Ad hoc Group of Governmental Experts to Identify and Examine Potential Verification Measures from a Scientific and Technical Standpoint BWC/CONF.III/VEREX/WP.110

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Rapporteur's Introduction to the Evaluation

Information Monitoring

Rapporteur: M. Gevers

General introduction

At the end of VEREX II summaries of work were made as a first step in the evaluation process. Capabilities and limitations were summed up according to WP 89\*. At the start of VEREX III an update as well as the main conclusions of these summaries need to be presented again as a start for a more definitive evaluation. To assess the value of the agreed measures in combination with each other it was suggested that verification should be considered as consisting of three sequential phases.

In the primary phase a measure would not be technically or politically focused towards a particular State Party; a measure in this phase would be random and automatic and be repeated at regular intervals. A measure in the secondary phase would be triggered by information generated by a measure in the primary phase. It would therefore be focussed on seeking answers to specific questions about e.g. a specific facility. A measure in the tertiary phase would be triggered as a result of information generated by a secondary phase measure. Such a measure would be highly focussed and intended to clarify specific points raised by a secondary measure.

A categorization of measures according to these three phases will also be given in this preliminary evaluation.

A full summary according to WP 89\* is attached as annexes 1 to 4. Annexes 5 to 8 give an overview of the score of the four measures in the contaxt of the three phases mentioned above.

## PRELIMINARY EVALUATION

## SURVEILLANCE OF PUBLICATIONS

#### 1. Amount and quality of information

A multitude of sources is available that could be used for a survey, including data provided by international organisations. In fact so much information is available that a selection will be needed. This selection should be done carefully, so as to avoid any misinterpretation or political bias.

If done properly surveillance of publications could provide useful general information on relevant activities in a State Party. It could reveal trends and be used to target further investigations or inspections.

#### 2. Ability to differentiate between prohibited and permitted activities

In itself surveillance of publications might not differentiate between prohibited and permitted activities, although a general pattern of activities in a State Party may be construed. Such information could assist in identifying inconsistencies e.g. between declarations on one hand and actual work (as perceived from publications) on the other. Information from publications could also help focus on targets for further inspection.

#### 3. Ability to resolve ambiguities about compliance

Surveillance of publications could assist the analysis in that it would highlight dual purpose activities that merit further investigation. Relevant publications might also help to resolve some specific compliance concerns. An adequate survey should be made to prevent missing important items and avoid misinterpretation of facts.

#### 4. Requirements

Specific expertise is needed for an adequate surveillance, both on the use of automated literature search systems and on knowing the items to look for. A computer with on line connections to major databases would be essential.

### 5. Financial and organisational implications

A comprehensive search and analysis of databases might well be expensive, more focussed surveys would limit this cost. Information monitoring could be part of the function of a multilateral body for verification of the BWC.

### 6. Impact on permitted activities and CPI

Information monitoring in this way might act as a brake on publication. One of the

big advantages of this measure is the low level of intrusiveness compared to onsite inspections.

# 7. Interaction with other measures

Surveillance of publications might well be envisaged as a primary phase measure. It might on a routine basis provide information on the activities of a State Party. Such information could then be used as a comparison to the declaration by the State Party. As a secondary phase measure a focussed and thorough surveillance of publications may assist in selecting targets for inspections.

# PRELIMINARY EVALUATION

## SURVEILLANCE OF LEGISLATION

### 1. Amount and quality of information

A survey of States Parties' legislation could provide information on the relevant activities of those States Parties, although it may not independently provide indications of biological weapons activities. It may, however, provide support and a background for further investigation or assist in focussing on targets for inspections.

## 2. Ability to differentiate between prohibited and permitted activities

Surveillance of legislation could help establishing a pattern of activity in a State Party. It could also suggest priorities in budget allocation. Information obtained in this way may help focus on targets for inspections.

# 3. Ability to resolve ambiguities about compliance

Information obtained from surveillance of legislation may help to resolve ambiguities about compliance in that it would help to explain the nature of dual purpose activities.

### 4. Requirements

The precise requirements pertaining to this measure still need to be determined. A good computer/data base is of course essential.

## 5. Financial and organisational implications

It could be an expensive measure if not focussed. Surveillance of legislation would be part of the activities of a mutilateral body for the verification of the BWC. The measure requires a well established administration.

## 6. Impact on permitted activities and CPI

Surveillance of legislation is less intrusive that on-site inspections.

### 7. Interaction with other measures

As a primary stage measure information obtained from surveillance of legislation may be used as a comparison to declarations by States Parties. As a secondary phase measure it could help select proper targets and ways for off-site auditing and help focus on targets for on-site inspection.

### PRELIMINARY EVALUATION

#### DATA ON TRANSFERS, TRANSFER REQUESTS AND PRODUCTION

## 1. Amount and quality of information

Data on transfers and production could provide important relevant information on the activities of States Parties. The amount of information is expected to be enormous. A proper and unbiased selection will therefore be neccesary. These data may provide information on dual use activities and on production capacity in the biological realm in a State Party. They may be a background for further investigation. Not all relevant data may be freely accessible, however. There may be a divergence in the information different States Parties are able to supply.

#### 2. Ability to differentiate between prohibited and permitted activities

Information of this kind could help establish patterns of activity in a State Party. It may help focus on targets for inspections.

#### 3. Ability to resolve ambiguities about compliance

Transfer and production data may over time provide profiles of kinds of activities in a State Party. They may help in the analysis of dual purpose activities.

#### 4. Requirements

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The precise requirements pertaining to this measure still need to be determined. A good computer/data base is of course essential.

#### 5. Financial and organisation implications

It could be an expensive measure if not focussed. Surveillance of legislation would be part of the activities of a multilateral body for the verification of the BWC. There may also be some legal implications. Not all information is freely accessible; confidentiality concerns need to be considered.

### 6. Impact on permitted activities and CPI

Surveillance of legislation is less intrusive than on-site inspections.

### 7. Interaction with other measures

As a primary stage measure information obtained from data on transfers and production may be used as a comparison to declarations by States Parties. As a secondary phase measure it could help in the selection of targets for inspection.

## 1. Amount and quality of information

Again a lot of information could be made available, including information from international organisations. Therefore, a selection of information is needed. Not all States Parties may be able to generate the same quantity of information. From the multilateral sharing of information a better and more detailed understanding of the activities of States Parties will arise. Thus a background for further investigation and targeting of sites for inspection will be obtained. Information sharing may depend on the willingness of a State to provide information. There is also a risk of manipulation.

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## 2. Ability to differentiate between prohibited and permitted activities

Information obtained in this way could help establish patterns of activity in a State Party. It may help focus on targets for inspections. It may also provide information on non-declared activities.

## 3. Ability to resolve ambiguities about compliance

Information obtained from information sharing may help to resolve ambiguities about compliance in that it would help to explain the nature of dual purpose activities. Information sharing also opens the way tot non-routine inspections but without intrusive aspects on a consultative/cooperative basis.

### 4. Requirements

The precise requirements pertaining to this measure still need to be determined. A good computer/data base is of course essential.

### 5. Financial and organisational implications

It could be an expensive measure if not focussed. Analysis of the information obtained would be part of the activities of a multilateral body for the verification of the BWC. There may also be some legal implications. Not all information is freely accessible; confidentiality concerns need to be considered. Universal participation is to be promoted.

### 6. Impact on permitted activities and CPI

Confidentiality concerns may exist, but universal participation may partly alleviate these. The sharing of information is less intrusive than on-site inspections.

# 7. Interaction with other measures

As a primary stage measure information obtained in this way may be used as a comparison to declarations by States Parties. A comparison with information from other information monitoring measures and information obtained by remote sensing is of obvious use. As a secondary phase measure it could help in the selection of targets for inspection.

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# SURVEILLANCE OF PUBLICATIONS (Off-Site) (Rapporteur: Mr. Max Gevers)

	CRITERIA	CAPABILITIES AND LIMITATIONS
	Amount of information	<ul> <li>-data of Int. Org's</li> <li>-multitude of different sources</li> <li>-provides info. on activities in a SP</li> <li>-worldwide examination of sources is probably physically impossible</li> <li>-quant. of info. varies per state</li> <li>-a wealth of info. is available, but not in a comprehensive or methodological form</li> <li>-a priori selection of info. would be required</li> </ul>
•	Quality of information	<ul> <li>-necessity to select info.</li> <li>-could reveal trends</li> <li>-could be used as background for further investigation if necessary</li> <li>-could act as support for other types of info.</li> <li>-could assist in focussing targets for inspections</li> <li>-if not focussed, could be expensive and misleading</li> <li>-risk of manipulation, misinterpretation if inadequate selection</li> <li>-variation in qual. of info. per state</li> <li>-applicable especially in R and D and production stage</li> <li>-could help in getting a general picture of activities and/or yield specific info. on selected sites</li> <li>-could be influenced and/or directed by political needs</li> <li>-scientific publications usually lag 1-2 years behind the work program</li> <li>-press publications may project a subjective image</li> <li>-it provides only a partial picture of activities. Industrial and military activities may be poorly covered</li> </ul>

<u>EX 1</u>.

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	Other strengths or weaknesses not covered by other criteria	-indication of dual-purpose activities -might act as brake on publications -not all info. freely accessible
2.	Their ability to	<ul> <li>-could provide info. on activity in a SP</li> <li>-could help establishing patterns of activities</li> <li>-could assist focussing targets for inspections</li> <li>-could assist in identifying inconsistencies</li> </ul>
3.	Their ability to resolve ambiguities about compliance	<ul> <li>-could assist analysis to highlight dual purpose activities</li> <li>-risk of manipulation, misinterpretation of inadequate selection</li> <li>-data-base searches may miss items</li> <li>-scanning could be especially helpful if directed to specific compliance concerns</li> <li>-could help in obtaining on abnormal phenomena</li> </ul>
¶ ¶	Technology requirements	
	Material requirements	
	Manpower requirements	-requires specific expertise of knowing what to look for
	Equipment requirements	-computerized data-base
5.	Financial (Treaty organisation, national level, inspected facilities)	-if not focussed, expensive
, <u> </u>	Legal - <del>(internat</del> ional.and national level)	-not all info. freely accessible
-	Safety (for inspectors and inspected facilities, for environment)	
	Organizational implications (treaty organisation, national level)	-info. monitoring part of function of multilateral body for verification of BWC -computerized data-base -promote universal participation
6.	Impact on permitted activities	-might act as brake on publications
	Impact on CPI (commercial proprietary information)	-less intrusive than OSI

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Combinations with other measures that will enhance the effect of the measure above. Listed in order of priority.

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- 1. Declarations
- 2. Selection : Inspections / Visits
- 3. Auditing

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- 4. Data on transfers etc.
- 5. Multilateral information sharing
- What will be required ? What is presently available ? Which relevant future developments ?

# ANNEX 2.

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> SURVEILLANCE OF LEGISLATION (Off-Site) (Rapporteur: Mr. Max Gevers)

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	CRITERIA	CAPABILITIES AND LIMITATIONS
1.	Amount of information	-provides info. on activities in a SP -risk of too much info. -worldwide examination of sources is probably physically impossible -quant. of info. varies per state
	Quality of information	<ul> <li>-necessity to select info.</li> <li>-could reveal trends</li> <li>-background for further investigation if necessary</li> <li>-support for other types of info.</li> <li>-could assist in focussing targets for inspections</li> <li>-variation in qual. of info. per state</li> <li>-could suggest priorities in budget</li> <li>allocations</li> <li>-could reveal differences in the application of national legislation and/or regulations in the field of environmental and labour standards</li> <li>-existence or absense of legislation may not independently provide indications of biological weapons activities</li> </ul>
	Other strengths or weaknesses not covered by other criteria	-indication of dual-purpose activities -it requires a well established administration

2.	Their ability to differentiate between prohibited and permitted activities	<ul> <li>-provides info. on activity in a SP</li> <li>-helps establishing patterns of activities</li> <li>-could assist focussing targets for</li> <li>inspections</li> <li>-could suggest priorities in budget</li> <li>allocations</li> <li>-could indicate patterns of a nature that</li> <li>are subject to control in States Parties</li> </ul>
3.	Their ability to resolve ambiguities ' about compliance	-could assist analysis to highlight dual purpose activities -risk of manipulation, misinterpretation of inadequate selection
4.	Technology requirements	
	Material requirements	
	Manpower requirements	
	Equipment requirements	
5.	Financial (Treaty organisation, national level, inspected facilities)	-if not focussed, expensive
	Legal (international and national level)	
	Safety (for inspectors and inspected facilities, for environment)	
	Organizational implications (treaty organisation, national level)	-info. monitoring part of function of multilateral body for verification of BWC -computerized data-base
6.	Impact on permitted activities	
	Impact on CPI (commercial proprietary information)	-less intrusive than OSI

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Combinations with other measures that will enhance the effect of the measure above. Listed in order of priority.

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- Declarations
   Auditing
   On site inspections/visits
   Multilateral information sharing

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ANNEX 3.

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> DATA ON TRANSFERS AND TRANSFER REQUESTS AND ON PRODUCTION (Off-Site) (Rapporteur: Mr. Max Gevers)

· .	CRITERIA	CAPABILITIES AND LIMITATIONS
1.	Amount of information	-provides info. on activities in a SP -risk of too much info. -worldwide examination of sources is probably physically impossible -quant. of info. varies per state -"records" may be to broadly interpreted
	Quality of information	<ul> <li>-necessity to select info.</li> <li>-could reveal trends</li> <li>-background for further investigation if necessary</li> <li>-support for other types of info.</li> <li>-could assist in focussing targets for inspections</li> <li>-risk of manipulation, misinterpretation if inadequate selection</li> <li>-variation in qual. of info. per state</li> <li>-may provide information on production capacity and actual use of this capacity</li> </ul>
	Other strengths or weaknesses not covered by other criteria	-indication of dual-purpose activities -might act as brake on publications -not all info. freely accessible
2.	Their ability to differentiate between prohibited and permitted activities	<ul> <li>-provides info. on activity in a SP</li> <li>-helps establishing patterns of activities</li> <li>-could assist focussing targets for</li> <li>inspections</li> <li>-divergence in information supplied by</li> <li>different states</li> </ul>

	Their ability to resolve ambiguities about compliance	-could assist analysis to highlight dual purpose activities -risk of manipulation, misinterpretation of inadequate selection -over time may provide profiles of kinds of "activities in a Sate
	Technology requirements	
	Material requirements	
	Manpower requirements	1.4
	Equipment requirements	
	Financial (Treaty organisation, national level, inspected facilities)	-if not focussed, expensive
	Legal (international and national level)	-not all info. freely accessible -confidentiality concerns need to be considered
	Safety (for inspectors and inspected facilities, for environment)	
	Organizational implications (treaty organisation, national level)	<ul> <li>-info. monitoring part of function of multilateral body for verification of BWC</li> <li>-confidentiality concerns need to be considered</li> <li>-information to be supplied by States Parties</li> </ul>
5.	Impact on permitted activities	
	Impact on CPI (commercial proprietary information)	-less intrusive than OSI 🛥

ombinations with other measures that will enhance the effect of the measure bove. Listed in order of priority.

- . Declarations
- . Selection : Inspections / Visits
- . Surveillance of publications . Multilateral information sharing

- What will be required ?

- What is presently available ?
- Which relevant future developments ?