

THE CBW CONVENTIONS BULLETIN

News, Background and Comment on Chemical and Biological Weapons Issues

ISSUE NO. 40

JUNE 1998

Quarterly Journal of the Harvard Sussex Program on CBW Armament and Arms Limitation

THE SCIENTIFIC ADVISORY BOARD OF THE ORGANIZATION FOR THE PROHIBITION OF CHEMICAL WEAPONS: THE ROLE OF SCIENCE IN TREATY IMPLEMENTATION

Kathleen Lawand

At its Second Session, the Conference of the States Parties to the Chemical Weapons Convention, the principal organ of the Organization for the Prohibition of Chemical Weapons (OPCW), directed the Director-General of the OPCW to establish the Scientific Advisory Board. In so doing, the Conference fulfilled its obligation under paragraph 21(h) of Article VIII of the Convention to adopt terms of reference of the Scientific Advisory Board.

The idea of a scientific advisory council was first mooted in 1987 by France's delegation to the Ad Hoc Committee on Chemical Weapons of the Conference on Disarmament, in acknowledgement of the threat posed by emerging scientific and technological developments to the effective implementation of the Convention, particularly of its verification regime. In order to avert this, it was proposed that the constitution of the OPCW provide a role for the scientific community in ensuring that the Convention remain a dynamic instrument capable of adapting to the latest scientific and technological developments. The underlying idea was that:

[the] scientific community has a universal calling, and ... must be in a position to transcend divergences in culture and in interest between States in order to provide an objective assessment of scientific and technological developments as they affect the Convention." {France, CD/916, 17 April 1989}.

One could hardly dispute the need for dispassionate scientific advice in relation to a treaty the implementation of which relies in large part on scientific and technological know-how. However, the economic and social impacts of every scientific development coupled with the fact that a scientific finding inevitably attributes power to those proclaiming it, or more accurately to those with the means to exploit and benefit from its development, put into question the "neutrality" of science and its role as an impartial dispenser of "truth". This is especially true in areas of science that remain uncertain or controversial, and in this regard one needs only to look at the way in which scientific studies on global warming have been manipulated in the climate change debate. Conversely, it is precisely this ambiguity of science that makes the independence of a scientific advisory body, acting at arms length from governments and the

political organs of international institutions, all the more critical.

The article examines the birth of the Scientific Advisory Board, and whether, under the structure created by the *Terms of Reference* adopted by the Conference, it can live up to the above-mentioned expectations.

Relevant provisions of the Convention

The Convention refers to the Scientific Advisory Board in Article VIII.21(h) and 45. From the convoluted language of these provisions, these elements can be drawn:

- As directed by the Conference, the Director-General is to establish the Scientific Advisory Board for the purpose of enabling him, in the performance of his functions, to render specialised advice to the Conference, the Executive Council or states parties, in areas of science and technology relevant to the Convention.
- The Director-General is responsible for the organization and functioning of the Scientific Advisory Board.
- The members of the Scientific Advisory Board are appointed by the Director-General in consultation with states parties, in accordance with terms of reference approved by the Conference.
- The members are appointed as independent experts serving in their individual capacity, on the basis of their expertise in the particular scientific fields relevant to the implementation of the Convention.
- The Director-General may also establish, in consultation with members of the Scientific Advisory Board, temporary working groups of scientific experts to provide recommendations on specific issues.

<i>Guest Article by Kathleen Lawand</i>	1-5
<i>Progress in The Hague: 22nd Quarterly Review</i>	5-13
<i>CWC ratifications and accessions</i>	10
<i>Progress in Geneva: 3rd Quarterly Review</i>	13-16
<i>News Chronology: February-May 1998</i>	16-38
<i>Forthcoming Events</i>	39
<i>Recent Publications</i>	39-40

- States parties may submit lists of experts to the Director-General.

It follows that the Scientific Advisory Board is to provide expert advice to the Director-General, who in turn advises the political organs. This relationship underscores the Board's independence, since the Director-General, as head of the Technical Secretariat, is an independent international civil servant answerable only to the Conference and the Executive Council, whom the Convention forbids from receiving instruction from any Government or source external to the OPCW {Article VIII.46}. The Convention further requires states parties to respect the "exclusively international character" of the responsibilities of the Director-General and other members of the Technical Secretariat, and not seek to influence them in the discharge of their responsibilities {Article VIII.47}. While members of the Scientific Advisory Board are not staff members of the Secretariat, the fact that the Convention gives the Director-General principal jurisdiction over its organization and functioning is a clear indication of the apolitical nature of the Board, which is to operate outside of the realm of influence of the OPCW's political organs and of its member states.

As stated above, access to the latest scientific and technological information is critical to the effective implementation of the Convention's verification regime. The Convention expressly recognises this in Article VIII.6: "In undertaking its verification activities, the Organization shall consider measures to make use of advances in science and technology". It further enjoins the Conference to convene special sessions to undertake reviews of the operation of the Convention, taking into account any relevant scientific and technological developments {Article VIII.22}. In addition, the Convention requires that the model agreements for the inspection of chemical weapons facilities and facilities producing Schedule 1 chemicals "include provisions to take into account future technological developments" {Part III.8 of the Verification Annex}. The Scientific Advisory Board will inevitably have a role to play in these matters. But this role is intended to be exclusively *consultative* and does not involve any decision-making responsibilities.

A commentary on the Terms of Reference

The *Terms of Reference* of the Scientific Advisory Board {annexed to C-II/DEC.10} were elaborated by member states through a series of informal consultations leading up to the Second Session of the Conference. The main points of contention related to the Scientific Advisory Board's composition, its functioning and, to a lesser degree, its role. Underlying the divergence of views on these constitutional issues were concerns regarding the degree of freedom of the Director-General in the appointment process and the relationship of the Scientific Advisory Board to its temporary working groups.

Composition

The provisions of the *Terms of Reference* on the composition of the Scientific Advisory Board are the result of protracted discussions between states parties. Under paragraph 3 of the *Terms of Reference*, the Director-General is required to appoint 20 members "from a list of nominees put forward by the States Parties", to serve "in their individual

capacity as independent experts". Paragraph 4 of the *Terms of Reference* provides criteria for the selection of board members, based on their qualifications, expertise and activity in relevant institutions, with preference to be given to persons "who are knowledgeable about the relevant scientific and technological developments, and who are familiar with the implementation of the Convention". In appointing members, the Director-General is also to make efforts at maintaining a balance between the areas of research, development and applications.

That the issue of the Scientific Advisory Board's composition was the last to be resolved before the draft *Terms of Reference* were submitted to the Conference for approval is indicative of the level of controversy surrounding the foregoing provisions. This played itself out as a tug-of-war between, on the one hand, those advocating a degree of discretion for the Director-General in the appointment process and, on the other hand, proponents of a requirement for equitable geographic distribution among the five regional groups referred to in Article VIII.23 of the Convention (the provision dealing with the composition of the OPCW's Executive Council).

Not surprisingly, division on this issue ran along the North-South divide. Developing states parties argued that an appointment process which gives preference to persons having access to the most recent scientific and technological developments unfairly advantages developed states parties. Developed states parties strongly resisted what they claimed was an attempt to politicise the constitution of the Board. In the end a compromise of sorts was reached: the *Terms of Reference* require the Director-General to appoint twenty members to the Scientific Advisory Board in consultation with states parties from a list of nominees provided by states parties, taking into account "the need for a comprehensive spread of relevant fields of scientific and technological expertise", and resulting in "a *fair distribution* of appointments from the regions" {paragraph 5, emphasis added}. It seems that states parties agreed that the Director-General could be trusted to make an appropriate selection, while recognising that science and technology is not the preserve of a particular regional group.

A related, though less contentious, issue was the extent to which the Director-General should be given a free hand in the selection of experts to serve as members of the Board. In the result, while the Convention only requires the Director-General to appoint members in consultation with states parties and while states parties *may* submit lists of experts to the Director-General, the *Terms of Reference* further oblige the Director-General to appoint members "from a list of nominees put forward by States Parties" {paragraph 3}, thus shrinking the pool of experts from which appointments can be made. The shortcomings of this additional requirement have taken little time to manifest themselves. Following a round of nominations ending in mid-April 1998, resulting in a list of 87 nominations, the Director-General has had to call upon states parties to submit additional candidates because of his inability to fulfil the *Terms of Reference*'s requirement that there be a balance between the areas of research, development and application, due to a shortage of expertise in many of the relevant scientific and technological fields. In his note to states parties on the sub-

ject, the Director-General remarked that “the overall number of genuinely eminent persons, such as full members of National Academies of Science, across the entire spectrum of nominations submitted thus far is still insufficient to allow a balanced and well-justified selection”.

The question of the appointment process of the Scientific Advisory Board is of course critical to the Board’s independence and impartiality. The *Terms of Reference* also provide for specific measures in this regard. In accordance with rules of procedure to be provided by the Director-General, a Board member must disclose to the Director-General any activity that may affect his or her impartiality or appearance of impartiality {paragraph 8(d)} and may be dismissed from his or her office “for just cause” {paragraph 8(f)}. It would also appear that a Board member may not communicate with a state party directly, but only through the Technical Secretariat {paragraph 8(e)}.

However, these laudable measures for the preservation of the Scientific Advisory Board’s independence and impartiality may be circumvented by budgetary constraints. In its decision approving the Board’s *Terms of Reference*, the Conference decided that the OPCW would be responsible only for costs associated with the annual meeting of the Board, and that any other meetings (i.e., *ad hoc* meetings of the Board or meetings of its temporary working groups) are to be held at no cost to the OPCW. In the result, a Board or working group member will be required to get funding from his or her Government, institution or employer to pay for his or her travel and *per diem* expenses, thereby arguably compromising his or her appearance of impartiality. A potential solution to this problem is found in the *Code of Conduct of the Technological and Economic Assessment Panel* (TEAP) and its subsidiary bodies, which provide advice to the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer. The Code requires members to annually disclose their sources of funding.

Another potential problem lies in relation to the Board members’ term of office. Paragraph 6 provides for a three year term, with a possibility of two consecutive terms of service. The absence of overlapping terms of office may render difficult the construction of an institutional memory to be passed on to future Board members.

Operation

In elaborating the draft *Terms of Reference*, states parties spent much time discussing the operation of the Scientific Advisory Board, and in particular its relationship with the temporary working groups established by the Director-General pursuant to Article VIII.45. States parties emphasised the need for flexibility in the provision of timely and effective scientific advice. It was acknowledged at the outset that a body of 20 experts could not properly advise on the broad range of issues relevant to the implementation of the CWC, each requiring specialised knowledge.

Consequently, the *Terms of Reference* provide for a Scientific Advisory Board functioning as a college of experts, knowledgeable about relevant scientific and technological developments and familiar with the implementation of the Convention, that “co-ordinate” the operation of a decentralised system of subject-specific temporary working

groups. It is in the latter that specific scientific and technological issues are thrashed out and recommendations are made to the Director-General. The Scientific Advisory Board as a whole meets only once a year, to elect a Chair {paragraph 8(b)} and to report to the Director-General on its activities during the previous year {paragraph 13}, consisting mainly of the activities of its working groups. It may also be convened by the Director-General in consultation with the Chair for *ad hoc* sessions, at the Director-General’s own initiative or at the request of the Executive Council or the Conference {paragraph 14}.

As provided by the Convention, the temporary working groups are established by the Director-General in consultation with members of the Board. In contrast to the composition of the Scientific Advisory Board proper, the *Terms of Reference* give the Director-General a larger pool of candidates from which to choose when appointing scientific experts to temporary working groups since, in addition to the nominees provided by states parties, he may select experts as suggested by Board members themselves {paragraph 10}. The co-ordinating role of the Scientific Advisory Board in the operation of the working groups is guaranteed by the requirement that each working group be chaired by a member of the Board, appointed for that purpose by the Chair of the Board with the approval of the Director-General. The temporary working groups provide recommendations on specific issues directly to the Director-General, within a specific time-frame {paragraph 9}.

Role and functions

The basic function of the Scientific Advisory Board is to assess and report to the Director-General developments in scientific and technological fields relevant to the Convention. Paragraph 2 of the *Terms of Reference* provides a non-exhaustive list of types of issues that may be brought to the Board. These include the provision of advice on changes to the Annex on Chemicals, including its Schedules, proposed by states parties. In this regard, the wording of paragraph 2(b) of the *Terms of Reference* makes clear that the Board cannot propose changes to the Annex on Chemicals at its own initiative, since only states parties are competent to do so pursuant to Article XV of the Convention. However, nothing would seem to prevent the Board from studying the development of “novel agents”, regardless of any proposed changes to the Schedules.

At its Second Session, the Conference identified two specific issues for the consideration of the Scientific Advisory Board. In the first instance, the Conference directed the Director-General to task the Scientific Advisory Board to address the scientific and technical aspects of the issue of when ricin production should be declared {C-II/DEC.5, 5 December 1997}. In the second, the Conference noted that the Scientific Advisory Board will elaborate guidelines on the evaluation of new and emerging verification technologies relevant to inspection equipment, to be approved by the Executive Council {C-II/6 (1998 Programme and Budget), note [070] (p. 116-117), Item A(c)(ii)}.

Experience of other scientific advisory bodies

At the time of writing, the Scientific Advisory Board was not yet up and running. Nonetheless, it may be possi-

ble to gauge its prospects for success by comparing its constitutional structure to that of the scientific advisory bodies of other inter-governmental organisations, in light of the experience of these bodies.

The International Atomic Energy Agency — SAC

The principal scientific advisory body of the International Atomic Energy Agency (IAEA) was the Scientific Advisory Committee (SAC), established in 1958 for the purpose of advising on the annual review of the IAEA's technical programmes. The SAC consisted of "eminent scientists" nominated by the Director General "with the concurrence of their respective Governments" and appointed by the Board of Governors.

The factors underlying the composition of the SAC are similar to those of the OPCW's Scientific Advisory Board: members were appointed in their personal capacity, on the basis of experience and activity in the relevant scientific fields while attempting to achieve a degree of balanced representation from the different regions represented by the Agency's respective member states. However, in contrast to the Scientific Advisory Board, the appointing authority of the SAC membership was the IAEA's executive organ, the Board of Governors. It is difficult to determine conclusively how this might have affected the SAC's work, though it has been said that its deliberations had been the scene of political skirmishes relating to "every major internal battle in the Agency" and its influence on the Board of Governors ranged "from negligible to almost decisive" {see P C Szasz, *The Law and Practices of the International Atomic Energy Agency*, IAEA, Vienna, 1970, at p 244}.

With time, the existence of a single body of eminent experts proved unworkable in view of the scientific developments in the nuclear field and consequent changes on the IAEA's technical programmes. In 1988, the Board of Governors reviewed the role of the SAC and decided to suspend its activities. Instead, review of the IAEA's technical programmes (e.g., fusion research, theoretical physics, safeguards, nuclear safety, transport, etc.) was entrusted, on a trial basis, to a number of special advisory bodies, thereby privileging a sectorial approach. In 1990, the Board of Governors assessed the sectorial reviews procedure and decided to continue to apply this decentralised system of subject-oriented advisory bodies, in spite of the criticism that the specialised advisory groups were "paying too much attention to their own sectors without taking account of the others or of the global priorities". In light of this criticism, it is perhaps felicitous that in its Scientific Advisory Board the OPCW has opted to retain a core of state-nominated experts akin to the SAC, while taking a subject-specific approach to scientific and technological advice.

The Montreal Protocol on the Protection of the Ozone Layer — TEAP

Pursuant to Article 6 of the Montreal Protocol on Substances that Deplete the Ozone Layer, the Meeting of the Parties has established three standing panels of experts — the Scientific Assessment Panel, the Environmental Effects Assessment Panel, and the Technological and Economic Assessment Panel (TEAP) — to report to it on their assessment of the control measures imposed by the Protocol on

the production and consumption of substances that deplete the ozone layer. The TEAP, which analyses technical options for and economic costs of controls on the use of ozone-depleting substances, is the most important of these panels. Members are appointed by the Meeting of the Parties, from nominations made by individual parties or by the panel itself, as experts acting in their personal capacity.

The TEAP operates largely through seven standing Technical Options Committees (TOCs), each covering a specific issue, and through temporary subsidiary technical bodies. Geographical balance is an important aspect of the appointment process for both the TEAP and the TOCs, consistent with the differentiated responsibilities of developed and developing parties under the Protocol. Each TOC is headed by two co-chairs appointed by the Meeting of the Parties, one from a developed state party and one from a developing state party. The co-chairs are also members of the TEAP. All other members of a TOC are nominated by individual parties or the TEAP and appointed by the TOC's co-chairs themselves, in consultation with the TEAP.

Though chaired by TEAP members, the TOCs operate independently from the TEAP. The TOCs and the temporary subsidiary bodies report to the TEAP which forwards the reports "without modification" to the Meeting of the Parties, together with any comments it wishes to provide {paragraph 4.3 of its *Terms of Reference*}.

As far as scientific advisory bodies are concerned, the TEAP has been hailed for its success in providing timely and effective advice to the Meeting of the Parties, the Protocol's political organ. It is on the basis of TEAP reports that the Meeting of the Parties has adopted adjustments to and reductions of permissible production and consumption of controlled substances and amendments to the Annex listing controlled substances to be reduced or phased-out. The success of this model — consisting of several subject-specific standing committees and temporary bodies co-ordinated by a panel of experts appointed by states parties — is encouraging for the OPCW's Scientific Advisory Board which is similarly structured.

Framework Convention on Climate Change

In contrast to the TEAP, the Subsidiary Body for Scientific and Technological Advice (SBSTA) under the Framework Convention on Climate Change (FCCC) cannot boast of a good report-card. It is perhaps no coincidence that it is set up as a subsidiary organ of the Conference open to participation by all states parties and composed exclusively of government representatives. In the result, political disputes have frequently dominated its meetings.

Five years after entry into force of the FCCC, the SBSTA has been incapable of setting up panels similar to the TEAP to study and advise on specific issues. The intention behind the creation of such panels was precisely to provide objective scientific advice in the face of the highly politicised nature of the discussions taking place in the SBSTA. The initiative failed largely due to disputes between developed states parties and developing states parties as to whether membership in the panels should be based on equitable regional distribution and whether experts should be appointed in a personal or in a representative capacity. The reasoning behind either side of the debate is virtually

identical to that which took place in relation to the composition of the OPCW's Scientific Advisory Board, described above, with the exception that debate in the SBSTA has resulted in paralysis. In order to fill the resulting vacuum, the Climate Change Secretariat has had to compile a roster of experts from which it draws consultants to assist it in its work.

Conclusions

This article has addressed some of the challenges involved in setting up a system for the provision of objective and effective scientific advice within a process that is inherently political.

It would be too much to hope for purely objective scientific advice, given the political implications of scientific findings and the sometimes ambiguous premises on which they are founded. But decision-making organs of international organizations need to have timely access to credible information on the latest scientific and technological developments relevant to the implementation of the treaties which they oversee. This is a functional necessity: without such information, implementation measures and aspects of the treaty itself would fade into obsolescence and irrelevance. Past experience shows that it is clearly to the advantage of an international organization to have a scientific advisory body which is as de-politicised as possible, and at a minimum this requires, firstly, a membership composed of persons acting in their personal capacity and not as representatives of their governments or of non-state interest groups, and secondly, a functional structure which shields the body and its members from the influence of the international organisation's political organs and its member States.

The states parties to the Chemical Weapons Convention were well aware of these facts. As provided by paragraphs 21(h) and 45 of Article VIII and as detailed in the *Terms of Reference* of the Scientific Advisory Board adopted by the Conference, Board members are appointed by the Director-

General of the OPCW in their individual capacity as independent experts. Expert advice on scientific and technological developments that could affect the operation of the Convention is provided to the Director-General who in turn advises the political organs of the OPCW.

Pursuant to its *Terms of Reference*, the operational structure of the Scientific Advisory Board is that of a core of eminent scientists of international standing which provide recommendations on specific scientific issues through temporary subject-specific working groups while maintaining an overall co-ordinating role in the advisory process. In this, the OPCW has opted for both a holistic and a sectorial approach to scientific advice, an approach which has proven highly successful in the case of the Technology and Economic Assessment Panel set up by the Parties to the Montreal Protocol on the Protection of the Ozone Layer.

Over and above the issues that have been flagged in this article in relation to the protection and enhancement of the Board member's independence and impartiality, which are fundamental to the integrity of the advisory process, questions remain as to transparency. What has not been addressed in the *Terms of Reference* is whether, for instance, meetings of the Scientific Advisory Board are open to observation by relevant international agencies or scientific institutions, or whether its reports are accessible to the public. Some form of public access to the Board's reports and recommendations would be a welcome means of promoting a transparent, and therefore accountable, process of scientific advice.

Until June 1998, Kathleen Lawand was Legal Officer in the Legal Division of the OPCW. This article is based on a paper presented at the Ninth Workshop of the Pugwash Study Group on Implementation of the Chemical and Biological Weapons Conventions, May 1998. The views expressed are those of the author in her personal capacity.

Developments in the Organization for the Prohibition of Chemical Weapons

This quarterly review of the activities of the Organization for the Prohibition of Chemical Weapons (OPCW), from mid March to early June 1998, covers some major landmarks in the Organization's development. Over a period of weeks starting at the end of March, the OPCW moved into its new headquarters building in The Hague. After years of operating out of temporary and dispersed accommodation, all the constituent elements of the Organization are now housed under one roof (except for the OPCW Laboratory and Equipment Store which remains at Rijswijk, outside The Hague). The first anniversary of the entry into force of the Chemical Weapons Convention fell on 29 April. The new OPCW headquarters were officially opened on 20 May by Queen Beatrix of the Netherlands at

a ceremony attended by many dignitaries, representatives of member states, the media and non-governmental organizations. Finally, this period also witnessed the first rotation in the membership of the Executive Council as those members which had been elected for one year were either replaced or re-elected for another term. The tenth session of the Council, scheduled for 16-19 June, will be the first with the new member states present and the new officers in position. It will also be the first to take place in the Ieper Room, the new Executive Council chamber.

The membership of the Organization has continued to grow during the period under review. Three additional states, Lithuania, Benin and Gambia, have deposited their instruments of ratification with the Secretary-General of the