

AN OPTIMUM ORGANIZATION

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Introduction

1. The Ad Hoc Group (AHG) of the States Parties to the Biological and Toxin Weapons Convention (BTWC) have touched from time to time on the question of the organisation needed to implement the legally binding instrument being negotiated to strengthen the BTWC. Now that the work of the AHG has intensified with the fleshing out of a rolling text for the legally binding instrument, the nature of the organisation is receiving more and more attention as its size and cost are likely to influence the nature and effectiveness of the regime developed by the AHG.

2. This Briefing Paper considers what can be learned from existing relevant organisations, notably the World Health Organisation (WHO) and its counterparts for animal and plant diseases (OIE and FAO), the United Nations Special Commission (UNSCOM) on Iraq and the Organization for the Prohibition of Chemical Weapons (OPCW). The developments thus far in the AHG deliberations are then addressed and some estimates are made for the optimum size and cost of a BTWC organisation. It is emphasised that these estimates are necessarily broad as the actual size of the BTWC Organization will depend on the precise functions and responsibilities that it is given.

World Health Organisation (WHO), Office International des Epizooties (OIE) and the Food and Agriculture Organization (FAO)

3. **The World Health Organization (WHO)** was established as a specialist agency within the United Nations in 1948 by 61 Governments "for the purpose of cooperation among themselves and with others to promote the health of all people". By July 1996, the number of Member States had grown to 190. The Constitution of the WHO sets the attainment by all peoples of the highest possible level of health as the ultimate objective of the WHO and its Member countries. The World Health Report 1996 states that the primary focus of the Organization's work is to continue to be the enhancement of countries' capacity to define and implement their own priorities for health developments and public health action, disease prevention and health promotion and to establish sustainable health infrastructures. Four policy orientations for WHO were identified:

- a. Integrating health and human development in public policies
- b. Ensuring equitable access to health services
- c. Promoting and protecting health
- d. Preventing and controlling specific health problems.

4. The 1996 Report concentrates on the work of the WHO in fighting disease and on its work to counter new and re-emerging disease which was strengthened by the World Health Assembly resolution in 1995. This requested the Director-General of the WHO *inter alia* :

"to draw up plans for improved national and international surveillance of infectious diseases and their causative agents, including accurate laboratory diagnosis and

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prompt dissemination of case definition, surveillance information, and to coordinate their implementation among interested Member States, agencies and other groups.

to establish strategies enabling rapid national and international responses to investigate and to combat infectious disease outbreaks and epidemics including identifying available sources of diagnostic, preventive and therapeutic products meeting relevant international standards"

5. It is, however, clear that the emphasis of the WHO is to address the health implications of any outbreaks of disease and the success of its work depends on the rapid reporting to the WHO of any such outbreaks. The importance of a global surveillance programme to recognise and respond to emerging disease is paramount as there can be no response until an outbreak has been recognised and reported. It is only then that the WHO can respond rapidly and efficiently to calls for help in such emergencies and achieve its aim of having a team of experts at the location of an outbreak anywhere in the world within 24 hours of the WHO being officially notified of it.

6. The provision of information to the WHO on outbreaks is thus the foundation of its work to counter such outbreaks. It is in the interests of all countries for such outbreaks to be rapidly notified and countered -- hence there is a clear need for the activities of the WHO in being notified of and responding to outbreaks to be kept separate from political considerations which can only introduce delay and increase the difficulties of containing and countering an outbreak. However, central to the WHO's surveillance network is the timely and rapid provision of information to all concerned frequently through the EMC (Division of Emerging and other Communicable Disease Surveillance and Control) site on the World Wide Web.

7. **The Office International des Epizooties (OIE)** was established on 25 January 1924 by an international agreement signed by 28 countries. As of December 1996, the OIE had 144 member countries. The OIE is located in Paris and as the world organisation for animal health, the main objectives of the OIE are to:

- a. Inform Governments of the occurrence and course of animal diseases throughout the world, and of ways to control these diseases,
- b. Co-ordinate, at the international level, studies devoted to the surveillance and control of animal diseases, and
- c. Harmonise regulations for trade in animals and animal products among Member Countries.

8. A principal product of the OIE is the provision of information. Notably, information is transmitted immediately by facsimile, telex or electronic mail to member Countries upon the occurrence of any new outbreaks of highly contagious diseases. Information is also transmitted regularly in three publications -- *Disease Information*, a weekly compilation of emergency animal disease declarations, the *Bulletin* which reports, every two months, on the course of the most contagious animal diseases, in addition to the principal activities of the OIE, and *World Animal Health* which presents an annual overview of animal health world-wide.

9. In addition, the OIE has permanent working relations with over 20 other international organizations including the FAO, the WHO, and the World Trade Organization.

10. **The Food and Agriculture Organization (FAO)** was established in October 1945 as a specialized United Nations agency following a meeting of 44 nations. Today FAO has 174 Member Nations together with the European Commission (Member Organization). The FAO has its headquarters located in Rome and as the world organization for food and agriculture, FAO has a mandate to raise levels of nutrition and standards of living, to improve agriculture productivity, and to better the condition of rural populations. Since its inception, FAO has worked to alleviate poverty and hunger by promoting agricultural development, improved nutrition and the pursuit of food security -- the access of all people at all times to the food they need for an active and healthy life. FAO offers direct development assistance, collects, analyses and disseminates information, provides policy and planning advice to governments and acts as an international forum for debate on food and agriculture issues.

11. A specific priority of FAO is encouraging sustainable agriculture and rural development and a long term strategy for the conservation and management of natural resources. FAO's work falls into two categories: the Regular programme which covers internal operations, including the maintenance of the highly qualified staff who provide support for field work, advise governments on policy and planning and service a wide range of development needs, and the Field Programme which implements FAO's development strategies and provides assistance to governments and rural communities. It is interesting to note that FAO emphasises that its role as a "neutral forum" is closely tied to its work as an adviser to governments.

12. Disease is not specifically highlighted in the FAO information although it is evident an Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES) is operated by FAO. The EMPRES system was established in June 1994 as an FAO priority programme. The animal diseases component of EMPRES aims to strengthen FAO's role in preventing, controlling and, when possible, eradicating diseases that are highly contagious and may spread rapidly across national borders. Transboundary diseases are defined as those:

- * that are of significant economic, trade and/or food security importance for a considerable number of countries;
- * that can easily spread to other countries and can reach epidemic proportions;
- * for which control/management, including exclusion, requires cooperation between several countries.

The six priority animal diseases identified for EMPRES are : Rinderpest; Foot and mouth disease (FMD); Peste des petits ruminants (PPR); Contagious bovine pleuropneumonia (CBPP); Rift valley fever (RVF); and Lumpy skin disease (LSD). EMPRES aims to contain, control and progressively eliminate the most serious epidemic livestock diseases by mobilizing international cooperation on a regional and global basis, involving early warning, early and rapid reaction, enabling research and coordination.

13. **WHO, OIE and FAO: Appreciation.** It will be evident that all three organizations have a principal role to help improve world public and animal health food and agriculture. In

this they have successfully over time established effective working relationships with individual countries which provide timely information to the organisation on the changing situation in their countries. The fundamental role of the WHO, OIE and FAO is in alerting the global community to outbreaks of disease and to countering them and these organizations have developed their relationships with States to acquire and disseminate information about outbreaks of disease and to establish international global epidemiological networks. Their clearly recognised neutrality is essential for their effective operation. These organisations work together to help countries improve their national capabilities and the information that they provide to their member states and to international organizations will be of immense value to a future organization to strengthen the BTWC. However, it is evident that it would be inappropriate -- and indeed a retrograde step insofar as the primary roles and functions of the WHO, OIE and FAO are concerned -- for any of them to be asked to undertake a monitoring or other role on behalf of the BTWC organization as this would result in the loss of their neutral role.

United Nations Special Commission (UNSCOM) on Iraq

14. UNSCOM was established in April 1991 by United Nations Security Council Resolution 687 (1991)¹, the cease-fire resolution at the end of the 1990/1991 Gulf War. UNSCOM was given a mandate to:

- * "Carry out immediate on-site inspection of Iraq's biological, chemical and missiles capabilities, based on Iraq's declarations and the designation of any additional locations by the Special Commission itself;"

- * Oversee "the destruction, removal or rendering harmless... of;

- (a) All chemical and biological weapons and all stocks of agents and all related subsystems and components and all research, development, support and manufacturing facilities;

- (b) All ballistic missiles with a range greater than 150 kilometres and related major parts, and repair and production facilities;"

- * "Develop a plan for the future ongoing monitoring and verification of Iraq's compliance" with its undertaking not to use, develop, construct or acquire any of the above items.

15. The past six years has seen the carrying out of over 200 UNSCOM inspections mounted from outside of Iraq; over 50 of these have been biological weapons inspections. These inspections mounted from outside Iraq have been limited by the capability of UNSCOM to support such inspections and normally not more than two such inspections are in country at any one time.

¹United Nations Security Council Resolution 687 (1991), *Security Council Resolution establishing detailed measures for a cease fire-in between cease fire, including deployment of a United Nations Observer Unit; arrangements for demarcating the Iraq-Kuwait borders; the removal or destruction of Iraqi weapons of mass destruction and measures to prevent their reconstitution, under the supervision of a Special Commission and Director General of the IAEA; and creation of a compensation fund to cover direct loss and damage resulting from Iraq's invasion of Kuwait,* S/RES/687(1991) 3 April 1991.

16. In respect of the ongoing monitoring and verification system which became operational some three years ago, inspections are carried out by a team of inspectors located at the Baghdad Monitoring and Verification Centre. Typically, some 700 inspections have been carried out over a six month period; some 240 of these have been biological monitoring of some 90 sites with 893 items of equipment being tagged.

17. The experience of UNSCOM in respect of biological inspections and monitoring is thus relevant to considerations of an organization to carry out the implementation of a strengthened BTWC. However, it has to be recognised that UNSCOM is a unique organisation which was established under the Security Council Resolution 687 (1991).

18. **UNSCOM staff.** The staff of UNSCOM in the Headquarters in New York and the Baghdad Monitoring and Verification Centre are made up primarily of personnel seconded by supporting governments together with a small number of UN staff, both professional and support. The UNSCOM staff in Bahrain are all UN staff as they have administrative and logistic responsibilities. Personnel are seconded to UNSCOM by the Member States of the United Nations for periods of time ranging from a few days (e.g. to participate in a meeting or seminar at the United Nations in New York) to a few weeks (e.g. for a specific inspection mounted from outside Iraq) to several months (e.g. to join a monitoring group in Baghdad) or to several years (e.g. as a member of the UNSCOM staff in New York).

19. It is the fact that UNSCOM is largely staffed by personnel from supporting governments that makes UNSCOM an atypical UN organisation as it enables the Executive Chairman to request additional staff with specific skills very quickly from supporting governments without the necessity to follow the normal UN procedures for recruiting staff which are lengthy and require an appropriate geographical distribution. This inherent flexibility of UNSCOM is further augmented through the support in kind, such as equipment, provided by supporting governments which avoids the necessity for the normal UN bidding process for the purchase of equipment. In addition, especially in the early years of UNSCOM prior to the implementation of UNSCR 986 (1995), the financing of UNSCOM was from frozen Iraqi assets provided to UNSCOM under Security Council Resolution 778 (1992) together with donations from supporting governments. Although this flexible arrangement in respect of personnel has worked, the ability of UNSCOM to create specialist teams of inspectors at short notice has been limited and has resulted in operational penalties. The specialist experts generally have many other commitments and their availability depends on their ability to fit in an UNSCOM activity of a few weeks into their schedule.

20. Particular examples of support in kind in the equipment area are the provision of a U-2 reconnaissance plane; this is flown and operated by US personnel although its missions are directed by UNSCOM which also controls the use of the product. Initially Germany and currently Chile have provided the aircraft, together with the air crew and supporting staff, used to fly UNSCOM personnel into and out of Iraq together with the helicopters used within Iraq both for transport and for the aerial inspection team carrying out surveillance activities. The direct control by UNSCOM of these and other assets has been central to its effective operation. UNSCOM reports to the Security Council have listed the Member States who have provided support in the form of personnel, equipment and services; over 40 countries around the world have provided such assistance which has been essential in enabling UNSCOM to fulfil its mandate effectively.

21. All UNSCOM staff (excluding the Executive Chairman, Deputy Executive Chairman and the Commissioners who are appointed by the UN Secretary-General) receive a UN

Special Services Agreement for a Consultant (SSA) for 6 month periods; these SSAs are for a work assignment specified as “to provide expert advice to the Special Commission pursuant to Security Council Resolution 687 (1991) and 715 (1991), UNSCOM" which are additionally annotated with the words "when actually employed". This annotation means that the SSA starts to be effective from the moment when travel commences from the home country of the individual member of staff, inspector or Commissioner.

22. The effectiveness of UNSCOM has depended greatly on those members of its staff which have been seconded to UNSCOM for several years or who have participated on a regular basis. It is clear that Iraq has been quick to exploit any gaps in continuity. UNSCOM staff involved in missions to Iraq have essentially learnt on the job. Over the past few years it has been recognised that well qualified scientists are not necessarily well qualified to lead inspections, to be physically fit enough to carry out inspections in a harsh environment or to have the mental toughness needed to work under pressure in difficult circumstances. A further example of the importance of continuity is that UNSCOM chief inspectors have increasingly been appointed from the UNSCOM staff especially for declaration (FFCD) verification missions. This has greatly contributed to the effectiveness of such missions as such chief inspectors are intimately familiar with the nuances of the series of Iraqi declarations and are likely to have also participated in the seminars with Iraqi personnel which have sought to clarify and augment the declarations. An efficient and effective inspection team has to be trained to work as a team; the value of inspections is greatly enhanced when each individual knows what to look for as part of the team. Furthermore, the protection of commercial proprietary information in the context of UNSCOM inspections in Iraq by part-time inspectors, who are seconded to UNSCOM for two to three weeks to carry out a specific inspection and then return to their national positions, has not been a particular problem..

23. The precise numbers of staff in UNSCOM are constantly varying as individuals from supporting governments start or finish their periods of secondment. However, as an example, on 1 May 1997 the numbers of staff in UNSCOM totaled some 160; of these 120 were seconded from supporting governments and 42 were UN staff (16 professionals, 26 support staff). These were located at the New York Headquarters, in the Baghdad Monitoring and Verification Centre and in Bahrain.

Location	Seconded staff	UN Staff	
		Professional	Support
New York	30	7	14
Baghdad	90	6	12
Bahrain	0	3	0
TOTALS	120	16	26

Of the 16 professional UN staff, about a third are career UN staff. The other professionals were specifically recruited to fill UNSCOM posts. The nationalities of the seconded staff in New York and Baghdad on 1 May 1997 were as shown in Annex A.

24. **UNSCOM costs.** As might be expected, the costs of UNSCOM vary from year to year and are necessarily estimates. Indicative figures are available for the likely costs for 1997 paid by UNSCOM -- these are the costs of the UN professional and support staff of about \$3.5M, the costs of the travel of seconded personnel to and from New York or Bahrain and their subsistence costs whilst working for UNSCOM which amount to about \$11M, and the costs of Chilean helicopter and L-100 aircraft operations which together amount to about \$10M, and other costs amounting to around \$2M. The total for 1997 is thus likely to be about \$27M. This figure is also consistent with the figure that can be deduced from the allocation under UNSCR 986 to UNSCOM of 0.8% of \$2 billion every six months -- which corresponds to \$16 M every six months or \$32 M a year.

25. The salaries of seconded personnel are paid by the supporting governments who also pay the costs of the equipment and other services provided to UNSCOM. Such costs can only be estimated. The UNSCOM report of 17 December 1995 to the Security Council said² that "the Commission estimates that contributions in kind from various Member States have covered about two-thirds of the total cost of its operations." The same report goes on to note that the cash costs of UNSCOM to date have amounted to around \$20 to \$25 M a year. If anything, it might be expected that these December 1995 figures are likely to be on the low side as in late 1995 Iraq had only just admitted its biological weapons programme to UNSCOM. A round figure of \$100M a year would seem reasonable for the total cost of UNSCOM.

26. **UNSCOM Biological Activities.** As already noted, over 50 BW inspections have been mounted from outside Iraq. The sizes of the BW inspection teams have varied from as few as 4 up to as many as 31 involving inspectors from up to 12 States. The size of the team depends very much on the mandate -- the small teams are appropriate for very specific missions such as seeking particular information or interviewing specific individuals. The large teams are needed for inspections such as short notice ones of suspicious sites which may need to be sealed by the inspection team on arrival so that all material leaving the site can be monitored. The duration of inspections also varies from a few days to a few weeks. It needs, however, to be recalled that the ability of UNSCOM to support up to 2 inspections in Iraq at any one time means that the duration of inspections will be limited.

27. UNSCOM is a remarkable small organisation. In order to gain an appreciation as to the size of an organization to implement a strengthened BTWC, it is necessary to consider the structure of UNSCOM. The 50 strong staff at the Headquarters in New York are currently organised into 3 principal groups:

- a) Office of the Executive Chairman
- b) Operations Unit
- c) Information Assessment Unit and Export/Import Joint Unit.

The office of the Executive Chairman has the following posts:

²United Nations Security Council, *Tenth Report of the Executive Chairman of UNSCOM*, S/1995/1038, 17 December 1995.

Executive Chairman
 Deputy Executive Chairman
 Senior Legal Advisor
 Political Advisor
 External Relations Advisor, and

The Administration Unit .

The Operations Unit comprises 4 groups reflecting the various disciplines:

Chief Ballistic Missiles Section
 Chief Chemical Weapons Section
 Chief Biological Weapons Section
 Chief Nuclear Weapons Section

The Information Assessment Unit and Export/Import Joint Unit comprises a number of analysts, export/import experts and database handlers who input information on the various programmes into the UNSCOM database. However, it has to be noted that the collation and analysis of data has not being a particular strength and is an area in which it is important to ensure that there are appropriate resources in any future BTWC organization.

28. In the Baghdad Monitoring and Verification Centre (BMVC), the current organisation and staff numbers are as follows:

Baghdad Monitoring and Verification Centre

Office of Director (inc. Dir)	3		
Admin. staff (inc. interpreters)	6	Biological monitoring group	5
Technical staff (radio, computers)	5	Chemical monitoring group (including lab technicians)	10
Operations (communicators)	5	Missile monitoring group	7
Medical	4	Nuclear monitoring group	6
Aerial Inspection team	3	Export/import group	1

29. The specific biological weapons numbers of staff in the headquarters and in the BMVC are relatively small -- about five in the Operations Unit, about two or three in the Information Assessment Unit, and about five in the BMVC. To these have to be added the specialist members of the inspections mounted from outside Iraq. In addition, there are other essential capabilities such as logistics, planning and administrative functions in New York and administration, interpretation, technical, communication, medical and logistics staff in the BMVC.

30. For an organization to implement a strengthened BTWC, these capabilities would need to be located in the headquarters; there would be no in-country equivalent to the BMVC.

The Organization for the Prohibition of Chemical Weapons (OPCW)

31. As has been stated in previous Briefing Papers, the CWC is the arms control treaty that is of greatest relevance to the BTWC. The CWC³ which opened for signature on 13-15 January 1993 and entered into force on 29 April 1997 comprises a regime of comprehensive declarations together with both routine and challenge inspections as well as provisions for the investigation of alleged use and the monitoring of the destruction of declared chemical weapons and chemical weapon production facilities. The CWC provides for the establishment of the Organization for the Prohibition of Chemical Weapons (OPCW) located in The Hague in The Netherlands with responsibilities to implement the Convention. The relevance of the provisions of the CWC to the BTWC is three fold. First, both Conventions prohibit the development and production of weapons which attack people -- in the one case by non-living materials (chemicals) and in the other by living materials (micro-organisms) and their non-living products (toxins). Second, there is an overlap -- and rightly so -- between the two Conventions in that both cover toxins. Thus the CWC and its verification regime applies to toxins -- and examples of toxins, such as saxitoxin and ricin, are listed in the CWC Schedules -- as does the BTWC. Third, the CWC is the arms control treaty that is of greatest relevance to the BTWC; it is much more closely relevant than the NPT (Nuclear Non-Proliferation Treaty), the CTBT (Comprehensive Test Ban Treaty) or the IAEA (International Atomic Energy Agency) 93 + 2. The structure and provisions of the CWC are thus well worth examining as in order to reach agreement on the CWC, the negotiators had to resolve many issues which will arise in similar, if not always identical, form in the BTWC context.

32. It is therefore particularly relevant to examine the provisions relating to organization in the CWC in order to draw out what is potentially relevant to an organization for the implementation of a strengthened BTWC. Article VIII of the CWC⁴ established the OPCW:

*To achieve the object and purpose of this Convention,
To ensure the implementation of its provisions, including those for international
verification of compliance with it, and
To provide a forum for consultation and cooperation among States Parties.*

and set up a Technical Secretariat headed by a Director-General with the following functions:

The Technical Secretariat shall assist the Conference and the Executive Council in the performance of their functions. The Technical Secretariat shall carry out the verification measures provided for in this Convention. It shall carry out the other functions entrusted to it under this Convention as well as those functions delegated to it by the Conference and the Executive Council.

The responsibilities of the Director-General are set out in Article VIII as:

³United Nations, *Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction*, United Nations 93-05070, 1993.

⁴United Nations, *Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction*, United Nations 93-05070, 1993; Article VIII, The Organization.

The Director-General shall be responsible to the Conference and the Executive Council for the appointment of the staff and the organization and functioning of the Technical Secretariat. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity. Only citizens of States Parties shall serve as the Director-General, as inspectors or as other members of the professional and clerical staff. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible. Recruitment shall be guided by the principle that the staff shall be kept to a minimum necessary for the proper discharge of the responsibilities of the Technical Secretariat.

33. Detailed information is available on the structure of the OPCW and on the costs associated with its activities. In September 1997, there were 405 approved posts, made up of 265 headquarters staff and 140 inspectors⁵. The staff are divided into four Administrative and Other Divisions and two Verification Divisions as follows:

A1 Executive Management	Director-General, Deputy DG, Health & Safety, etc	31	
	Office of Legal Adviser	9	
	Secretariat for Policy Making Organizations	<u>36</u>	76
A2 Administration			74
A3 External Relations			15
A4 International Cooperation and Assistance			<u>10</u>
			175
V1 Verification			64
V2 Inspectorate	26 + 140 Inspectors	<u>166</u>	230
	Overall Total		405

Close to 60% of the manpower is thus for verification and inspection with the balance of some 40% primarily on management and administration. In 1998, the budget⁶ is based on a total of 491 posts which are made up of 303 posts (62%) for verification and inspection and the balance of 188 posts (38%) for management and administration. The increased number of posts is made up of 71 further inspectors and 15 additional posts approved for 1998.

34. The costs associated with these 491 posts are set out in the 1998 budget. As the CWC entered into force on 29 April 1997, it is more informative to examine the budget for the full calendar year 1998 rather than considering the costs for the part year 1997. The budget information broadly follows the organisational structure although an additional Administrative element is used for common services which are not distributed to specific programmes. For 1998 the budget is as follows:

⁵Organization for the Prohibition of Chemical Weapons, Technical Secretariat, *Note by the Director-General: Technical Secretariat: Post Structure and Placements as of 8 September 1997*, Administration Division, S/14/97, 11 September 1997.

⁶Organisation for the Prohibition of Chemical Weapons, Conference of the States Parties, *Programme and Budget 1998*, Second Session, 1 - 5 December 1997, C-II/6, 6 December 1997.

	Dutch Guilders
A1 Executive Management	17,991,500
A2 Administration	13,563,000
A3 External Relations	2,918,400
A4 International Cooperation & Assistance	4,996,400
A5 Common Services not Distributed to Programmes	<u>17,999,000</u>
	57,468,300
V1 Verification	18,912,100
V2 Inspection Management & Field Operations	<u>64,416,600</u>
	83,328,700
Total	140,797,000

The OPCW annual budget of 140M Dutch Guilders is thus about \$70M a year (assuming an exchange rate of 2 Dutch Guilders to \$1). Approximately 60% of the budget is thus for verification and field operations with the other 40% primarily for management and administration; external relations and international cooperation account for about 6% of the total budget.

35. The personnel resource costs are distinguished from the other resources

A1 - A5 Personnel Resources	27,356,300	Other Resources	30,112,000
V1 - V2 Personnel Resources	<u>47,729,700</u>	Other Resources	<u>35,599,000</u>
Total	75,086,000		65,711,000

36. There is, however, an important qualification in respect of the inspection costs included in V1 - V2 in regard to the costs associated with the implementation of Article IV (Chemical Weapons) and of Article V (Chemical Weapons Production Facilities) of the Convention as Article IV, paragraph 16 states that:

*Each State Party shall meet the costs of destruction of chemical weapons it is obliged to destroy. **It shall also meet the costs of verification of storage and destruction of these chemical weapons unless the Executive Council decides otherwise.** [Emphasis added]*

Likewise, Article V, paragraph 19 states that:

*Each State Party shall meet the costs of destruction of chemical weapons production facilities it is obliged to destroy. **It shall also meet the costs of verification under this Article unless the Executive Council decides otherwise.** [Emphasis added]*

The estimate for the reimbursable expenses to the OPCW from those Member States where Article IV and Article V verification activities are carried out is some 10 M Dutch Guilders in 1998.

37. It is equally important to recognise that in respect of the strengthened BTWC, there are unlikely to be comparable costs relating to the destruction of biological weapons as no State has so far admitted possession of such weapons. After all, Article II of the BTWC requires each State Party to undertake

"to destroy, or to divert to peaceful purposes, as soon as possible but not later than nine months after the entry into force of the Convention, all agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention...".
[Emphasis added]

As entry into force of the Convention took place in 1975, the deadline for destruction or diversion has long since passed. Insofar as past biological weapons facilities are concerned, the dual use nature of such facilities is likely to result in such facilities being converted with only biological weapons unique equipment being destroyed. Although it is possible that there will be additional verification requirements⁷ for such past biological weapons facilities, the associated costs are unlikely to be large and will not significantly modify the estimates developed in this Briefing Paper for the size and cost of the organisation needed to implement a strengthened BTWC.

38. The detailed information available for the OPCW and its activities can usefully be analysed further. Information is provided in the Budget for 1998 which provides estimates for the numbers of different locations to be inspected, the numbers of inspections, the inspection team size, the inspection duration and the annual frequency of inspections. The OPCW documentation states that these figures are based on the number of inspections that would be conducted in the Russian Federation and in one other hypothetical State party that declares as a CW possessor; should no State Party, other than the Russian Federation, declare as a CW possessor in time to be inspected in 1998 then more inspections of non-CW sites would take place in 1998.

Type of inspection	Number of sites	Number of inspections	Size of inspection teams	Duration on site, hours	Annual frequency
CW production facilities	17+19+7	52	3 - 9	120	0.3 - 2
CW storage facilities	26+8	68	6 - 10	120	2
CW destruction facilities	4+4+2	90 month	7 - 18	Continuous	Continuous
Old and abandoned CW	42	14	5	120	As necessary
Schedule 1	40	30	3 - 4	48	0.5
Schedule 2	400	68	5	96	1 in 3 years
Schedule 3	500	4	5	24	Limited
		Total 326			
Article IX and X activities	8				

The Article IX and X activities cover challenge inspections resulting from suspected non-compliance and investigations of alleged use respectively. The OPCW 1998 budget document states that such activities, in terms of the numbers or durations, cannot be predicted in advance and no estimate is made for their costs. For budgetary purposes, the required

⁷Graham S. Pearson, *Past Biological Weapons Facilities: An Opportunity for the Ad Hoc Group*, ASA Newsletter, 97- 6 , Number 63, 4 December 1997.

personnel and equipment would be drawn from available resources and such resources will be organised to ensure a sufficient surge capability to carry out Article IX and X activities as required. The entries in the above table therefore are based on 8 such incidents in a year with an unspecified number being the subject of an OPCW inspection/investigation.

39. The inspection team numbers and resources needed to carry out the 326 inspections planned in 1998 -- 224 of which are of CW facilities and 102 of which are of scheduled facilities -- are detailed in the 1998 budget as follows:

Post	Number
Team Leader	21
Senior Inspectors	100
Inspectors	72
Technical Inspection Assistants	12
Total	205*

* The authorized number of inspectors in 1998 is 211 -- however, only 205 are assumed to be available in 1998

The costs for the inspection management and field operations are as follows

Item	Cost
Salaries and CSC costs	46,416,600
Inspector travel	7,000,000
Inspector per diem	4,000,000
Inspection equipment	5,000,000
Interpretation	2,000,000
Sub-total (less salaries)	18,000,000
Total	64,416,600

40. Insofar as considerations of an organisation to implement a strengthened BTWC are concerned, the inspections of weapon production facilities, storage areas, destruction facilities and old and abandoned weapons in the above table can be disregarded as not being relevant. Indeed, it is evident in respect of the CWC that the costs of the verification of such CW production facilities, storage areas, and destruction facilities fall under Articles IV and V and are thus born by the State Party concerned. The OPCW budget for inspection management and field operations distinguishes between the CW related and the Scheduled facility inspections noting that in 1998, the plan is that the OPCW will conduct 326 inspections of which 224 will be CW related and 102 will be to Scheduled facilities.

41. Using the above data, the number of inspector - days actually used in inspections at each of the facilities can be calculated using the average inspection team sizes:

Type of inspection	Number of inspections	Size of inspection teams	Duration* on site, days	Inspector - days/inspection	Inspector-days/year
CW production facilities	52	3 - 9	5 + 3	6x8=48	48x52=2496
CW storage facilities	68	6 - 10	5 + 3	8x8=64	64x68=4352
CW destruction facilities	90 month	7 - 18	Continuous (28/month)	12.5x28=350	350x9=3150

Old and abandoned CW	14	5	5 + 3	5x8=40	40x14=560
Subtotal	224				10,558
Schedule 1	30	3 - 4	2 + 3	3.5x5=17.5	17.5x30=525
Schedule 2	68	5	4 + 3	5x7=35	35x68=2380
Schedule 3	4	5	1 + 3	5x4=20	20x4=80
Total	326				13,543

* Duration is the number of days on site plus 3 days needed for getting to and from the site.

The 1998 planned overall total inspector-days used in inspections per year is thus 13,543; this is made up of Scheduled facility inspections totalling 2,985 days (525+2380+80=2,985) or 22%, and CW related inspections totalling 10,558 days (2496+4352+3150+560=10,558) or 78%. It needs to be recognised that the 1998 figures are based on a high number of CW related inspections. As already noted, if no other State Party, other than the Russian Federation, declares as a CW possessor in 1998, then the number of inspections to Scheduled facilities would increase. In addition, the proportion of inspections to Scheduled facilities will increase as CW facilities and CW are destroyed over the coming years. It is therefore judged to be more representative to consider inspections to Scheduled facilities as being some 20 to 30% of the inspection activities of the OPCW.

42. Consequently the OPCW manpower and budget, using the 1998 budget figures and a figure of 25% as an indication of the proportion of Scheduled facility inspections, can be summarised in broad terms as follows:

Activity	Manpower	Cost
Management & Administration	33%	35%
External relations & international cooperation	5%	6%
CW related verification	47%)59%
Scheduled facility verification	15%)

Ad Hoc Group

43. The Ad Hoc Group has increasingly started to address the organization that will be required to implement a legally binding instrument to strengthen the BTWC. At the seventh session in July 1997 working papers prepared by the Netherlands⁸ and by South Africa⁹ were introduced. The Netherlands working paper stated that the language proposed for the Article in the rolling text dealing with organization had been drawn, as might be expected, extensively from the relevant language in the CWC and the Comprehensive Test Ban Treaty (CTBT). At the same session South Africa also produced two working papers which addressed the laboratory functions¹⁰ and the laboratory support¹¹ needed in support of

⁸The Netherlands, *Certain aspects of a future BTWC Organization*, BWC/AD HOC GROUP/WP. 186, 23 July 1997.

⁹South Africa, *Scientific support to a future organization*, BWC/AD HOC GROUP/WP. 152, 11 July 1997.

¹⁰South Africa, *Laboratory functions in support of investigations of non-compliance concerns*, BWC/AD HOC GROUP/WP. 153, 11 July 1997.

¹¹South Africa, *Laboratory support for investigations of non-compliance concerns*, BWC/AD HOC GROUP/WP. 160, 11 July 1997.

investigations of non-compliance concern. From these papers language was introduced into the rolling text annexed to the procedural report of the seventh session¹².

44. This text under Article IX The Organization and Implementational Arrangements consists of some main sections:

- A. General Provisions (1 page)
- B. The Conference of States Parties (3 pages)
- C. [The Executive Council] (3 pages)
- D. The [Technical] Secretariat [(including International Epidemiological Network)] (9 pages)
- E. Privileges and Immunities (1 page)

together with a further page containing some alternative sections entitled UN Security Council, Technical Body and Consultative Council. Whilst this language is based on that in the CWC and the CTBT, it is evident that the Ad Hoc Group has introduced variations which are intended to tailor the language to the requirements of the BTWC.

45. At the eighth session¹³ in September/October 1997, there was relatively little change to the text in Article IX although a further working paper by South Africa¹⁴ addressed the organisation of the technical secretariat. In the rolling text of 6 October 1997, Article IX on organization and implementational rearrangements was reorganized with much of the detail on the technical secretariat together with additional material being incorporated in a new Annex (H) entitled The [Technical] Secretariat. There is considerable duplication between text on the technical secretariat in Article IX and that in Annex H. Consequently the current version of Article IX in the rolling text contains the following sections:

- A. General Provisions (1 page)
- B. The Conference of States Parties (3 pages)
- C. [The Executive Council] (3 pages)
- D. The [Technical] Secretariat [(including International Epidemiological Network)] (5 pages)
- E. Privileges and Immunities (1 page)

together with

Annex H The [Technical Secretariat] (9 pages).

46. Annex H comprises the following sections:

A. Structure

The Director-General
Scientific Support Centre

¹²United Nations, *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*, Procedural Report, BWC/AD HOC GROUP/36, 4 August 1997.

¹³United Nations, *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*, Procedural Report, BWC/AD HOC GROUP/38, 6 October 1997.

¹⁴South Africa, *Organization of the technical secretariat*, BWC/AD HOC GROUP/WP. 202, 8 September 1997.

- Permanent staff
- Part-time staff
- Laboratories
 - Organization laboratory
 - Field laboratories
 - Local laboratories
 - Accredited laboratories
- Budget and Administration

B. Functions

- Director-General
- Scientific Support Centre
 - Routine and ongoing functions
 - Visits and Investigations
 - Reporting
 - Support laboratories
 - Organization laboratory functions
 - General laboratory functions
- Scientific and technical exchange functions
- Administrative functions

47. This Briefing Paper is focussed primarily on the optimum size and cost of the future organization. Consequently, attention is concentrated on those elements of the rolling text of most relevance to these aspects. The purpose of the Technical Secretariat is set out (Art IX, para 37) as being:

The [Technical] Secretariat shall assist States Parties in the implementation of this Protocol. The [Technical] Secretariat shall assist the Conference and [the Executive Council] in the performance of their functions. The [Technical] Secretariat shall carry out the verification [investigation] measures and the scientific and technological exchange and technical cooperation activities and measures provided for in this Section [Annex ...]. It shall carry out the other functions entrusted to it by this Protocol as well as those functions delegated to it by the Conference or [the Executive Council] in accordance with this Protocol. [The [Technical] Secretariat shall include, as an integral part, the Scientific Support Centre (SSC).] [The details with regard to the functions of the [Technical] Secretariat, the SSC and the system of support laboratories are set out in Annex [...], paragraph]

This is broadly similar to that in the CWC with the addition of additional language on "scientific and technological exchange and technical cooperation activities and measures" and specific mention of both a Scientific Support Centre (SSC) and a system of support laboratories. Importantly, the above language makes it explicitly clear that the Technical "Secretariat shall carry out the verification [investigation] measures". The word "[investigation]" as a possible alternative to "verification" is unhelpful as "investigation" could be used as an argument that all that the organization would do is to carry out investigations. Such a limitation would be inconsistent with the mandate to the Ad Hoc group from the Special Conference to consider measures to strengthen the BTWC.

48. The functions of the Technical Secretariat are set out (Art IX, para 38) "with regard to [verification of] compliance with the Convention and this Protocol shall...include, inter alia":

- (a) *Receiving and processing of declarations submitted by the States Parties to the Organization in accordance with the provisions of Article III, Part D;*
- [(b) Receiving, collecting, processing, analysing and storing data and all relevant information relating to the appearance of unusual pathogens or epidemics supplied by States Parties and existing international organizations;*
- (c) *Establishing on the basis of information supplied, epidemiological data bases for various geographical zones;*
- (d) *Supplying, at the request of the Organization or any State Party, any relevant information drawn up on the basis of collected and processed data, inter alia, to help distinguish pathologies and epidemics deemed to have a natural cause from pathologies and epidemics which might be the result of a violation or attempted violation of the BTWC;]*
- (e) *Assisting [the Executive Council] in facilitating consultation and clarification among States Parties;*
- [(f) Conducting [[Non-Challenge][Random]Visits][and][Clarification Visits][Request Visits][Confidence-Building Visits][Voluntary Visits] in accordance with the provisions of Article III, Part F and of Annex G;]*
- (g) *Receiving requests for [investigations to address a non-compliance concern][field and facility investigations][challenge inspections] and processing them, carrying out the preparations for, and providing technical support during the conduct of [investigations to address a non-compliance concern][field and facility investigations][challenge inspections] , and reporting to [the Executive Council];*
- (h) *Negotiating agreements with States Parties, other States and international organizations and concluding, subject to prior approval by [the Executive Council], any such agreements or arrangements relating to [verification] activities with States Parties or other States;*
- (i) *Assisting the States Parties through their National Authorities on other issues of verification under implementation of this Protocol; and*
- [(j) Implementing training programmes in order to facilitate the Director-General's responsibilities in regard to para 47.]*

There is an apparently serious flaw in the current wording in that whilst the Technical Secretariat will **conduct** the various types of Non-Challenge Visits, it appears that the Technical Secretariat will only "provide technical support" and not conduct non-compliance concern and other investigations. It should be made clear for consistency with the role of the Technical Secretariat (Art IX para 37) that the Secretariat will also **conduct** investigations carried out under the Protocol. A minor point is the apparent limitation to "existing" organizations in (b) above thereby ruling out links with future organizations.

49. A comparable paragraph (Art IX para 47) to that in the CWC addresses the responsibilities of the Director-General

The Director-General shall be responsible to the Conference and t[he Executive Council] for the appointment of the staff and the organization and functioning of the [Technical] Secretariat. [The paramount consideration in the employment of the staff [in the Technical Secretariat] and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity][, on equitable geographic distribution]. Only citizens of States Parties shall serve as the Director-General, [members of the SSC or the clerical staff] as [inspectors][investigators] or as members of the professional and clerical staff. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible. Recruitment shall be guided by the principle that the staff shall be kept to a minimum necessary for the proper discharge of the responsibilities of the [Technical] Secretariat.

This is closely similar to that in the CWC although surprisingly the second sentence, which occurs in the CWC, is here in square brackets.

50. A further paragraph (Art IX para 49) addresses the responsibilities of the inspectors/investigators:

In the performance of their duties, the Director-General, [members of the Scientific Support centre,] the [inspectors][investigators], the [inspection][investigation] assistants and [other] [the] members of the staff shall not seek or receive instructions from any Government or from any other source external to the Organization. They shall refrain from any action that might reflect adversely on their positions as international officers responsible only to the Organization. The Director-General shall assume responsibility for the activities of an investigation team.

This closely parallels the comparable paragraph in the CWC although the final sentence is new.

51. The final paragraph (Art IX, para 51) on the Technical Secretariat in Article IX, although entirely within square brackets, addresses the location of its scientific and technical expertise; there is no comparable paragraph in the CWC.

[Scientific and technical expertise in the {Technical} Secretariat shall be contained in a specialized multidisciplinary Scientific Support Centre (SSC). The SSC shall consist of a small permanent staff and an ad hoc group of experts as well as a system of support laboratories including a small organizational laboratory supported by accredited and local laboratories. The details of these structures are set out [below][in Annex...]. [The details with regard to the structure of the SSC and the system of support laboratories are set out in Annex [...], paragraph... .]

52. Annex H provides more detail on the SSC setting out what are perceived to be permanent staff and what are part time staff as well as outlining the system of support laboratories. The permanent staff of the SSC is detailed (Annex H, para 2, 3 and 4) as follows:

The Scientific Support Centre shall consist of a small permanent staff component which may be adjusted by the Director-General upon approval by the Executive Council, depending on the demands and workload which may develop with time.

Staff numbers shall be kept to a minimum, provided that the required skills are provided and that continuity is maintained. The Director-General may redefine the posts and skills which are necessary to perform the functions of the SSC.

The Head of the SSC shall be appointed by the Director-General and shall be scientifically well qualified with sufficient experience to manage the Centre in a cost effective manner. The Head of the SSC shall be responsible for selection and management of staff and to make presentations to international and national bodies. [The Head of the SSC shall liaise with other international organizations such as the WHO, FAO, OAE, and establish links to create an international epidemiological network.] The Head of the SSC shall report to the [Director-General] [Organization].

The permanent staff component shall comprise of scientists and technical support staff nominated by States parties and appointed by the Director-General with knowledge of and experience in, inter alia, the following disciplines:

As already noted, there is no parallel to the SSC in the CWC and the argument as to why a SSC is needed is not clear. There would appear to be benefit, as in the OPCW, in integrating appropriately qualified scientists throughout the Technical Secretariat as this is more likely to result in an effective and efficient organisation at minimum cost. The paragraph in Article IX (para 47) on the responsibilities of the Director-General (reproduced above in para 46 of this Briefing Paper) would appear to suffice. More significantly, the rolling text paragraph limits the permanent staff to "*scientists and technical support staff nominated by States Parties*" rather than, as in the CWC and in para 47 of Art IX, leaving it to the Director-General to recruit in order to secure "*the highest standards of efficiency, competence and integrity*[[, on equitable geographic distribution]."
The other significant and serious flaw, already mentioned above in paragraph 45 of this Briefing Paper, is the lack of any mention that the permanent staff shall be responsible for conducting visits and investigations. This flaw is underlined by the apparent intention to use only part time staff for investigations.

53. The part time staff is detailed (Annex H, para 5, 6) in square brackets as follows:

[The part time component of the SSC shall consist of a panel of experts nominated by States Parties from which investigators and investigation assistants shall be selected in accordance with the provisions and procedures set out in Article III and Annex D [and paragraph 47 of Article IX].

States Parties may nominate to the Director-General, suitably qualified and experienced experts in, inter alia, the following fields which would be made available to serve on the panel of experts on a part time basis:]

This makes it clear that it is intended that part time staff shall provide the investigators and investigation assistants. The experience gained by UNSCOM over the past seven years has demonstrated that whilst it has been possible to carry out the work of UNSCOM in Iraq by part time staff, this has worked well for UNSCOM because of its unique nature and focus on the activities of a single state. There are numerous lessons which show that such a dependence on part time staff would not be as effective or appropriate in implementing a multilateral arms control treaty. These include the following:

- a. UNSCOM has functioned through supporting States being approached by the Executive Chairman to provide specific expertise and equipment as required for particular missions in Iraq. This has enabled UNSCOM to react rapidly to developments and operate with much greater flexibility and speed than would have been possible for a fully UN staffed organisation.
- b. The effectiveness of UNSCOM has depended greatly on those members of its staff who have been seconded to UNSCOM for several years or who have participated on a regular basis. Iraq has been quick to exploit any gaps in continuity.
- c. UNSCOM chief inspectors have increasingly been appointed from the UNSCOM staff especially for declaration (FFCD) verification missions. This has greatly contributed to the effectiveness of such missions as such chief inspectors are intimately familiar with the nuances of the series of Iraqi declarations and are likely to have also participated in the seminars with Iraqi personnel which have sought to clarify and augment the declarations.
- d. UNSCOM staff involved in missions to Iraq have essentially learnt on the job. Over the past few years it has been recognised that well qualified scientists are not necessarily well qualified to lead inspections, to be physically fit enough to carry out inspections in a harsh environment or to have the mental toughness needed to work under pressure in difficult circumstances.
- e. An efficient and effective inspection team has to be trained to work as a team. The value of inspections is greatly enhanced when each individual knows what to look for as part of the team.
- f. Part time staff provided to UNSCOM for missions to Iraq generally have many other commitments and their availability is frequently limited.

54. Whilst the above lessons can be drawn from UNSCOM experience, it is also worth emphasising that the concern about the protection of commercial proprietary information demands that the future Organization depend on full time staff appointed to the organisation on multi-year contracts and with their loyalty to the Organization. It is after all the investigations which will probe deeply into the activities at particular sites -- and if they are to be credible, will need to address fully the circumstances that led to the non-compliance concern. It is also significant to note the considerable effort that the OPCW has needed to put into the training of their full time inspectorate. A solution depending on part time staff to carry out investigations is simply not credible.

55. There is, however, a possible role for the involvement of specialist experts on a part time basis in one particular area -- to complement a full time chief inspector and a core inspection team made up of full time staff in the investigation of unusual outbreaks of disease or for investigations of a particularly specialist plant.

An Optimum Organization

56. It is evident that, for an effective strengthening of the BTWC, there will need to be an organization to implement the legally binding instrument. The organization will need to liaise with the National Authorities of the States Parties to collect, analyse and evaluate the

mandatory declarations, carry out the non-challenge visits, both random and focussed, and conduct investigations of non-compliance concerns and of the alleged use of biological and toxin weapons. There is broad agreement that such an organization should be "lean and mean" -- and that it should concentrate on those activities that it **has** to do to strengthen the BTWC. The organization will need to develop links with other international organizations -- notably the OPCW as both the CWC and the BTWC will address the prohibition of toxins, as well as the international organizations such as WHO, OIE and FAO concerned with human, animal and plant diseases. It will, however, be important to avoid unnecessary duplication of activities with organizations such as the WHO, FAO and OIE which are far better placed to acquire and disseminate information about outbreaks of disease and to establish international global epidemiological networks. Likewise, there are several activities stemming from the Rio Earth Summit of 1992 and from the Convention on Biological Diversity which whilst being of potential relevance to the BTWC should not be duplicated by the future BTWC organization.

57. The language in Article VII Scientific and Technological Exchange for Peaceful Purposes and Technical Cooperation in respect of [Institutional Mechanisms and] International Cooperation strikes the right note in its language (Art VII, para 12):

[The BTWCO shall establish a cooperative relationship, maintain working ties and when necessary negotiate agreements and develop joint programmes with relevant organizations, including [OPCW] WHO, FAO, IOE, UNIDO, ICGEB, UNEP and other agencies engaged in the implementation of Agenda 21 and the Convention on Biological Diversity (CDB) in order to:]

(a) {Derive the greatest possible synergy in such fields as}[ensure that there is no duplication in such fields as]:

(i) the collection and dissemination of information on listed pathogens;

(ii) sharing information on environmental release of genetically modified organisms;....

(b) Maintain a record of cooperative activities promoted by international organizations in areas considered relevant to the BTWC, to provide awareness and facilitate access to those activities by States parties to the Protocol, and coordinate with those organizations its own promotional activities, avoiding duplication and rationalizing the use of the resources;

The square brackets around [OPCW] should be removed as a cooperative relationship with the OPCW will be essential as both organizations will cover toxins.

58. A less practical approach is suggested in one paragraph of Article IX [[The Organization][and Implementational Arrangements] which unrealistically suggests that the verification responsibilities should be entrusted to organizations such as the WHO:

*[The Organization shall conclude an agreement(s) with the relevant specialized international organizations such as WHO which shall be entrusted with the verification responsibilities determined by this Protocol and with the rendering of conference, logistic and infrastructural support required by the Organization.]**

* The view was expressed that tasking other international institutions and organizations such as the WHO with central functions raises legal, organizational and political concerns to be investigated further.

That the unrealistic nature of this paragraph is recognised by the AHG is shown by the square brackets around the entire paragraph and the footnote. Such an approach is impractical as it fails to recognise the fundamental role of the WHO, FAO and OIE in alerting the global community to outbreaks of disease and to countering them. A suggestion that such organizations should implement the verification responsibilities of the Protocol would jeopardize the primary function and the neutrality of such organizations as States would be reluctant to provide information if they thought that the organization concerned was going to use it to judge whether they were compliant with the BTWC. There is a clear need for the BTWC Organization to use fully the information collected and disseminated globally by organizations such as the WHO, FAO and OIE -- but not to task them to carry out activities on behalf of the BTWC Organization.

59. A lean and mean BTWC organization could therefore be expected to have a structure comprising:

Director-General
Administration
International Relations & Cooperation
Compliance Monitoring & Visits/Investigations

This would comprise a permanent staff. It would be possible to include provision for the Director-General to have the authority, as he judged fit, to augment the teams investigating allegations of unusual outbreaks of disease by additional well qualified and trained experts on a part-time basis.

60. The essential technical expertise and capabilities would be embedded in the organization in the sections concerned with International Relations & Cooperation and with Compliance Monitoring & Investigations. The proposal that there should be a small organizational laboratory supported by accredited international laboratories, which is similar to the arrangements under the OPCW, is sensible. There should be no necessity for the number of staff in the BTWC organizational laboratory to be more than the number (4) in the OPCW Laboratory.

61. By considering the information available on the OPCW it is possible to estimate the possible number of posts needed for a BTWC Organization. The following assumptions for the BTWC Organisation have been made for the purposes of this Briefing Paper:

- a. The numbers of visits and investigations will be about 30% of the 300 to be carried out by the CWC i.e about 100 a year and hence the required number of staff to carry out these visits and investigations will be about 30% of the 303 OPCW posts in 1998 for CWC verification and inspection.
- b. The numbers of declarations made to the BTWC organization are assumed to be comparable to the numbers made to the OPCW. Although current OPCW numbers for Schedule 1, 2 and 3 facilities are 40, 400 and 500 respectively totalling 940, these are indicated in the 1998 budget as being low estimates which may rise to 40, 950 and

1500 respectively totalling 2450. It is assumed that there will be no comparable declarations under the BTWC to those of CW storage, CW destruction facilities or old and abandoned CW under the CWC although there may be declarations of past BW facilities. Although no parallel is envisaged in the BTWC Protocol to Schedule 1 facilities in the CWC, which are currently estimated as being 40, it is probable that there will be a comparable number of biological defence facilities requiring to be declared. As for the numbers of other facilities likely to be declared this is envisaged as being some 10s of facilities in each State Party¹⁵. Consequently, for 140 States Parties¹⁶, the numbers of declarations can be anticipated as being in the range from 1400 if there were an average of 10 facilities to be declared in each State up to 7000 if there were to be an average of 50 to be declared in each State. It seems probable that the overall number of declarations will be of the order of several thousands, say 4,000.

It is interesting to note that if 100 visits and investigations were carried out annually and if visits to the assumed 40 biological defence facilities were to occur more frequently, say once every two years, then the number of visits to other declared facilities would be some 80 visits each year -- or an average of one such visit to a State Party every two years.

62. A detailed analysis has been made in Annex II of the posts and functions in the OPCW which have been reviewed from the point of view of assessing what is likely to be required for a lean and mean BTWC organization. Any posts that are unlikely to have a direct analogue in the BTWC regime, such as the chemical demilitarization branch or specific CW related posts have been deleted, and the numbers of other posts reduced to reflect the reduced number of inspectors which have been assumed to be about a third of those in the OPCW. The outcome of the analysis gives the following broad indications; in order to facilitate comparison with the OPCW external relations and international cooperation have been shown as separate divisions and the corresponding OPCW numbers in 1998 are included:

Post	BTWC Organization	OPCW
Director-General (Security, Health & Safety, Legal Adviser, Internal Oversight, Secretariat for Policy Making Organs)	42	85
Administration (Budget, Human Resources, Information Systems, Travel, Training)	32	77
External Relations	10	15
International Cooperation & Assistance	10	11
Compliance Monitoring (Declarations, Information Processing, Validation, Evaluation and Confidentiality, Organization Laboratory)	44	66
Visits & Investigations	70	237
OVERALL TOTAL	208	491

¹⁵Graham S Pearson, *Discriminating Triggers for Mandatory Declarations*, University of Bradford, Department of Peace Studies, Briefing Paper No. 3, September 1997.

¹⁶United Nations, *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 as of 29 August 1997*, BWC/AD HOC GROUP/INF.11, 8 September 1997.

It must be emphasised that the purpose of the exercise is to gain a feel for the likely size of a lean and mean BTWC Organization; there may be scope for further reductions in numbers as some functions might be combined or there may be additional functions required for the BTWC Organization.

63. As the approved OPCW figures for 1998 total 491 posts, the proposed BTWC Organization with a strength of just over 200 would be well under half of the size of the OPCW. An indication of the order of costs for the BTWC Organisation can be deduced by assuming that the costs per staff member in the respective divisions would be the same as those in the OPCW and calculating, using the ratio of the numbers of posts in the BTWC Organization to those in the OPCW from the table above, the appropriate proportion of the OPCW budget costs. The OPCW 1998 budget figures and the corresponding estimated costs for a BTWC Organization are as follows:

Function	OPCW (1998 Budget)	Factor	BTWC Organization
A1 Executive Management	17,991,500	42/85	8,890,000
A2 Administration	13,563,000	32/77	5,640,000
A3 External Relations	2,918,400	10/15	1,945,600
A4 International Cooperation & Assistance	4,996,400	10/11	4,542,100
A5 Common Services	17,999,000	208/491	7,625,000
Sub-total	57,468,300	---	28,642,700
V1 Verification	18,912,100	44/66	12,128,000
V2 Inspection & Field Operations	64,416,600	70/237	19,026,000
Sub-total	83,328,700	---	31,154,000
TOTAL	140,797,000	---	59,797,700
(in US \$)	65,331,050	---	29,898,850

The overall costs for a BTWC Organization are thus estimated as being less than half of those for the OPCW.

Conclusions

64. This Briefing Paper has considered what can be learned from existing relevant organisations, notably the World Health Organisation (WHO) and its counterparts for animal and plant diseases (OIE and FAO), and concludes that whilst the information obtained, analysed and distributed by these organizations will be essential for a future BTWC Organization, it would be inappropriate, and indeed would jeopardize the primary function and the neutrality of such organizations, to task them to carry out activities for the BTWC Organization. Although the United Nations Special Commission (UNSCOM) on Iraq has

been effective, its nature is unique and such an arrangement of part-time participants would be ineffective for a future BTWC Organization.

65. The detailed information available on the staffing and budget for the OPCW have been used to estimate the likely overall size and cost of a lean and mean BTWC Organization. It is concluded that the BTWC Organization would need about 200 posts and an annual budget of under \$30M; it would be well under half the size of the OPCW with a budget of less than half that of the OPCW.

ANNEX A: NATIONALITIES OF UNSCOM STAFF, AS OF 1 MAY 1997

UNSCOM Personnel in			
New York		Baghdad	
Country	No of staff	Country	No of staff
Argentina	1	Argentina	1
Australia	2	Australia	3
Austria	1	Canada	1
Brazil	1	Chile	41
Canada	2	France	5
France	3	Germany	1
Germany	4	Republic of Korea	2
Netherlands	1	New Zealand	12
New Zealand	2	Poland	1
Russia	2	Romania	2
Sweden	1	Russia	3
Switzerland	1	South Africa	1
UK	4	Sweden	1
USA	8	Switzerland	1
		UK	7
		USA	6

ANNEX B: ANALYSIS OF OPCW STAFF NUMBERS

(Based on Staff Numbers in reference 5 as amended by reference 6)

OPCW Organization	Number	Prospective BTWC Organization	Number	Change
Director General	5	Director General	3	-2
Security	11	Security	2	-8
Office of Deputy Director-General	5			-5
Health & Safety Branch	11	Health & Safety Branch	5	-6
Internal Oversight	6	Internal Oversight	2	-3
Office of Legal Adviser	4	Office of Legal Adviser	2	-2
Treaty Matters	3	Treaty Matters	1	-2
Internal Matters	2	Internal Matters	1	-1
Special Projects	2			-2
Subtotal	49	Subtotal	16	-33
Secretariat for Policy Making Organs	3	Secretariat for Policy Making Organs	2	-1
Conference Services Branch	3	Conference Services Branch	2	-1
Languages	23	Languages	18	-5
Conference Support	4	Conference Support	2	-2
Documentation	3	Documentation	2	-1
Total	85	Total	42	-43
Administration	2	Administration	2	---
Budget & Finance	2	Budget & Finance	1	-1
Budget	3	Budget	1	-2
Accounts	3	Accounts	2	-1
Disbursement & Treasury	6	Disbursement & Treasury	2	-4
Human Resources Branch	2	Human Resources Branch	1	-1
Recruitment	3	Recruitment	1	-2
Staff Administration	7	Staff Administration	3	-4
Information Systems Branch	4	Information Systems Branch	2	-2
Network Systems	5	Network Systems	3	-2
Systems Application	7	Systems Application	3	-4
System Security	1	System Security	1	---
Archives, Document management	7	Archives, Document management	3	-4
General Services Branch	2	General Services Branch	1	-1
Procurement	4	Procurement	1	-3
Travel & Transportation	7	Travel & Transportation	2	-5
Building/Facility Management	4	Building/Facility Management	1	-3
Training & Staff Development	4	Training & Staff Development	1	-3
Training Management	4	Training Management	1	-3
Total	77	Total	32	-45
External Relations	2	External Relations	2	---
Government Relations & Pol Aff	4	Government Relations & Pol Aff	2	-2
Media & Public Affairs	4	Media & Public Affairs	2	-2
Protocol	2	Protocol	2	---
Visa	3	Visa	2	-1
Total	15	Total	10	-5

International Cooperation & Assistance	2	International Cooperation & Assistance	2	---
Assistance and Protection	5	Assistance and Protection	4	-1
International Cooperation	4	International Cooperation	4	---
Total	11	Total	10	-1
Verification Division	3	Verification Division	2	-1
Confidentiality	7	Confidentiality	7	---

OPCW Organization	Number	Prospective BTWC Organization	Number	Change
Verification Division (contd)		Verification Division (contd)		
Declarations	2	Declarations	2	---
Information Processing	8	Information Processing	6	-2
Information Validation	8	Information Validation	6	-2
Policy and Review	4	Policy and Review	3	-1
Evaluation	4	Evaluation	3	-1
Industry Verification	7	Industry Verification	7	---
Chemical Demilitarization	7	Chemical Demilitarization	---	-7
Technical Support Branch	4	Technical Support Branch	2	-2
OPCW Equipment Store	8	BTWCO Equipment Store	2	-6
OPCW Laboratory	4	BTWCO Laboratory	4	---
Total	66	Total	44	-18
Inspectorate Division	2	Inspectorate Division	2	---
Operations & Planning Centre	21	Operations & Planning Centre	6	-15
Inspection Management	3	Inspection Management	2	-1
Inspection Team Personnel	211	Inspection Team Personnel	60	-151
Total	237	Total	70	-167
OVERALL TOTAL	491	OVERALL TOTAL	208	-183