

Third session  
Geneva, 27 November-8 December 1995

PROCEDURAL REPORT OF THE AD HOC GROUP OF THE STATES PARTIES  
TO THE CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT,  
PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL  
(BIOLOGICAL) AND TOXIN WEAPONS  
AND ON THEIR DESTRUCTION

1. The Ad Hoc Group of States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction held its third session at the Palais des Nations, Geneva, from 27 November to 8 December 1995, in accordance with the decision taken at its second session. The Group held 20 meetings during that period under the chairmanship of Ambassador Tibor Tóth of Hungary. Ambassador Richard Starr of Australia and Ambassador Jorge Berguño of Chile continued to serve as Vice-Chairmen of the Group. Mr. Ogunsola Ogunbanwo, the Senior Coordinator of the Disarmament Fellowship, Training and Advisory Programme, Centre for Disarmament Affairs, Department of Political Affairs, served as Secretary of the Group.

2. At the third session of the Ad Hoc Group, the following States Parties to the Convention participated in the work of the Group: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Cuba, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Ireland, Italy, Japan, Lebanon, Malta, Mexico, Mongolia, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Slovakia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America. The following signatory State to the Convention also participated in the work of the Group: Myanmar.

3. At the first meeting, the Ad Hoc Group decided to continue its consideration of Agenda Item 9 entitled "Strengthening of the Convention in Accordance with the Mandate as it is contained in the Final Report of the Special Conference of the States Parties to the Biological Weapons Convention".

\* Retyped for technical reasons.

4. As in the previous session, the Chairman of the Ad Hoc Group was assisted by Friends of the Chair in his consultations and negotiations on particular issues as follows:

Definitions of Terms and Objective Criteria

- Dr. Ali Mohammadi (Islamic Republic of Iran)

Confidence-Building and Transparency Measures

- Ambassador Tibor Tóth (Hungary)

Measures to Promote Compliance

- Mr. Stephen Pattison (United Kingdom of Great Britain and Northern Ireland)

Measures Related to Article X

- Ambassador Jorge Berguño (Chile).

5. Out of the 20 meetings the Ad Hoc Group held in accordance with the programme of work, 6 meetings were devoted to issues related to "Measures to Promote Compliance", 4 meetings were devoted to issues related to "Measures Related to Article X", 2 meetings were devoted to the issues on "Confidence-Building Measures" and 5 meetings were devoted to "Definitions of Terms and Objective Criteria". The Friends of the Chair were assisted by Mr. Timur Alasaniya and Mr. Jerzy Zaleski of the Centre for Disarmament Affairs.

6. The results of discussions and the exchange of views on those issues were reflected by Friends of the Chair in papers which were annexed to the present Report (Annex III), on the understanding that amendments agreed in the closing sessions would be faithfully incorporated, and underlining the importance at future sessions of prompt circulation of final texts. These papers are without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and do not imply agreement on the scope or content of the papers.

7. In addition to the documents presented at its first and second sessions, the Ad Hoc Group had before it 52 working papers covering all four issues under discussion and which are listed in Annex I, together with all documents of previous sessions.

8. In accordance with the decision taken at its first session, the Ad Hoc Group, at its 18th meeting, on 7 December 1995, adopted the estimated costs of the fourth and fifth sessions of the Group as contained in document BWC/AD HOC GROUP/30.

10. The Group agreed to have the Fourth session of the Ad Hoc Group from 15 to 26 July 1996 and the Fifth session from 16 to 27 September 1996. The Group took note of the intention of the Chairman to continue consultations concerning a possible third week in September/October 1996 to prepare a report to the Fourth Review Conference. The Group agreed that during the Preparatory Committee of the Fourth Review Conference to be held between 9 and 12 April 1996, the Chairman might have structured consultations.

11. At its 19th meeting of the session, on 8 December, the Ad Hoc Group considered and adopted its draft Procedural Report for the third session as contained in document BWC/AD HOC GROUP/WP.29.

ANNEX I

LIST OF DOCUMENTS

DOCUMENTS SUBMITTED AT THE THIRD SESSION

<u>Document symbol</u>	<u>Title</u>
BWC/AD HOC GROUP/WP.3	The Role of Containment in Facility Declarations under the BTWC
BWC/AD HOC GROUP/WP.4	Ad Hoc Expert Group - Working document by Cuba - Some elements associated to the promotion of science and technology with peaceful aims within the framework of the Convention on Biological and Toxin Weapons
BWC/AD HOC GROUP/WP.5	Ad Hoc Expert Group - Working document by Cuba - Rights and obligations of the States Parties to the Convention on Biological and Toxin Weapons within the framework of the economic and technological development and in the field of international cooperation and assistance
BWC/AD HOC GROUP/WP.6	Discussion paper on declarations: list of agents and combinations of criteria
BWC/AD HOC GROUP/WP.6/Corr.1	Working paper submitted by Canada
BWC/AD HOC GROUP/WP.7	BWC Article X: Areas of biological activity of direct relevance to the Convention
BWC/AD HOC GROUP/WP.7/Corr.1	Working paper submitted by the United Kingdom
BWC/AD HOC GROUP/WP.8	Definition of containment facilities for plant pest laboratories
BWC/AD HOC GROUP/WP.8/Corr.1	Working paper submitted by South Africa
BWC/AD HOC GROUP/WP.9	France/Germany Discussion paper - Declarations in a BTWC-Verification Protocol
BWC/AD HOC GROUP/WP.10	Discussion paper of the Netherlands - The relevance and effectiveness of (combinations of) criteria for declaration
BWC/AD HOC GROUP/WP.11	Use of investigative epidemiology as a tool in the investigation of unusual outbreak of disease and alleged use of biological weapons
BWC/AD HOC GROUP/WP.12	Friend of the Chair on Compliance Measures - Declarations
BWC/AD HOC GROUP/WP.13	Alleged Use Investigation - Authority to Trigger - Working paper by Australia

- BWC/AD HOC GROUP/WP.14 Overview of some epidemiological factors relevant to the production and use of infectious agents as biological weapons - Discussion paper submitted by Portugal
- BWC/AD HOC GROUP/WP.15 Working paper by Sweden - Short notice on-site information visits and inspections as parts of a verification regime for the BTWC
- BWC/AD HOC GROUP/WP.16 The relationship between investigations of alleged use of BTW and unusual outbreaks of disease and challenge inspections
- BWC/AD HOC GROUP/WP.17 Friend of the Chair for Compliance Measures - Proposed revision of paragraph 6 of FOC July paper
- BWC/AD HOC GROUP/WP.18 France/Germany - Working document on genetically modified organisms (GMO)
- BWC/AD HOC GROUP/WP.19 France - Convention de 1972 - Application de l'Article X de la Convention
- BWC/AD HOC GROUP/WP.20 Friend of the Chair on Compliance Measures - Investigation of alleged use
- BWC/AD HOC GROUP/WP.21 Working paper submitted by Cuba - Investigation on the use or alleged use of biological or toxin weapons against a State Party to the Biological Weapons Convention
- BWC/AD HOC GROUP/WP.22 Working paper by Cuba - Elements for a potential verification regime within the framework of the Convention on the prohibition of the development, production and stockpiling of bacteriological (biological) and toxin weapons and their destruction (BWC)
- BWC/AD HOC GROUP/WP.23 Friend of the Chair on Article X - Informative Note concerning some activities of multilateral cooperation in areas related to the BWC and their relevance for cooperation under Article X of the BWC
- BWC/AD HOC GROUP/WP.24 Working paper by Brazil - Recent trends in the biology of infectious agents and cooperation as an element of the BWC compliance regime
- BWC/AD HOC GROUP/WP.25 Paper submitted by the United States of America - Computer networking as a means of strengthening the BWC
- BWC/AD HOC GROUP/WP.26 Working paper by Japan - BWC definition: list of biological agents
- BWC/AD HOC GROUP/WP.27, Rev.1, Rev.2 and Rev.3 Friend of the Chair on Confidence-Building and Transparency Measures - Surveillance of legislation

BWC/AD HOC GROUP/WP.28, Rev.1, Rev.2 and Rev.3	Friend of the Chair on Confidence-Building and Transparency Measures - Data on Transfers and Transfer Requests and on Production
BWC/AD HOC GROUP/WP.29, Rev.1, Rev.2 and Rev.3	Friend of the Chair on Confidence-Building and Transparency Measures - Multilateral Information Sharing
BWC/AD HOC GROUP/WP.30, Rev.1 and Rev.2	Friend of the Chair on Confidence-Building and Transparency Measures - Surveillance of Publications
BWC/AD HOC GROUP/WP.31, Rev.1, Rev.2 and Rev.3	Friend of the Chair on Confidence-Building and Transparency Measures - Exchange visits
BWC/AD HOC GROUP/WP.32	Czech activities in the field of biotechnology - Working paper submitted by the Czech Republic
BWC/AD HOC GROUP/WP.33	New Zealand Delegation - Criteria and lists of animal and plant pathogens to support specific measures to verify compliance with the Biological Weapons Convention
BWC/AD HOC GROUP/WP.34	Definitions of terms and objective criteria - list of biological agents and toxins - Proposal by Turkey
BWC/AD HOC GROUP/WP.35, Rev.1 and Rev.2	Friend of the Chair on Confidence-Building and Transparency Measures - Exchange visits (off-site)
BWC/AD HOC GROUP/WP.36	Friend of the Chair on Compliance Measures - Declarations
BWC/AD HOC GROUP/WP.37	Friend of the Chair on Compliance Measures - On-site Measures
BWC/AD HOC GROUP/WP.38	Friend of the Chair on Compliance Measures - Investigation of Alleged Use
BWC/AD HOC GROUP/WP.39 and Rev.1	Friend of the Chair on the Definition of Terms and Objective Criteria - Human Pathogens
BWC/AD HOC GROUP/WP.40	Working paper submitted by the Islamic Republic of Iran - Threshold quantities for toxins
BWC/AD HOC GROUP/WP.41	Working paper submitted by the United Kingdom - The role of quantitative data in measures to promote compliance with the BTWC
BWC/AD HOC GROUP/WP.42	The role of lists of key equipment in measures - Working paper submitted by the United Kingdom
BWC/AD HOC GROUP/WP.43	Working paper by the Friend of the Chair on

and Rev.1	Definitions and Objective Criteria - Types of Activity
BWC/AD HOC GROUP/WP.44	Working paper submitted by the Islamic Republic of Iran - Animal Pathogens
BWC/AD HOC GROUP/WP.45	Working paper submitted by the Netherlands - Implementation of Article X of the BTWC
BWC/AD HOC GROUP/WP.46	Protection of intellectual property rights with regard to biotechnology - Working paper submitted by Japan
BWC/AD HOC GROUP/WP.47	Friend of the Chair on Article X
BWC/AD HOC GROUP/WP.48 and Rev.1	Friend of the Chair on Definition and Objective Criteria - Criteria for animal pathogens
BWC/AD HOC GROUP/WP.49	Friend of the Chair on Definition and Objective Criteria - Criteria for plant pathogens
BWC/AD HOC GROUP/WP.50 and Rev.1	Friend of the Chair on Definition and Objective Criteria - Summary of views on definition and threshold quantities
BWC/AD HOC GROUP/WP.51	Friend of the Chair on Definition and Objective Criteria - Summary of views on list of equipment and types of activity
BWC/AD HOC GROUP/WP.52	Privileges and Immunities of the Organization and Inspectors - Working paper submitted by Japan
BWC/AD HOC GROUP/INF.6	Provisional list of participants
BWC/AD HOC GROUP/INF.6/Rev.1	List of participants
BWC/AD HOC GROUP/30	"Estimated cost of the fourth and fifth sessions of the Ad Hoc Group of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction" submitted by the Secretariat.

DOCUMENTS SUBMITTED AT THE FIRST SESSION

BWC/AD HOC GROUP/1	-	Provisional agenda
BWC/AD HOC GROUP/2	-	Estimated costs of the first session
BWC/AD HOC GROUP/INF.1	-	Provisional list of participants
BWC/AD HOC GROUP/WP.1	-	Working paper by Canada entitled "The role of trial inspections in informing arms control negotiations and implementation, with particular emphasis on the Biological and Toxin Weapons Convention".
BWC/AD HOC GROUP/WP.2	-	Draft Procedural Report
BWC/AD HOC GROUP/WP.2*	-	Draft Procedural Report
BWC/AD HOC GROUP/3	-	Procedural Report

DOCUMENTS SUBMITTED AT THE SECOND SESSION

- (1) BWC/AD HOC GROUP/4 - "Estimated costs of the second and third sessions of the Ad Hoc Group of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction", submitted by the Secretariat;
- (2) BWC/AD HOC GROUP/5 - "Discussion paper on measures", submitted by the United Kingdom of Great Britain and Northern Ireland;
- (3) BWC/AD HOC GROUP/6 - "The future role of confidence-building measures (CBMs)", submitted by the Netherlands;
- (4) BWC/AD HOC GROUP/7 - "Programme of work: measures to promote compliance: agenda", submitted by the United Kingdom of Great Britain and Northern Ireland;
- (5) BWC/AD HOC GROUP/8 - "Elements for a possible verification regime in the framework of the Convention on Biological Weapons", submitted by Cuba;
- (6) BWC/AD HOC GROUP/9 - "List of biological and toxin agents significantly important for the Convention", submitted by Cuba;
- (7) BWC/AD HOC GROUP/10 - "List of equipment significantly important for the Convention", submitted by Cuba;
- (8) BWC/AD HOC GROUP/11 and Add.1 - "Investigation alleged use of biological weapons", submitted by South Africa;
- (9) BWC/AD HOC GROUP/12 - "The application of intrusive measures on-site inspections, auditing, sampling and identification in order to strengthen the BWC", submitted by South Africa;
- (10) BWC/AD HOC GROUP/13 - "Compilation of questions for the item 'Definitions of terms and objective criteria'", submitted by France and Germany;
- (11) BWC/AD HOC GROUP/14 - "Working document on criteria and lists of agents to be included in a verification protocol of the Convention on the prohibition of biological weapons", submitted by France and Germany;
- (12) BWC/AD HOC GROUP/15 - "Definition of terms", submitted by the Russian Federation;
- (13) BWC/AD HOC GROUP/16 - "List of biological agents and toxins", submitted by the Russian Federation;
- (14) BWC/AD HOC GROUP/17 - "Declarations", submitted by the Friend of the Chair on compliance measures;
- (15) BWC/AD HOC GROUP/18 and Rev.1 - "List of biological agents and toxins", submitted by China;
- (16) BWC/AD HOC GROUP/19 - "List of agents", submitted by Brazil;
- (17) BWC/AD HOC GROUP/20 - "Criteria and list of animal pathogens", submitted by Portugal;

- (18) BWC/AD HOC GROUP/21 - "The role and objectives of information visits", submitted by the United Kingdom of Great Britain and Northern Ireland;
- (19) BWC/AD HOC GROUP/22 - "Specific measures for implementation of Article X in the context of a compliance regime for the BWC", submitted by Brazil;
- (20) BWC/AD HOC GROUP/23 - "Discussion of potential Article X issues", submitted by the United States of America;
- (21) BWC/AD HOC GROUP/24 - "Japanese Cooperation in the field of biotechnology", submitted by Japan;
- (22) BWC/AD HOC GROUP/25 - "Some possible elements in a verification protocol", submitted by Sweden;
- (23) BWC/AD HOC GROUP/26 - "Criteria for the selection of biological agents to be included in a list", submitted by Brazil, France, Germany, Greece and the Russian Federation;
- (24) BWC/AD HOC GROUP/27 - "Definitions for some terms related to measures under discussion for strengthening the Convention on Biological Weapons", submitted by China;
- (25) BWC/AD HOC GROUP/CRP.1 - "Declarations as a component of a verification protocol", non-paper submitted by Australia;
- (26) BWC/AD HOC GROUP/CRP.2 - "Programme of work Definition on terms", non-paper submitted by the Friend of the Chair;
- (27) BWC/AD HOC GROUP/CRP.3 - "US Agency for international development programs", non-paper submitted by the United States of America;
- (28) BWC/AD HOC GROUP/CRP.4 - "US Agency for international health activities", non-paper submitted by the United States of America;
- (29) BWC/AD HOC GROUP/INF.3 - "List of States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction";
- (30) BWC/AD HOC GROUP/INF.4 - "Provisional list of participants";
- (31) BWC/AD HOC GROUP/INF.5 - "List of participants".

ANNEX II

PROGRAMME OF WORK FOR THE FOURTH SESSION  
(15-26 JULY 1996)

First week - 15-19 July 1996

	15 JUL	16 JUL	17 JUL	18 JUL	19 JUL
AM	AHG	CBM	DEF	CM	CM
PM	Int. org.	CM	Art. X	DEF	Art. X

Second week - 22-26 July 1996

	22 JUL	23 JUL	24 JUL	25 JUL	26 JUL
AM	CBM	CM	CM	CM	DEF
PM	DEF	DEF	DEF	Art. X	AHG

CM           - ..  
DEF          - ..  
CBM          - ..  
Art. X       - ..  
AHG          - ..

ANNEX III/1

FRIEND OF THE CHAIR ON COMPLIANCE MEASURES

*This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.*

DECLARATIONS

PURPOSE

1. Declarations help strengthen confidence in compliance with the Convention by increasing transparency and thus helping to avoid false suspicions of non-compliance. Declarations make evasion of obligations more difficult, and could thus have a deterrent effect. To be fully effective, declarations may have to be linked to other measures. Declarations should address relevant issues related to compliance with the Convention and implementation of the compliance regime.

SCOPE

General Considerations

2. States could be required to declare activities/facilities/programmes of clear relevance to the objective of strengthening compliance according to the agreed scope of declarations. There is a need at the same time to avoid including irrelevant material which risks overload of information. Declaration requirements need to be precise and to take account of national security and CPI concerns. There was general agreement that mandatory declarations could be a useful way of building on the existing voluntary CBMs.

DECLARATION CRITERIA

3. Each State Party could submit declarations on any of the following activities, facilities, events and programmes:

(A) MILITARY AND MILITARY-RELATED BIODEFENCE PROGRAMMES/FACILITIES

(a) national biological defence activities/programmes and facilities.

The declaration could include detailed information on:

technical data and staff, such as:

- (i) location;
- (ii) the floor areas (sqm) of the facilities, including that dedicated to BL2, BL3, BL4 level laboratories;
- (iii) the total number of staff employed, including those contracted full time for more than six months;
- (iv) numbers of staff reported in (iii) by the following categories: civilian, military, scientists, technicians, engineers, support and administrative staff, contractor staff;
- (v) a list of the scientific disciplines of the scientific/engineering staff;

sources of funding (military, government, private);

objectives and main elements of activities, such as work in prophylaxis, studies of pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research;

production, stockpiling of and work with agents contained in the list of pathogens and toxins;

activities related to genetic manipulation on agents contained in the list of pathogens and toxins;

work with biological aerosols, including laboratories, open-air test ranges, aerosolisation activities, work with test chambers.

(b) (possibly) past biological offensive or defensive programmes (since?).

Commentary

4. Further consideration should be given to whether military medical programmes of protection against infectious diseases (or toxins) should be included and, if so, whether facilities involved in military medical programmes - in addition to those related to biological defence - could also be declared. Further consideration is also needed on whether biological defence programmes for the civil population could be triggered separately, or whether such information should be given as part of the declaration on national biological defence programmes. There was discussion of whether it would be necessary to specify further programmes/activities etc. run by non-military organizations at the request of, or funded, sub-contracted or proposed by military/defence agencies. The existing CBM A Part 2 already has a provision calling for information on such activity; it is open for consideration whether the same or a greater degree of information should be sought. There was no agreement on the date for past programmes; dates mentioned were 1/1/46 and Entry into Force of the BWC, 26/3/75; and entry into force of any legally binding instrument to strengthen compliance in the Convention. It was not clear whether, given the CBM request to report past programmes, it was necessary to include this as a new trigger.

(B) HIGH CONTAINMENT FACILITIES

(c) facilities containing areas protected according to the standard for maximum containment laboratories as specified in 1993 WHO Laboratory Biosafety Manual (Biosafety 4 or equivalent standards).

(d) (possibly) facilities containing areas protected according to the standard for containment laboratories as specified in 1993 WHO Laboratory Biosafety Manual (Biosafety Level 3 or equivalent standards).

(e) (possibly) facilities possessing BL3 containment or equivalent standards, microbiology production capability, and working with listed agents.

Any declaration could include:

- the facility location;
- name of the facility;
- scope and general description of activities;
- production, stockpiling of and work with listed pathogens toxins.

*Commentary*

5. *The BL4 trigger is intended to capture those facilities, not already captured by the military triggers, with maximum containment levels.*

6. *It might be useful to require the declaration of all facilities possessing BL3 containment levels. Criteria for BL3 containment levels are described in the WHO 1993 Biosafety Manual. But it appeared that these were not universally reflected in national practice. Many countries do not require obligatory licensing of such facilities. Some facilities would satisfy BL3 standards for only short periods. Furthermore, an unqualified BL3 trigger might capture too many facilities not of direct relevance.*

7. *Those facilities of relevance with BL3 containment areas might be better captured through other triggers. Biodefence facilities with BL3 containment would be captured by the defence trigger which requires the declaration of all biodefence facilities regardless of containment level. Other relevant facilities which possess BL3 containment might be more easily captured through other triggers, notably the production microbiology trigger (see below).*

8. *The possibility of combining BL3 with other triggers was proposed. One particular possibility would be to require the declaration of those facilities possessing BL3 containment, microbiology production capability and working with listed agents. It was not clear, however, whether, given the uncertainty about the universal application of BL3, that this would be workable. A question to be answered was would such a trigger help capture relevant facilities not captured elsewhere? In the case of containment facilities for plant pest research/development and or production several relevant characteristics could be taken into account in developing declaration criteria; for example, they should be insect proof, have arrangements for decontamination of waste, and arrangements for maintaining air pressure differentials.*

(C) WORK WITH LISTED PATHOGENS AND TOXINS

*Commentary*

9. *The key question was whether a stand alone trigger on possession and/or work with listed pathogens and toxins was necessary. Such a trigger might be useful. But it might capture too many irrelevant facilities. A question to be answered was whether the trigger would capture facilities of relevance more easily than other triggers. For example, work (i.e. production, genetic manipulation, etc.) with listed pathogens and toxins could be captured by other triggers. Work in biodefence programmes would be captured by the biodefence trigger. Production of listed pathogens and agents could be captured by the production trigger (as amended - see below) or the BL4 containment trigger.*

10. *Deletion of the list as a separate trigger would mean that culture collections were not declared. But a requirement to declare all such collections, unless qualified in some way, might be unworkable.*

11. *As indicated above, a list of pathogens and toxins could be useful in focussing the scope of other triggers.*

12. *It could be important to provide specific information on pathogens and toxins in detailed facility responses triggered by other means.*

(D) AEROBIOLOGY/AEROSOL DISSEMINATION

(f) facilities that:

(i) use test chambers for work with listed pathogenic microorganisms and toxins;

(ii) work with aerosols of microorganisms at open-air test sites (alternatively: work with large scale open-air release of pathogens or toxins and have the capability to generate aerosols in the respirable size range (to be defined)).

*Commentary*

13. *Aerobiology work in the biodefence sector would be captured by the biodefence trigger. Routine agricultural work, environmental work and public health work should be excluded. But there was concern to capture other aerobiology activities/facilities. The above formulae attempt to do this, although it was recognized that they need refining. An alternative proposal would be to require the declaration only of aerobiology facilities which either (1) worked on listed agents/pathogens or (2) possessed BL3 containment capabilities. But the problem with such an approach could be that it would fail to capture relevant facilities unless they were currently using listed agents. As noted above, there may also be problems with the application of BL3 containment levels.*

(E) PRODUCTION MICROBIOLOGY

(g) the following types of facilities:

(i) those producing vaccines licensed by the State Party for the protection of humans; those producing animal vaccines;

(ii) those carrying out production of listed agents;  
(alternatively: those using listed agents);

(iii) those working on listed agents, and having production capacity on the same site;

(iv) certain other facilities with a potential to produce (agents) (under contained conditions).

*Commentary*

14. *This trigger is designed to capture relevant production facilities which would have the capability and expertise for relevant production but which are not involved in biodefence programmes and do not possess BL4 containment (both of which would be captured by other triggers).*

15. *(They might, however, be captured by some of the BL3 formulae tested as possible triggers.) It was important to capture vaccine production*

facilities and facilities producing listed agents (not necessarily as vaccines). The CBMs already invite a declaration of human vaccine facilities (as above). The inclusion of a reference to animal vaccines was without prejudice to the outcome of the debate on animal pathogens, and their role in any list of agents. One way of further refining the trigger would be to require only the declaration of vaccine producers working with listed agents, but this might exclude relevant facilities. Facilities which work with listed agents and maintain a production capacity (which may not necessarily be producing listed agents) should also be triggered (although this might be covered by the formula on "using" listed agents in (ii) above). Some of these production triggers could be qualified by including a reference to specific scales of activity.

16. It might be important to capture certain other facilities with a potential to produce agents of concern e.g. antibiotic production facilities. But it was recognized that a definition was needed to ensure that such a trigger had a clear and precise scope, and did not capture irrelevant facilities. One way of doing this might be to include only facilities which use certain containment features for production. Given the problems of clarity about BL3 containment identified above, it could be better to specify the containment characteristics rather than trying to apply a "BL" label. (An example of such an approach would be: facilities handling microorganisms in a system which physically separates the process from the environment and where exhaust gases from the closed system are treated in order to minimize release.)

(F) GENETIC MANIPULATION

(h) (possibly) genetic manipulation on listed agents.

*Commentary*

17. *It was recognized that genetic manipulation and other techniques could be used to enhance the potential for misuse of microorganisms and toxins. But genetic manipulation was a widespread technique in biotechnology and further consideration was required of whether genetic modification on its own should be a trigger for declarations. One option would be to combine this with work on listed agents, or work to enhance virulence or pathogenicity. Another possibility would be to trigger only those facilities which carry out genetic modification of listed agents and also possess production capacity.*

(G) OTHER CRITERIA

- Transfer data. As a trigger for declarations would yield too much information and would be difficult and complex for States Parties to implement. Transfer data could be included in declarations made under other criteria.
- Vectors. Further consideration should be given to the breeding of vectors of microorganisms e.g. insects above the laboratory scale as a criteria for declarations. There may be a need to avoid capturing irrelevant activities e.g. beekeeping.
- Unusual outbreaks. States Parties could be required to declare outbreaks of infectious diseases and similar occurrences caused by toxins, which seem to deviate from the normal pattern in the area concerned. This issue requires further consideration.

OTHER CONSIDERATIONS

- Declarations could be annual. In the first year declarations might be relatively comprehensive and in subsequent years focus primarily on changes.
- Formats should be simple, easy to prepare and not too expensive with questions ideally in a yes/no formats. CBM formats could serve as a model.
- There could be declarations for each facility as well as national declarations.

- National legislation might be needed to meet the requirements of declaration contents.
- Declarations could be handled in such a way as to protect the confidentiality of the information they contain.
- Any future international organization could follow up gaps and ambiguities in declarations by requesting further information possibly through national authorities. This might obviate the need for visits/inspections in certain cases.

#### Notifications

- Changes in information already described in declarations, and other developments, could, if necessary, be recorded in subsequent notifications. Some examples are contained in BWC/AD HOC GROUP/8. Others could include changes in laboratory containment levels, or in the purpose of high containment facilities.
- Annual declarations could include advance warning of such changes.
- Further consideration should be given to whether and how transfer data could be recorded in notifications.

ANNEX III/2

FRIEND OF THE CHAIR ON COMPLIANCE MEASURES

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

ON-SITE MEASURES

Introduction

1. The Special Conference mandated the Ad Hoc Group to consider, inter alia, "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". They "should be formulated and implemented in a manner designed to protect sensitive commercial proprietary information and legitimate national security needs" and they "shall be formulated and implemented in a manner designed to avoid any negative impact on scientific research, international cooperation and industrial development".

2. In the context of on-site measures, VEREX noted that "the most frequently identified on-site measures in combination were on-site inspections (interviewing, visual inspection, identification of key equipment, sampling and identification, auditing). This does not mean that all the measures in parenthesis above always would be included in an on-site inspection." These measures would presumably be implemented in the context of visits to a site.

3. This paper follows a preliminary discussion of on-site measures. There was no agreement on the inclusion of on-site measures into the system of measures to promote compliance with the Convention. The overall effectiveness and feasibility of the system of measures to promote compliance with the Convention would need to be assessed, taken as a whole and in the context of work on the other elements of the Ad Hoc Group's mandate.

4. Further consideration should be given to the view that on-site measures should be target specific, conducted in accordance with agreed lists of agents (pathogens and toxins) and equipment, and that their scope should be clear. Another view held that on-site measures should not be tied to agreed lists of agents.

#### Recurrent Issues

5. A number of important recurrent issues concerning on-site measures and visits/inspections require further consideration:

- the role of lists;
- how to avoid unduly interfering with activity at the site;
- how to protect commercial proprietary and scientific information and national security information not of concern to the Convention. In this respect, consideration should be given in particular to:
  - a) access regulated by a multilaterally-agreed standing arrangement on applicable procedures;
  - b) access regulated by ad hoc arrangements agreed between the inspecting and inspected parties for each facility to be visited or inspected;
  - c) privileges and immunities of inspectors;
- the need to ensure the necessary access to sites;
- the need for balance between: i) the requirement to protect commercial proprietary and scientific information and national security information not of concern to the Convention, and avoid interfering unduly with the activities of the site; and ii) the obligation to address any concerns about compliance;
- the nature of the inspectorate or designated inspectors who could be responsible for conducting on-site measures; some considerations could include:

- a) the need for impartiality and objectivity;
  - b) the need for an inspectorate with the skills and resources, including financial, to implement on-site measures effectively and impartially;
  - c) whether to set up an independent Organization to strengthen compliance with the Convention and if so how it might be structured. What alternatives there might be to this;
  - d) equitable geographical representation in the selection of inspectors and staff of the possible Organization;
- how to ensure that costs, including equipment costs, are carefully controlled and how they would be shared;
  - what decision-making processes would be appropriate to the implementation of on-site measures;
  - the question of appropriate and non-discriminatory access to collected data;
  - how different types of visit or inspection could be initiated;
  - whether different procedures would be necessary for different types of visit or inspection;
  - whether the example of other relevant regimes may be useful in formulating measures, bearing in mind that biological weapons have their own inherent characteristics;
  - the political costs involved.

#### Visits/Inspections

6. A number of different types of inspection have been identified in discussions so far.

7. A challenge inspection could be used to investigate a specific concern about compliance with the BWC. The inspection could take place at short notice, and at either a declared or undeclared facility or site. It was recognized that political sensitivities would be involved. There should therefore be strict and effective measures to prevent abuse. A challenge inspection might be a measure of last resort.

8. On the implementation of challenge inspections, detailed consideration would need to be given to the questions raised in the *Recurrent Issues* section of this paper and how they should be initiated. Would requests be limited to States Parties only? Would a request have to be accompanied by supporting data to demonstrate "due cause"? What other filters could be considered? A consultation and clarification mechanism to help resolve inconsistencies might avoid the need for challenge inspections in some circumstances.

9. Other, non-challenge visits, might also have a role to play. Consideration was given to the possible justification for them. Two broad justifications were identified:

- (i) Non-challenge visits might have a deterrent role. They could be used to seek clarification where concerns fell short of those which would justify a claim of possible non-compliance with the BWC. For example, they could be used to resolve any uncertainties about declarations. This would be useful as a means of confirming the accuracy of declarations. This would help create confidence and build transparency. For maximum effectiveness such visits should be at short notice.
- (ii) Some non-challenge visits could be used to convey information to a State Party about other relevant matters, including Article V and Article X issues. It would not be necessary for these visits to be at short notice. It might be more appropriate to look at some aspects of this type of visit in the context of Article X.

10. It was recognized that a careful calculation was needed to assess the benefits of non-challenge visits in terms of strengthening confidence in compliance, against their costs, namely the burden on States Parties of hosting such visits, and the financial/resource cost involved in implementing them. It was also recognized that a main advantage of non-challenge visits was that they were much less politically sensitive

than challenge inspections, and that this political neutrality should be preserved. A number of issues need to be addressed:

- How should non-challenge visits be initiated? Would responsibility lie exclusively with an inspectorate? Would it be open to States Parties to propose sites? Or would a combination of these procedures be appropriate?
- What level of resources would it be appropriate to devote to this level of activity?
- Should there be a quota system to govern the distribution of non-challenge visits among States Parties? If so, what? Should there be limits on the frequency of non-challenge visits to any one facility?
- One approach would be to focus non-challenge visits on only the key facilities (e.g. those working with defensive military programmes, or having BL4 containment facilities). Several criteria have been proposed to select the facilities including weighting factors to focus inspection effort on relevant facilities (i.e. those that had discovered new viral agents or whose declarations indicate some inconsistencies).

12. Different types of visits/inspections could employ a different range of measures and different levels of intrusiveness, according to the specific objectives of each visit.

#### IMPLEMENTATION OF SPECIFIC ON-SITE MEASURES

##### Interviewing

- Interviewing, if properly conducted, could be an important on-site measure in combination with other measures.
- Interviewers need to be impartial, objective and have the proper qualifications and skills to carry out interviews.
- Further consideration should be given to the form of interviews. They should not be inquisitorial or accusatory. Arrangements could be made for a senior member of staff/government representative/legal adviser

to be present when an employee is being interviewed. Interpretation may also be required.

- Other safeguards for personnel or facilities (e.g. a manual of procedures) might be considered. National authorities may have an important role in preparing facilities for interviews.
- Those interviewed should have the right to refuse to answer any question.
- Access to appropriate individuals for interview would be important. Consideration should be given to how much advance notice of interviews is required.
- Interviewing should be carried out in such a way as to avoid unduly hindering the work of the site.
- Commercial proprietary information and national security information not of concern under the Convention would need to be protected.
- A list of pathogens and toxins may have utility in interviewing. For example, interviewers may wish to confirm the accuracy of information in declarations concerning work on listed pathogens and toxins.

#### Visual observation (VEREX measure: visual inspection)

- Visual observation could be an important on-site measure in combination with other measures. It is not always possible clearly to determine the intent of activity at a site with this measure alone.
- Where direct visual observation is not possible, alternative means of demonstrating compliance should be offered. Consideration could be given to alternatives such as use of a video camera, drawings of the area.

#### Identification of key equipment

- Identification of key equipment could be an important on-site measure in combination with other measures. The identification of key equipment could help determine if the equipment is consistent with

the purpose of the site.

- There could be a role for a list of key equipment in the implementation of this measure. Account should be taken of the fact that biotechnology equipment is extremely diverse, rapidly evolving and likely to be of dual use and equipment may be used for different purposes in different states. Care needs to be taken that a list of equipment does not result in erroneous judgements: presence of certain items of equipment is not the only factor. The absence of particular types of equipment and the quantity of equipment could also be important, since if a facility had been declared for a specific purpose, certain equipment would be expected to be present.

#### Sampling and identification

- Sampling and identification could be an important on-site measure. It could provide objective/scientific information about material at the site, but would need to be used in combination with other measures.
- Sampling and identification is a highly intrusive measure. Confidential proprietary information would need to be protected. This could be achieved by restricting the use of sampling and analysis by means such as the following:
  - limiting the specific situations in which sampling would be available, or, while not excluding sampling, ensuring that it be used sparingly
  - limiting the numbers of samples to be taken
  - limiting the areas from which samples might be taken (for example process samples might be excluded)
  - using only certain techniques of sampling and identification such as standard reagents and procedures
- A list of pathogens and toxins may have utility in sampling and identification.
- Despite the sensitivity of sampling, it might be possible to allow

for sampling to be undertaken, following negotiation between parties directly involved, even if sampling was not a required measure for the "inspection" involved.

- It would be preferable for analysis of samples always to be carried out on site, because of CPI concerns and the importance of rapid analysis. Off-site analysis in specific cases (e.g. in investigation of alleged use or in identifying virus) might be necessary. This might be made more acceptable through considering various methods to protect CPI and other sensitive information.
- Sampling and identification would need to be carried out by inspectors with proper qualifications and skills. The results provided by sampling would need to be carefully analysed, taking into account the context in which they were taken.
- There may be national legislation considerations.

#### Auditing

- Further consideration could be given to the possible role of auditing in a system of measures, although it would not alone be adequate to resolve compliance concerns. It might help avoid the need for a more intrusive measure such as sampling and identification.
- In implementation of this measure, it would be important to take into account national procedures /financial regulations which vary among States Parties.

#### Medical examination

- Medical examination would have utility and wider application in the investigation of alleged use or unusual outbreaks of disease.

ANNEX III/3

FRIEND OF THE CHAIR ON COMPLIANCE MEASURES

*This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.*

INVESTIGATION OF ALLEGED USE

INTRODUCTION

1. Appropriate arrangements to provide for the investigation of alleged use could play a central part in a legally binding instrument to strengthen confidence in compliance. Detailed consideration, however, needs to be given to the implementation arrangements, especially the scope, triggers for initiation of any investigation, and the specific technical guidelines for the conduct of any investigation.

2. Use of BW could be difficult to determine for several reasons; for example, the disease episode would be difficult to distinguish from a naturally occurring event; the disease may not be recognized as a consequence of BW use; the circumstances surrounding the alleged use, particularly if armed conflict is involved, could make investigation hazardous; considerable time may have elapsed since the alleged use.

(A) INITIATION

Any State Party to a legally binding instrument could be entitled to request an investigation of alleged use.

Key questions are identified below.

*Commentary*

3. *The precedent of similar Conventions or international regimes suggests that only States Parties normally have the authority to request an investigation of alleged use. In this case, it would presumably be only States Parties who had also ratified the legally binding protocol. Further consideration needs to be given to the issue of whether individuals or NGOs should be allowed to approach a future BWC secretariat to request an*

*investigation. One option might include a provision to enable an approach to be made directly, or through another international organization such as the WHO or FAO or through a State Party.*

*4. Two possible situations were distinguished: (1) where a State Party might want to request an investigation on its own territory and (2) where a State Party might want to request an investigation outside its own territory. For an investigation to take place, the consent of the inspected State would be a prerequisite.*

States Parties should be mindful of their obligations under Article V of the BWC where they are committed to consult with one another and cooperate in solving any problems which may arise in relation to the Convention.

Any allegation should be accompanied by supporting information.

#### *Commentary*

*5. Sufficient information would need to be submitted to support the request. Such information would help provide a focus and define the scope for any subsequent investigation. Requesting States Parties could be obliged to submit information on a wide range of relevant topics. Much would depend on the specific circumstances. A request would need to contain at least some minimum amount of detail. Some specific details might be required. Article VI of the BWC notes that any complaint about compliance submitted to the UN Security Council should include all possible evidence confirming its validity.*

States Parties could submit information, to the extent possible, on the following:

- the State Party on whose territory alleged use of biological and toxin weapons may have occurred;
- the location and characteristics of the areas in which biological or toxin weapons may have been allegedly used; the location name and geographic co-ordinates; and the identification of the location in relation to another known location (by direction and distance);
- characteristics of the site(s): nature of the terrain and

- accessibility of the site; whether military or civil (city, rural area, town, buildings affected);
- meteorological conditions;
- the moment of the alleged use;
- types of biological and toxin weapons allegedly used;
- extent of alleged use;
- characteristics of the biological and toxin agents allegedly used; preliminary identification;
- effects on humans; estimated number of fatalities; number of hospitalized victims; signs and symptoms at the time of attack; delayed onset;
- effects on animals: signs and symptoms;
- effects on vegetation;
- types of samples identified in situ, including any unexploded munitions or remnants of munitions;
- types of samples analysed; results of available analyses;
- request for specific assistance (medical and technical) as applicable;
- indication of equipment, installations and assistance available for a team of investigators.

*Commentary*

5. *The above suggestions are taken from UN, CWC procedures and proposals made to the Ad Hoc Group. States Parties would not have to meet all of these information requirements before an investigation could proceed.*

(B) MEASURES TO GUARD AGAINST ABUSE

Provisions would be necessary to guard against the possibility that an outbreak of disease was deliberately misrepresented as an alleged use in order to initiate international investigation procedures, thereby abusing the regime.

Possibilities include:

- (i) requirement to provide sufficient information;
- (ii) a (technical/scientific) screening mechanism;
- (iii) a (political) decision making/approval process;
- (iv) a combination of (ii) and (iii).

But there is likely to be a requirement for urgency in deciding whether to proceed with an investigation.

*Commentary*

6. *A requirement to submit sufficient information in support of a request should help reduce the risk of frivolous or abusive requests. The role of a technical screening body to evaluate the submitted evidence might also be a useful mechanism for filtering unwarranted requests. The composition of such a body would need to be considered as would its decision making procedures. Approval procedures for permitting an investigation to proceed needs further consideration. However, the elaboration of any such system would need to keep in mind the requirement for timely investigations: a long review and evaluation process could well undermine the effectiveness of any investigation procedures.*

7. *As noted above, the consent of the inspected State is a prerequisite for an investigation to take place. A State Party to any future legally binding instrument would presumably have accepted the obligations contained in it.*

8. *There would need to be arrangements for evaluating the results of any investigation to see whether the request had in fact been abusive, and consideration given to any follow-up action.*

(C) IMPLEMENTATION

Investigations need to be carried out by impartial and qualified personnel. Any new BWC inspectorate that might be created could become the body primarily responsible for carrying out an investigation.

The creation and maintenance of an international register of persons/centres with specific epidemiological or other relevant expertise could be useful for the rapid provision of specialized expertise for investigations of alleged use.

The investigative team should be able to use the full range of on-site measures identified by VEREX, including medical examination, in carrying out its investigation.

*Commentary*

9. *Detailed technical guidelines for the conduct of investigation of alleged use are already available in procedures prepared for the UN Secretary General. The procedures outlined in Part XI of the CWC's Verification Annex may also be relevant in the BW context:*

(i) *Access*

10. *The investigative team could be given access to all areas which could be affected by the alleged use of biological or toxin weapons. The team could have a right of access to hospitals, refugee camps and other places it considers convenient for the effective investigation of the alleged use. Managed access procedures may be required in specific circumstances, but these would need to be applied without preventing an inspection team fulfilling its mandate.*

(ii) *Collection of samples*

11. The investigative team could have the right to collect samples in types and quantities it deems necessary. Adequate control samples should be taken in areas near the place of the alleged use. Samples important in such investigations include: munitions and devices, remnants of munitions and devices, environmental samples (air, soil, flora, water, snow) and biomedical samples of human or animal origin. Care would need to be taken to avoid contamination of samples; records and appropriate identification numbers would need to be made for each sample; care would need to be taken for sample preservation during transport. A legal chain of custody would be essential for preserving the integrity of the sample collection and analytical process.

(iii) Extension of the investigation area

12. If during an investigation, the team considers it necessary to extend the investigation to a neighbouring State Party, the UN Secretary General or Director of the BW secretariat as appropriate could notify that State Party of the need to have access to its territory. The extent of any such access would need to be agreed between the parties involved.

(iv) Extension of the inspection period

13. Should the team consider that safe access to a specific zone pertinent for the investigation is not possible, the requesting State Party would need to be informed immediately. If necessary, the inspection period could be extended until access under safe conditions can be provided and the team will have concluded its mission.

(v) Interviews

14. The investigating team should be entitled to interview and examine those persons that could have been affected by the alleged use of biological and toxin weapons. It would also have the right to interview eye witnesses on the alleged use of biological or toxin weapons.

(vi) Medical examination

15. Medical examination would be important. The inspection team could also have the right to interview medical personnel and other persons who may have treated or may have been in touch with those who could have been affected by the alleged use. The team could have access to medical records,

*if available, and could be allowed to participate in the autopsies of those people who might have been affected by the alleged use.*

National authorities should conduct their own independent investigation.

*Commentary*

16. *Particularly where the alleged use takes place on the territory of the requesting State Party, the national authorities of that State will presumably be involved and may conduct their own investigation. They should, however, ensure that any international investigation is able to complete its task effectively and that the necessary support and assistance is provided. Any international investigation should not obstruct a national investigation. Similarly, any national investigation should not obstruct the (international) investigation. In this context Article VI (2) of the BWC are relevant; namely each State Party has an obligation to co-operate in any compliance investigation initiated by the Security Council. It may be for national authorities to conduct an investigation, only seeking international assistance when needed.*

(D) REPORTS AND JUDGMENT

The investigative team's report should give a full account of its investigations and factual conclusions.

*Commentary*

17. *Care needs to be taken in reaching any judgment, especially if it is possible that an endemic disease could be responsible. Investigative epidemiology would be a useful tool. Three factors would be particularly important: normal and epidemic disease incidents, demographic parameters, and vaccine purchase and usage. Conclusions will need to be drawn on the basis of the material in the investigative team's report. Further consideration is required of how this should be done.*

18. *The report might need to make recommendations on any technical or humanitarian assistance needed by the requesting State Party.*

19. *In the event that the team obtains during its investigation any*

*information which may be useful in identifying the origin of any employed biological or toxin weapon, such information would need to be included in the report.*

#### UNUSUAL OUTBREAKS OF DISEASE

The investigation of an unusual outbreak of disease is primarily the responsibility of national authorities.

#### *Commentary*

20. *An unusual outbreak could be described as the situation when an outbreak of a disease affecting humans, animals or plants is unusual because of the nature of the disease or the conditions under which the disease appeared. The prevailing health, social and economic, sanitary, climatic conditions also need to be taken into account in assessing and responding to any unusual outbreak of disease or unusual type of outbreak.*

21. *Unusual outbreaks may have relevance to compliance with the BWC. They could be a legitimate area of concern in the context of strengthening confidence in compliance; for example, an unusual outbreak might have been caused by a national field trial of a BW agent.*

22. *The primary responsibility for investigating unusual outbreaks lies with national authorities in the country concerned. A number of international organizations, including a BWC secretariat in the context of Article X, might be in a position to provide technical and/or humanitarian assistance, if invited to do so at the request of the State Party concerned.*

23. *In the case of unusual outbreaks suspected to be the result of an incident raising a compliance concern, a State Party could be able to request a challenge inspection. (Relevant issues on "challenge inspection" are identified in the paper on on-site measures.) It would not, however, be limited to such incidents. Further consideration of the procedures involved is required. If an investigation by WHO or FAO indicated that an unusual outbreak did not have a natural cause, one interpretation might be that the incident was attributable to possible compliance concern, but this need not be the only cause. Careful review of all the evidence would be required in such circumstances.*

ANNEX III/4

FRIEND OF THE CHAIR ON CONFIDENCE-BUILDING  
AND TRANSPARENCY MEASURES

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

These potential confidence-building and transparency measures would be voluntary and non-mandatory, and they could be included, as appropriate, into a legally binding instrument.

Surveillance of Publications

1. Collection and survey of relevant information on publicly available printed matter and the media with special attention to activities directly related to the BWC and its Protocol
2. Collection
  - 2.1 States Parties and international organizations (WHO, FAO, OIE,...) are requested to provide relevant information
  - 2.2 BWC organization is to collect relevant information from publicly available sources (para. 4)
3. Survey
  - 3.1 Management, categorization and synthesis
  - 3.2 To be carried out by personnel with specific expertise, relying on information technology
  - 3.3 Survey will have to be focussed (para. 5)
4. Sources of information
  - 4.1 Scientific publications
  - 4.2 Scientific journals
  - 4.3 Specific statistical data
  - 4.4 Relevant press data bases
  - 4.5 Scientific data bases
  - 4.6 Records and reports of scientific meetings and congresses
  - 4.7 Information on vaccine programmes, other programmes and research concerning pathogenic organisms and toxins directed under high-containment conditions
  - 4.8 Information on new market products related to rapid identification of toxins and microbial pathogens including WHO risk groups III and IV

5. Information to be collected and surveyed
  - 5.1 key identifiers (triggers) should be used
    - 5.1.1 same triggers as for declarations (compliance measures)
    - 5.1.2 possibility of combining triggers
    - 5.1.3 other possible triggers (source of information linked to triggers)
6. Activities to be covered
  - 6.1 Unclassification of basic research and applied research in biosciences; biological research publication policy; scientific publications (1991 CBM "C" approach)
  - 6.2 All compliance relevant activities (as defined by triggers)
7. Modalities
  - 7.1 States Parties and international organizations are requested to provide information on an annual basis
  - 7.2 Organization is to collect and survey information continuously
  - 7.3 Information is to be provided
    - 7.3.1 in one of the UN official languages
    - 7.3.2 with a short résumé of publications
    - 7.3.3 preferably in computerized format (floppy disk)
  - 7.4 Information collected can be accessed by States Parties

ANNEX III/5

FRIEND OF THE CHAIR ON CONFIDENCE-BUILDING  
AND TRANSPARENCY MEASURES

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These potential confidence-building and transparency measures would be voluntary and non-mandatory, and they could be included, as appropriate, into a legally binding instrument.

Surveillance of legislation

1. Collection and survey of information with regard to legislation that is directly related to the BWC and its Protocol. (Existence or absence of legislation may not be an indication of compliance or non-compliance.)
2. Collection
  - 2.1 States Parties are requested to provide relevant information
  - 2.2 BWC organization is to collect, as appropriate, relevant information
3. Survey
  - 3.1 Management, categorization and synthesis
  - 3.2 To be carried out by personnel with specific expertise, relying on information technology
  - 3.3 Survey will have to be focussed
4. Sources of information
  - 4.1 Legislation directly related to the BWC and its Protocol
    - 4.1.1 Enabling legislation with regard to the BWC and its Protocol
  - 4.2 Regulations related to activities/facilities/programmes/agents covered by the BWC and its Protocol
  - 4.3 Other measures related to activities/facilities/programmes/agents covered by the BWC and its Protocol
  - 4.4 Legislative, regulatory and relevant statistical data bases
5. Information to be collected and surveyed
  - 5.1 Besides legislation directly related to BWC and Protocol (enabling legislation) key identifiers (triggers) should be used
    - 5.1.1 Same triggers as for declarations (compliance measures)

5.1.2 Possibility of combining triggers

5.1.3 Other possible triggers

6. Activities to be covered

6.1 Development, production, stockpiling, acquisition, or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I; export of micro-organisms and toxins; imports of micro-organisms and toxins (1991 CBM "E" approach)

6.2 All activities covered by BWC and Protocol and activities related to triggers

7. Modalities

7.1 States Parties are requested to provide baseline information

7.2 States Parties are requested to provide information on an annual basis about changes

7.3 Organization is to collect and survey information continuously

7.4 Information to be provided

7.4.1 Copies of legislation in original languages if possible with unofficial translation in one of UN official languages

7.4.2 A short résumé in one of the UN official languages

7.4.3 Preferably in computerized format (floppy disk)

7.5 Information can be used to provide, as appropriate, "model" legislation

7.6 Information can be accessed by States Parties

ANNEX III/6

FRIEND OF THE CHAIR ON CONFIDENCE-BUILDING  
AND TRANSPARENCY MEASURES

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

These potential confidence-building and transparency measures would be voluntary and non-mandatory, and they could be included, as appropriate, into a legally binding instrument.

As this measure is under consideration as a mandatory one in the Compliance Measures FOC discussions, it should be further studied in the light of the outcome of those discussions.

Data on Transfers and Transfer Requests  
and on Production

1. Collection and survey of national export and import data (e.g. government and industrial production statistics, culture collection records and other relevant information going beyond declaration requirements and to be provided voluntarily by States Parties)
2. Collection
  - 2.1 States Parties are requested to provide relevant information
  - 2.2 BWC organization is to collect relevant information from publicly available sources
  - 2.3 Confidentiality concerns need to be considered
3. Survey
  - 3.1 Management, categorization and synthesis
  - 3.2 To be carried out by personnel with specific expertise, relying on information technology
  - 3.3 Survey will have to be focussed
4. Sources of information
  - 4.1 Trade publications
  - 4.2 Specific statistical data
  - 4.3 Regulations and other measures (including control)
5. Information to be collected and surveyed
  - 5.1 Key identifiers (triggers) should be used
    - 5.1.1 Same triggers as for transfer and production declarations

5.1.2 Other possible triggers (e.g. for data collection under para. 2.2)

5.2 Information on

5.2.1 Suppliers and recipients

5.2.2 Agents

5.2.3 Equipment

6. Modalities

6.1 States Parties are requested to provide information on an annual basis (collection of national data might require national regulation)

6.2 Organization is to collect and survey information continuously

6.3 Information is to be provided

6.3.1 In one of the UN official languages

6.3.2 In accordance with agreed format

6.3.3 Preferably in computerized format (floppy disk)

ANNEX III/7

FRIEND OF THE CHAIR ON CONFIDENCE-BUILDING  
AND TRANSPARENCY MEASURES

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

These potential confidence-building and transparency measures would be voluntary and non-mandatory, and they could be included, as appropriate, into a legally binding instrument.

Multilateral Information Sharing

1. Sharing of information on issues relating to materials and activities of potential relevance to and in harmony with the BWC and the Protocol
2. Sharing of information
  - 2.1 Between States Parties (with the assistance of the BWC organization)
  - 2.2 Between the organization and international organizations
  - 2.3 The organization is to collect information from non-governmental organizations and programmes/initiatives
3. Areas which could be covered
  - 3.1 Surveillance of disease outbreaks
    - 3.1.1 Reporting of disease outbreaks
    - 3.1.2 Reporting of unusual disease outbreaks
  - 3.2 Information on pharmaceutical and vaccine production, good manufacturing practices
  - 3.3 Information technology applications for consultation and training
    - 3.3.1 Transfer and exchange of information concerning research programmes in biosciences
    - 3.3.2 "Virtual" attendance at scientific conferences and consultation in relevant areas
    - 3.3.3 Consultation in completing CBM requirements and reporting obligations
    - 3.3.4 Biosafety capabilities and procedures
  - 3.4 Information related to obligations under the BWC, e.g. information that may be related to the production, development, stockpiling or means of delivery of pathogens and toxins for hostile purposes

4. Possible forms of information sharing
  - 4.1 Between States Parties (organization as "hub")
    - 4.1.1 Creation of network, as appropriate, to report on unusual outbreaks of disease (via secure World Wide Web page access)
    - 4.1.2 World Wide Web and video conferencing connectivity/network to support information sharing (vaccines, GMP, etc.), consultation and training
  - 4.2 Between the organization and international organizations
    - 4.2.1 Information sharing with WHO, FAO, OIE on relevant disease outbreaks
  - 4.3 Between the organization and non-governmental organizations and programmes/initiatives
    - 4.3.1 Information sharing with PROMED, NEED on relevant disease outbreaks

ANNEX III/8

FRIEND OF THE CHAIR ON CONFIDENCE-BUILDING  
AND TRANSPARENCY MEASURES

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

These potential confidence-building and transparency measures would be voluntary and non-mandatory, and they could be included, as appropriate, into a legally binding instrument.

Exchange visits (off-site)

1. Visits of experts arranged for scientific purposes by a State Party to comparable facilities (of potential relevance for the BWC and the Protocol) of another State Party
2. Visits
  - 2.1 Visits would be under bilateral and/or multilateral agreement
  - 2.2 On a voluntary and/or reciprocal basis
  - 2.3 Visits should be in harmony with the provisions of the BWC and the Protocol
3. Experts with expertise in areas relevant for the BWC and the Protocol, such as
  - 3.1 Administrators with expertise in science administration and related matters
  - 3.2 Agriculture
  - 3.3 Bacteriology
  - 3.4 Biochemistry
  - 3.5 Biological defence experts
  - 3.6 Biosafety
  - 3.7 Biotechnology
  - 3.8 Engineers of fermentation technology, equipment, buildings, etc.
  - 3.9 Entomology
  - 3.10 Epidemiology
  - 3.11 Immunology
  - 3.12 Medicine
  - 3.13 Pharmaceutical sciences (antibiotics and other ethiotropic drugs)

- 3.14 Quality control experts
- 3.15 Toxicology
- 3.16 Veterinary science
- 3.17 Virology
- 4. Scope
  - 4.1 Bilateral/multilateral exchanges made in selected programme areas where common interest exists between countries
  - 4.2 Bilateral/multilateral long-term scientific exchanges covering areas of potential relevance for the BWC and the Protocol (facilities not covered by declarations)
- 5. Modalities
  - 5.1 Could be mediated through bilateral and/or multilateral agreements
  - 5.2 For the selection and/or appointment of experts, help may be sought from specialized UN agencies (WHO, FAO, OIE, UNDP, etc.)
  - 5.3 Arranged with mutual agreement on the:
    - 5.3.1 Areas of interest
    - 5.3.2 Selection of personnel
    - 5.3.3 Length of the scientific exchange
    - 5.3.4 Costs

ANNEX III/9

FRIEND OF THE CHAIR ON CONFIDENCE-BUILDING  
AND TRANSPARENCY MEASURES

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

These potential confidence-building and transparency measures would be voluntary and non-mandatory, and they could be included, as appropriate, into a legally binding instrument.

Exchange visits - international arrangements

1. Visits of experts arranged for scientific purposes by a State Party to comparable facilities of another State Party
2. Visits
  - 2.1 Visits would be under bilateral and/or multilateral agreement
  - 2.2 On a voluntary and/or reciprocal basis
  - 2.3 Visits should be in harmony with the provisions of the BWC and the Protocol
3. Experts with expertise in areas relevant for the BWC and the Protocol, such as:
  - 3.1 Administrators with expertise in science administration and related matters
  - 3.2 Agriculture
  - 3.3 Bacteriology
  - 3.4 Biochemistry
  - 3.5 Biological defence experts
  - 3.6 Biosafety
  - 3.7 Biotechnology
  - 3.8 Engineers of fermentation technology, equipment, buildings, etc.
  - 3.9 Entomology
  - 3.10 Epidemiology
  - 3.11 Immunology
  - 3.12 Medicine
  - 3.13 Pharmaceutical sciences (antibiotics and other ethiotropic drugs)

- 3.14 Quality control experts
- 3.15 Toxicology
- 3.16 Veterinary science
- 3.17 Virology
- 4. Scope
  - 4.1 Bilateral/multilateral long-term scientific exchanges made in selected programme areas where common interest exists between countries
  - 4.2 Bilateral/multilateral long-term scientific exchanges covering all areas directly related to the BWC and the Protocol
  - 4.3 Bilateral/multilateral long-term scientific exchanges covering all areas of potential relevance for the BWC and the Protocol (not restricted to declared facilities)
- 5. Modalities
  - 5.1 Could be mediated through bilateral and/or multilateral agreements
  - 5.2 For the selection and/or appointment of experts, help may be sought from specialized UN agencies (WHO, FAO, OIE, UNDP, etc.)
  - 5.3 Arranged with mutual agreement on the:
    - 5.3.1 Areas of interest
    - 5.3.2 Selection of personnel
    - 5.3.3 Length of the scientific exchange
    - 5.3.4 Costs

ANNEX III/10

FRIEND OF THE CHAIR ON DEFINITION OF TERMS  
AND OBJECTIVE CRITERIA

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

Criteria for animal pathogens

The following criteria were discussed by the Group and may be used in combination for selection of animal pathogens to be included in a list of bacteriological (biological) agents and toxins.

1. Agents known to have been developed, produced or used as weapons.
2. Agents which could directly or indirectly have significant socio-economic and/or human health impacts.
3. High morbidity and mortality rates.
4. Short incubation period.
5. Broad host range.
6. Transmission through respiratory route.
7. No prophylaxis and treatment available.
8. Low infection dose.
9. Stability in the environment.
10. Ease of production.
11. High level of contagiousness.

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Definition of some terms:

Morbidity:	Ratio of sick to healthy animals
Contagiousness:	Capability to be communicable
Mortality:	Ratio of dead to sick animals

ANNEX III/11

FRIEND OF THE CHAIR ON DEFINITION OF TERMS  
AND OBJECTIVE CRITERIA

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

Criteria for plant pathogens

The following criteria were discussed by the Group and may be used in combination for nomination of plant pathogens to be included in a potential list of bacteriological (biological) agents and toxins.

1. Agents known to have been developed, produced or used as weapons.
2. Agents which directly or indirectly have significant socio-economic and/or human health impacts.
3. Ease of dissemination (wind, insects, water, etc.)
4. Short incubation period.
5. Not host-specific.
6. Ease of production.
7. Extensive damage on agricultural products.
8. Difficulty in detection due to long incubation period with no symptoms.
9. High infectivity and/or toxicity.
10. Stability in the environment (over wintering, secondary host).
11. No treatment available.
12. Low infection dose.

ANNEX III/12

FRIEND OF THE CHAIR ON DEFINITION OF TERMS  
AND OBJECTIVE CRITERIA

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

The following list of human pathogens and toxins was discussed by the Group for developing a future list or lists of bacteriological (biological) agents and toxins, where relevant, for specific measures designed to strengthen the Convention.

**HUMAN PATHOGENS**

**Viruses**

1. Crimean-Congo haemorrhagic fever virus
2. Chikungunya virus
3. Eastern encephalitis virus
4. Ebola virus
5. Hanta virus
6. Japanese encephalitis virus
7. Junin virus
8. Lassa fever virus
9. Machupo virus
10. Marburg virus
11. Rift Valley virus
12. Tick-borne encephalitis virus (Russian spring-summer encephalitis virus)
13. Variola virus (Smallpox virus)
14. Venezuelan encephalitis virus
15. Western encephalitis virus
16. Yellow fever virus

**Bacteria**

1. Bacillus anthracis
2. Brucella spp
3. Chlamydia psittaci
4. Clostridium botulinum
5. Francisella tularensis (tularemia)
6. Pseudomonas (Burkholderia) mallei
7. Pseudomonas (Burkholderia) pseudomallei
8. Yersinia pestis

**Rickettsiae**

1. Coxiella burnetii
2. Rickettsia prowazekii
3. Rickettsia rickettsii

**Fungi**

1. Histoplasma capsulatum (incl. var duboisii)

**Toxins**

1. Abrin (*A. precatorius*)
2. Botulinum toxins (*Clostridium botulinum*)
3. *Clostridium perfringens* (tox)
4. *Corynebacterium diphtheriae* (tox)
5. Cyanginosins (Microcystins) (*Microcystis aeruginosa*)
6. Enterotoxins (*Staphylococcus aureus*)
7. Neurotoxin (*Shigella dysenteriae*)
8. Ricin (*Ricinus communis*)
9. Saxitoxin (*Gonyaulax catanella*)
10. Shigatoxin
11. Tetanus toxin (*Clostridium tetani*)
12. Tetrodotoxin (*Spherooides rufripes*)
13. Trichothecene mycotoxins
14. Verrucologen (*Myrothecium verrucaria*)

ANNEX III/13

FRIEND OF THE CHAIR ON DEFINITION OF TERMS  
AND OBJECTIVE CRITERIA

Summary of views on definition and threshold quantities

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

Definition

There was a general understanding that definition of terms was needed for some terms, particularly technical terms, in connection with specific measures. Some terms which were proposed in the Group to be defined were as follows:

1. Genetic modification or manipulation.
2. Biological defence.
3. Military medical programme.
4. National biological defence programme.
5. Diagnostic facility.
6. Military related biodefence programme.
7. BL3.

Thresholds

Discussions were held on the possibility of having threshold quantities of agents and toxins, where relevant, for specific measures designed to strengthen the Convention.

ANNEX III/14

FRIEND OF THE CHAIR ON DEFINITION  
AND OBJECTIVE CRITERIA

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

Summary of views on list of equipment and types of activity

Equipment

Some working papers were presented and views were expressed on the issue of equipment. A few types of equipment such as aerosol test chambers and equipment for aerosol tests in the open air were specifically mentioned by some delegations as the items which might trigger declaration, and for which the Group might need further details for elaboration. Furthermore, some categories of key equipment were mentioned which needed to be reported in a declared facility. The issue would be further discussed in conjunction with previous proposals during the next meeting of the Group.

Types of activity

The Group discussed a paper (WP.43/Rev.1)\* presented by the Friend of the Chair regarding different types of activities. It was decided that as the issue was related to the question of declaration, this non-paper would be taken as a resource paper to be discussed by the Friend of the Chair on Compliance Measures, and could at a later stage be further discussed by the Friend of the Chair on Objective Criteria.

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Amended version is appended hereto as ANNEX III/14/Appendix 1.

ANNEX III/14/Appendix 1

RESOURCE PAPER BY THE FRIEND OF THE CHAIR ON DEFINITION OF TERMS  
AND OBJECTIVE CRITERIA

This non-paper would be taken as a resource paper to be discussed by the Friend of the Chair on Compliance Measures, and could at a later stage be further discussed by the Friend of the Chair on Objective Criteria.

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

Types of Activity

Consideration should be given to the following activities (and potentially other activities yet to be identified) in developing declarations and their associated reporting requirements.

- A. Production activities
  - Vaccine and therapeutic sera (human and animal)
  - Diagnostic reagents and kits
  - Biological pharmaceuticals
  - Genetically modified products
  - Food industry
- B. Diagnostic activities
  - Medical diagnostic laboratories
  - Veterinary diagnostic laboratories
  - Plant disease diagnostic laboratories
- C. Research activities
  - Microbiological research laboratory
  - Medical research institution
  - Biological defence programme
  - Veterinary research programme
  - Plant pathology research programme
  - Culture collection
- D. Training and educational activities
  - Medical school
  - Veterinary school
  - Agricultural school
  - Biotechnology and molecular biology school

ANNEX III/15

FRIEND OF THE CHAIR ON ARTICLE X

This paper is without prejudice to the positions of delegations on the issues under consideration in the Ad Hoc Group and does not imply agreement on the scope or content of the paper.

FURTHER NOTES ON THE ELEMENTS FOR STRUCTURED DISCUSSION ON ARTICLE X

This paper does not substitute, modify or improve the working paper (BWC/AD HOC GROUP/28) submitted by the FOC on Article X during the July meeting. It is rather an attempt to reflect the discussion on the paper and to anticipate potential difficulties as well as specific items where further analysis is required. Modalities and procedures are suggested in order to deal with some of those items due to their complexity or, in other cases, to their overlapping with matters being considered in other fora, or in other working groups of the Ad Hoc Group.

Emphasis has been placed so far on the terms of the mandate (specific measures to ensure effective and full implementation of Article X). The need to focus on a more specific range of activities and on "areas directly relevant to the Convention" has been stressed by many delegations. References were made to Article X as an essential element in the overall balance of the Convention with its mutually reinforcing objectives of eliminating biological weapons and facilitating the fullest possible exchange of biological technology for peaceful purposes.

Paragraph IV (Scope and content of possible scientific and technical exchanges) was mentioned as requiring further examination in order to provide for the implementation of some of the measures described in those paragraphs. The items specified in the FOC included:

1. Transfer and exchange of information concerning research programmes in biosciences.
2. Active promotion of professional contacts between scientists and technical personnel, on a reciprocal basis, in relevant fields.
3. Encouragement of publication of results of biological research directly related to the Convention, in scientific journals generally available to States Parties, as well as promotion of use for permitted purposes of knowledge gained in this research.
4. Increased level of technical cooperation and assistance.

There was some discussion of the suggestions also contained in paragraph IV, subparagraph 5 (Greater cooperation in international public health and disease control) as well as with regard to subparagraph 5 of paragraph VI (Network for Exchange of Epidemiological Data/NEED). These aspects relate to a substantial amount of current multilateral activity highlighted by the delegation of United Kingdom, in its paper (WP.7) and described in an informative note by the FOC (WP.23). The task of strengthening the BWC through the enhancement of multilateral cooperation may require that the next Review Conference address the outstanding issues in some detail. The Review Conference may wish to take into account proposals made by non-governmental organizations, described in WP.23.

Specific items mentioned in IV.5 and VI.5 are within the competence of several international organizations (WHO, OIE and FAO) but it is the World Health Organization that plays a primary role in the implementation of its International Health Regulations (IHR). The Ad Hoc Group of Scientific and Technical Experts convened by the BWC in 1987 recommended that States Parties should fully utilize existing reporting systems within WHO and apply the classification contained in the WHO Laboratory Biosafety Manual. The Third Review Conference of the BWC ratified these recommendations.

Given the fact that there is a system of double reporting of diseases and outbreaks due to toxins relevant to the BWC, and that WHO (jointly with OIE and FAO) receives a larger amount of information and possesses the expertise required to adequately process such information, there may be a case for establishing an office to handle declarations under the BWC, or to process existing WHO declarations in a manner relevant to the BWC, in a special office of the WHO. Such proposal could be considered by the next World Health Assembly or some joint BWC/WHO meeting. However, when considering a decision to avoid double reporting, it is convenient to take due account of the fact that the obligation to report outbreaks of infectious diseases under the BWC is currently a CBM and could also be included as a compliance measure.

The same note of caution is applicable to the identification of further needs in the field of public health cooperation and the development of epidemiological methods and procedures; and to the question of an international vaccine programme. The Informative Note (WP.23) describes the various proposals made by non-governmental groups and both the Third BWC Review Conference and WHO have been generally supportive of some of these initiatives. A firm decision lies within the competence of the Fourth Review Conference but the above mentioned options (World Health Assembly and joint BWC/WHO meeting) are also worth considering.

A different perspective arises in connection with the concept of a Clearing-House for Article X purposes. The following aspects merit examination:

The value of Databanks, including existing facilities such as the Global Bioinformatics Network (BINAS) and the specialized network of the International Centre for Genetic Engineering and Biotechnology (ICGEBNET); the Clearing-House of the Biodiversity Convention, at present in a pilot-phase during 1996-97; and information which could be provided by the UN University (UNU) system of affiliated institutions, including its Programme for Biotechnology in Latin America and the Caribbean (UNU/BIOLAC).

New projects such as the Network for Exchange of Epidemiological Data (NEED), and a possible BWC Databank, under UN tuition or otherwise located in the ICGEB, providing information on safe laboratory procedures, bioproduct standards, biological containment, new or developing technologies and other services (Proposal from the Pugwash Workshop) require closer examination and differentiated treatment. While the NEED project should be examined together with the items in IV.5, the proposed BWC/ICGEB Databank touches on the more complex issue of the pattern of cooperation between the BWC and the ICGEB and, more fundamentally, the issue of a BWC Organization.

The United States (BWC/AD HOC GROUP/WP.25) recommended that States Parties establish INTERNET connectivity and indicated that numerous sources of relevance to the Convention were already available and were generally free charge or requiring only small access fees, in addition to the

standard INTERNET services of electronic mail, file transfer and search applications. The USA paper pointed to the important role of reliable connectivity in strengthening the BWC and expressed willingness to prepare more detailed descriptions of the technical data and costs of individual telecommunications and their connectivity. Reference was made in the USA paper to databanks such as GENE BANK, MEDLINE, Protein data bank of the US Department of Energy, World Wide Web pages from ProMed, OUTBREAK and MEDSCAPE, database maintained by the Federation of American Scientists, WHO and SIPRI web pages and numerous journals, newsgroup and discussion groups.

It was agreed that experts from the most relevant organizations be invited to make presentations on their current activities, in order to assess the existing web of multilateral cooperation and its relevance, if any, to Article X of the BWC. In addition to the already mentioned organizations, private centres and their affiliated institutions could give some useful insight about their work, e.g. the International Network of Pasteur Institute.

Many of these initiatives relate to the more fundamental question concerning the kind of institutional framework (para. V: Possible Institutional Arrangements) envisaged to facilitate Article X objectives and the type of financial assistance required to establish appropriate machinery, as contemplated in paragraph VII (Financial Arrangements) or otherwise. Although a review of current programmes and facilities suggests that, by taking advantage of relevant capabilities, a small BWC Organization may become cost-effective, a consensus seems to exist that all these matters should be taken into consideration and decided by the Ad Hoc Group as a whole.

With regard to the indicative examples of scientific areas regarded as promising (para. VIII) some doubts were expressed about their relevance to a "disarmament treaty" such as the BWC. Comprehensive surveys of cooperative programmes developed by the United States, Japan, the Netherlands and France, and information concerning activities in the field of biotechnology by the Czech Republic, illustrate the ways in which countries fulfill their commitments with regard to Article X. Moreover, the opinion was expressed that these important flows could be channelled in a more structured manner, and through more accessible ways to improve compliance with Article X.

This suggestion leads us into the kind of recommendations made by the Review Conferences and collated in paragraph IX (Reporting, administrative and review procedures) mentioned as well as belonging to the same global context of paragraphs V and VII, and therefore to be transferred to the Ad Hoc Group as a whole. Nevertheless, the question of reporting and reviewing progress achieved in compliance with Article X requires independent discussion about specific formats and particular features of such type of reporting and reviewing exercise.

There was no substantive discussion of potential issues concerning the relationship of Article X to other BWC Articles. Cuba contributed two papers (WP.4 and 5) which attempt to define rights and obligations of States under Article X in areas bordering the sensitive relationship with Article III; the need to give equal importance to promotional and regulatory needs was stressed and a request was made for an FOC paper enquiring into problems derived from export controls and their possible solutions. The already mentioned WP.5 is also concerned with ways to reinforce pledges of assistance to Parties threatened or harmed by biological weapons, including a voluntary fund or an ad hoc agreement with the UN Secretary General and setting up a minimum capacity to offer to a

State Party emergency assistance under Article VII of the BWC.

Paragraph XII (Role of Article X within a Compliance Assurance Regime) was mentioned as requiring further examination in order to provide for the implementation of some of the measures described in those paragraphs. In the context of its paper (WP.24), Brazil supported the argument that cooperative measures under Article X would also help the States Parties to draw a clearer picture of relevant biological activity in each State Party and stressed the importance of validation or information visits and the benefits to be derived for the implementation of the BWC objectives.

This summary record of positions and indications about Article X issues sheds some light on the need to proceed with further discussion on some critical areas; it introduces a note of caution and a dose of realism with regard to the possibilities which WP.28 opens for discussion, and provides some criteria for the establishment of priorities, the concentration on "core areas" relevant to the BWC, and a more selective method of work.