that policy?

Mr. MAHLEY. I think, Mr. Putnam, that the elaboration I would make on that is not going to be too extensive. I think that's a perception that was presented by Mr. Zelicoff with full belief in what he was saying.

I would simply say that, in my judgment, we have had a problem in the U.S. Government with respect to this protocol in the following sense: There are a number of agencies that have asked for throughout the negotiation consideration of equities, very real equities that they have in the process. I am talking about the Department of Commerce. I'm talking about the Department of Defense. I'm talking about the Department of Energy. I'm talking about a number of executive branches that have a number of places that they believe that real national security was potentially at risk by the nature of this protocol.

At the same time, the inherent ambiguity in trying to find answers to what people intended to do with activities in the biological nature by onsite activities is, as Dr. Lacey has said, an almost unanswerable conundrum.

In terms of the U.S. Government facilities, there were activities conducted which did indeed raise some of those ambiguities. There was also I think a general perception in the U.S. Government during the previous administration that this issue, the issue of a biological weapons conference protocol, was not one which was centered to the activities of the executive branch government and

therefore not one which had what I euphemistically refer to frequently as senior guidance and leadership.

Now one of the things that my probably much-too-extensive experience in the arms control arena has led me to believe about the formulation of the U.S. policy is that you're never going to get U.S. leadership in a negotiation or coherent U.S. policy without the intervention of senior and experienced personnel from the executive branch because no individual agency, just like no individual country in a multilateral negotiation, is going to be prepared to sacrifice its own equities without seeing where that sacrifice leads to in the way of an outcome which has some greater value to it for the country as a whole or in the case of countries to their own national interest as a whole.

Now, that is only achievable by getting a fairly senior and fairly broad and experienced perspective about how one can attempt to balance costs, risks, benefits in doing that. That particular process in my personal judgment did not occur during the previous administration. Instead, the entire negotiation policy development process was left to mire at relatively junior levels of the executive branch. Therefore, the particular influence and interests of individuals and the particular perspective in terms of the outcome which they wish to see from their own perspective in terms of the outcome of the negotiations was neither corrected nor was it balanced nor was it even debated in terms of more senior elements of the U.S. Government. In that respect, the United States in my judgment did indeed suffer in our ability to exhibit leadership, initiative and imagination in terms of proposing solutions to the various issues that arose during the course of the negotiation.

Did we have instructions about what the U.S. policy was at any particular point? Yes, we did. Did we as a delegation in Geneva execute those instructions? Yes, we did. So in that sense the cost is certainly one of opportunity, not one of impetus or not one of inaction.

Thank you.

Mr. PUTNAM. Thank you, Ambassador.

You mentioned a number of departments in the executive branch that have sought influence in this process. To what degree were the Centers for Disease Control consulted and what input have they had on the protocol negotiations?

Mr. MAHLEY. The Centers for Disease Control in Atlanta was consulted on a technical basis early in the negotiations to try to give us some perspective from the idea of disease control itself, what some of the difficulties are in terms of, for example, the outbreak of disease, whether it's a usual outbreak of disease, an unusual outbreak of disease, and the kinds of epidemiological activities that would normally be engaged in trying to pursue an outbreak of disease.

One of the things that we have been very careful to do, however, with the Centers for Disease Control in terms of the development of executive branch policy with respect to biological weapons is to avoid involving the Centers for Disease Control in a biological weapons question. This is much the same as, for example, the issue of involving the World Health Organization internationally in the biological weapons area.

One does not wish to do that because disease is a natural problem and trying to confuse the issue of whether or not disease outbreaks or disease data are connected with biological weapons, as opposed to connected with the events of nature, is not something you should do lightly. Because in doing that you then potentially cause people to be inhibited about the reporting of disease data for fear that it will be somehow or another associated with being biological weapons associated. And the lack of accurate data in terms of disease occurrence, disease outbreak and disease characteristics is a much larger and wider danger in terms of health national security and other kinds of threats than the issue of the biological weapons protocol. So in that sense we carefully restricted the Centers for Disease Control to being a technical consultant in terms of the disease characteristics on which they are truly experts.

Mr. PUTNAM. Thank you, Mr. Ambassador.

Mr. Tierney, would you like another round of questions?

Mr. TIERNEY. Just two questions.

I'd like to ask this of each of the panelists, and answer as briefly or as long as you want. Essentially, can we negotiate a protocol which improves the ability to impede the threat and the reality of biological weapons that are proliferated in the world, specifically one that, even given the magnitude of the advanced state of the U.S. biodefense activity and the biotech industry in the United States, strikes an acceptable balance between the gains that would result as opposed to the risks that would be involved?

I can repeat that if anybody needs me to repeat it.

Ambassador Leonard.

Mr. LEONARD. Thank you, Mr. Tierney.

I think my answer is clearly yes. I think that certain changes in the draft protocol put forward by the chairman would certainly be helpful. Some of them might in some way strengthen it. Some of them might weaken some of the provisions.

I would certainly support the specific suggestion that Ambassador Mahley mentioned with regard to export control in order to avoid a problem arising at a future review conference of the protocol. But it seems to me that these rather minor changes are attainable.

More than 40 delegations in the Geneva negotiation have indicated that they want to go forward on the basis of the protocol as it exists. Not only the 18—the 15 members of the European Union but the other 10 or so eastern European countries associated with them and another 10 or 15 from other—in other groups who have had taken the floor in Geneva. So that there is clearly a desire there for the negotiation to move forward and to close.

I certainly agree with Ambassador Mahley that there is no absolute deadline. November is not a drop-dead date. But some serious negotiation and work to improve the protocol to the point where it is acceptable all around is certainly in order.

Now, I think the U.S. Government, the administration, understands that; and I'm worried about the conclusions they may draw from it. They certainly have been taken aback by what happened to their position with regard to the Kyoto treaty, and they face a very difficult problem of regaining some sort of credibility in their express desire to do something.

I fear that something similar might happen in this area as well; and I certainly would like to say that I think the worst thing that could happen would be for the government, the administration, to say that this protocol is not satisfactory and we have a new bright idea of some sort that we think can effectively substitute for it. There have been some hints that something like this might be in the offing, and I think the result—there are some good ideas for other things besides the protocol. But if the United States puts them forward as a substitute for the protocol, it will kill them dead as a dodo; and that is not in our interest or in the interest of moving forward on this basic problem.

Mr. TIERNEY. Ambassador Mahley.

Mr. MAHLEY. Thank you, Congressman Tierney.

Do I believe that it is possible to devise a protocol which has adequate balance between risks and benefit? The answer to that is yes. Do I believe that such a protocol is negotiable in the current context, given the very disparate objectives that a number of countries that are participating in the negotiations have with respect to what they want with the protocol? The answer is that is, unfortunately, I do not believe it very likely.

Mr. TIERNEY. Is that regardless of the amount of time involved or just by the deadline of November?

Mr. MAHLEY. The difficulty—first of all, the deadline by November I think would have to be on the basis of the current text. I have already indicated that we have some substantial difficulties with that.

The difficulty beyond November is that if you go beyond November I think you simply reintroduce some very disparate objectives that you have, and it would be a very difficult task to overcome those. For example, you mentioned export controls previously. We have been I think very successful in rejecting a number of attacks on the export control arena from a number of countries whose major objective in this negotiation has been to undermine export controls as a means of trying to stop proliferation. If we go back in the negotiation, I see no reason why they will not renew those efforts to try to get a worse outcome in that particular area than what we have already.

Mr. TIERNEY. Doctor.

Mr. LACEY. Congressman, I'll just dovetail my comments onto Ambassador Mahley's; and I would say that, with respect to enhancing the verifiability of the Biological Weapons Convention, we have to recognize that there are limits to what can be done with multiple committee lateral arms control. I think there are a number of things we can do to improve verifiability of the BWC. We can do them unilaterally. We can do them in concert with our other nations, our friends, our allies. We can devote additional resources to the collection and evaluation of intelligence and other related data.

Diplomatically, we can take a very vigorous approach to compliance diplomacy. This means following up on compliance concerns and suspected violations. We can press for visits to suspect facilities by compliance experts.

Ambassador Leonard mentioned the trilateral process some time ago. There are variants of that would be possibilities. We can press known and suspected violators to come clean and to take corrective

action. These are things that we can do nationally and certainly we can do multinationally. But we have to recognize I think that, ultimately, in terms of improving verifiability, a protocol is not the way to do it.

Mr. TIERNEY. Thank you.

Thank you, Mr. Chairman.

Mr. PUTNAM. Thank you, Mr. Tierney.

At this time, if any of the witnesses have any brief closing remarks to summarize where we've been this afternoon—I'll start with Dr. Lacey and recognize any or all of you for some closing statements.

Mr. LACEY. Thank you, Mr. Chairman.

I think, in summary, I would reiterate that the U.S. Government for at least the past 10 years has been seeking ways to improve the Biological Weapons Convention, to make it a more effective convention in combating the threat of biological weapons. In that entire process, we have never envisioned that a protocol would be a means to improve verifiability of that convention. We always recognized that the protocol could do some useful things, and transparency was one of them. Ambassador Mahley has suggested several other areas.

We also recognized I think, Congressman Tierney, that in fact a balance could be struck; and we have been seeking to strike a useful balance.

But never, at least in the three administrations that I have served in, have we ever recognized—envisioned that we could do improvements to verifiability through a protocol. We have been consistent in that policy since 1992, and nothing that we have seen in the ensuing 10 years has changed that perception.

Mr. PUTNAM. Thank you, Dr. Lacey.

Ambassador Mahley.

Mr. MAHLEY. Thank you, Mr. Chairman.

I would like, first of all, to express my appreciation for having had the opportunity to testify this afternoon. I hope we have provided some information which is useful in your deliberations.

In sum, I again want to go back to something that I stated at the outset. We have had a lot of discussion about a protocol to the Biological Weapons Convention and how a protocol to the Biological Weapons Convention is designed to try to enhance the utility of that convention. Now, what I want to make sure we understand is that protocol is separable from that convention.

There is a very real threat of biological weapons in the world, and I will give a kudo right now to Ambassador Leonard, sitting to my left. Because when they negotiated the original Biological Weapons Convention back in 1972, and when they got it entered into force in 1975, it was a difficult document, a short document, and it has remained a very flexible document in adapting itself to the world as biotechnology has gone along its route. It has adapted itself to the changing threat in the world, and it has remained a very useful barrier against anyone thinking that biological weapons was an acceptable route to national security.

Whatever the outcome of a particular instrument designed to try to amplify that, we should not and must not lose sight of the underlying principle that the Biological Weapons Convention entails.

Certainly I agree with Ambassador Leonard that certainly one of the things that the United States should be doing and I hope will be doing with renewed vigor in the coming years is extending the number of countries that are parties to that and have indeed renounced biological weapons as an answer to their security problem. Thank you.

Mr. PUTNAM. Thank you, Mr. Ambassador.

Ambassador Leonard.

Mr. LEONARD. Thank you, sir.

Let me pick up on two points that Ambassador Mahley made. One was the very valid one for high-level involvement in this process if it's to be successful. The second is the problem—the very real problem of those members of the negotiating group whose objectives are very different from ours, in particular those who want to weaken the system of export controls.

On the first point, let me recall that when the former President Bush decided he wanted a Chemical Weapons Convention he got up and left the White House and went over to Geneva and sat in the chair next to our Ambassador and told the whole conference on disarmament that he wanted a convention; and that had a dramatic effect on making it clear that the United States was 100 percent behind this.

Now, if anything like that were to happen, if the United States would make it clear that it wants a protocol at the very highest level, that it's ready to use its weight in the world to bring about a successful solution to the negotiation, it would have a dramatic effect; and the first place it would have a dramatic effect is on those like the countries that are trying to weaken the whole operation by introducing impossible conditions on the question of export controls. They will only be driven off of that when it's clear that the United States is in this 110 percent and wants the protocol and is not going to be driven off of its positions with regard to export controls and the protection of the Australia group. Once that's clear, then I think they may stay out for the time being. But an effort to universalize the Convention following on that successful negotiation would I think transform the whole scheme.

Thank you, sir.

Mr. PUTNAM. Thank you, Mr. Ambassador.

The subcommittee thanks all of you for your expertise and for your candor in responding to the questions. This is not the first hearing we've had on this topic, and I would doubt that it will be the last as these issues continue to unfold.

With that, the subcommittee is adjourned.

[Whereupon, at 3:40 p.m., the subcommittee was adjourned.]

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