

Final

**Economic and technological development under the
Chemical Weapons Convention**
(discussion paper)

by
John Hart
(SIPRI)

Presented at the
'Preparatory workshop for the First Review Conference of the Chemical Weapons
Convention (CWC)'
19 March 2003
Chemical and Biological Arms Control Institute (CBACI)
Washington, DC
United States

I. Introduction

On 28 April 2003 a Special Conference of the States Parties to the Organisation for the Prohibition of Chemical Weapons (OPCW) will be convened to ‘take into account any relevant scientific and technological developments’, as well as any matters placed on the agenda which are judged to require the attention of the conference.¹ While all parties view the timely destruction of chemical weapon stockpiles and former production capabilities as a core activity, other core activities are seen as having varying degrees of importance by different states. Developing countries, in particular, place great importance on the Chemical Weapons Convention’s (CWC) economic and technological development provisions (Article XI) that are also a major attraction for such countries to join the treaty.² The review conference (RevCon) will, *inter alia*, consider the current and future implementation of these provisions. The ultimate scope and scale of the OPCW’s economic and technological development-related activities are still unclear. In addition, the relationship between the implementation of these provisions and activities carried out under informal export control arrangements, such as the Australia Group (AG), is the subject of continuing debate and disagreement. These arrangements are designed to improve the effectiveness of participating states’ national export controls preventing equipment, technology or materials from being misused for offensive chemical or biological weapon programmes. Part of the debate is related to the effectiveness of multilateral arms control and disarmament agreements. While the more operational level aspects can, in principle, to some extent be resolved, the overall disagreement reflects broader, more long-term political and philosophical differences among the countries involved.

Preparations for the Review Conference

An OPCW open-ended working group on the First RevCon, established in 2001, has developed draft rules of procedure for the conference and collected and generated supporting documentation.³ Participants have discussed possible agenda items in consultation with national governments. National papers, as well as a number of background papers by independent institutes and analysts, have also been produced.⁴ Two broad approaches have been identified on how to conduct the CSP. One, the more traditional approach, is to review the implementation of the treaty article-by-article. The other one, which has subsequently been adopted by the working group, is to focus on a more limited number of well-conceptualized core issue areas, such as universality, national treaty

¹ CWC, Article VIII, para. 22.

² CWC, Article XI.

³ ‘Note by the Secretariat, attendance by non-governmental organizations at the First Review Conference’, OPCW document WGRC-1/S/1, 28 Feb. 2002.

⁴ Hart, J., Kuhlau, F., Sutherland, R. and Zanders, J. P., *Maintaining the Effectiveness of the Chemical Weapons Convention*, 19 pp. SIPRI policy brief presented at the Organisation for the Prohibition of Chemical Weapons; The Hague, Netherlands, 8 Oct. 2002; International Union of Pure and Applied Chemistry (IUPAC), *Impact of Scientific Developments on the Chemical Weapons Convention*, Report by the International Union of Pure and Applied Chemistry to the Organization for (sic) Prohibition of Chemical Weapons and its States Parties, (IUPAC: 2002); *Pure and Applied Chemistry*, vol. 74, no. 12 (12 Dec. 2002) issue, entitled ‘Impact of Scientific Developments on the Chemical Weapons Convention’, consists of conference proceedings of IUPAC Workshop, Bergen, Norway 30 June-3 July 2002; Kenyon, I. R., ‘The Chemical Weapons Convention and OPCW: the challenge of the 21st century’, *The CBW Conventions Bulletin*, no. 56 (June 2002), pp. 1-2; Perry Robinson, J., ‘What should be the scope of the CWC?’, *The CBW Conventions Bulletin*, no. 55 (Mar. 2002), pp. 1-4; and Verification Research, Training and Information Centre (VERTIC), *Getting Verification Right, Proposals for Enhancing Implementation of the Chemical Weapons Convention*, (VERTIC: London, 2002).

implementation, technological developments and verification issues.⁵ It is hoped, in view of the relatively limited amount of time available to the parties to reach decisions, that this approach will facilitate agreement on key issues thereby avoiding lengthy, open-ended or highly detailed discussions on less fundamental, operational matters.

As of 14 March, no agreement had been reached on an agenda for the RevCon. The Executive Council (EC), which meets on 18-21 March, is tasked to agree on one. If it fails to do so, the EC will need to meet again, either shortly before or concurrently with the RevCon, until such time as agreement on an agenda has been reached.⁶

Possible format and outcome

An indication of the format and possible outcome of the conference will be the levels of representation governments send. If the level is high (e. g., ministerial level), the chances for reaching agreement on specific issues during the conference will be greater as, once the conference begins, fewer matters will have to be referred back to national capitals for a decision. The level of representation will also indicate the level of attention governments give to the conference.

As of 14 March, no high-level representatives had confirmed their participation. Kofi Annan, Jayantha Dhanapala, and John Bolton⁷ are among the senior officials who have been invited. Annan has indicated he will be unable to attend. However, as at previous Conferences of the States Parties, a statement will probably be presented in his name by another UN official. The level of representation sent by most countries is often partly dependent on the level of representation that a more limited number of 'key' countries elect to send.⁸ The Hague city council is also planning to mark the occasion and has invited senior national representatives to related events. This may have the effect of raising the level of representation. Finally, international developments related to Iraq or terrorism may either raise or lower the level of representation and degree of attention governments give to the RevCon.

The RevCon may consist of two broad types. One would be a conference which gives significant emphasis on taking specific, substantive decisions to address individual outstanding implementation issues. The second, more politically oriented, type would emphasize political principles in which parties reaffirm the general obligations and principles contained in the CWC. While the latter is to be expected, the degree to which the former approach will be followed is unclear. It is highly unlikely that parties are contemplating serious changes to implementation procedures or treaty amendments.

II. Article XI provisions

Article XI states:

⁵ Hart, J., Kuhlau, F., Sutherland, R. and Zanders, J. P., *Maintaining the Effectiveness of the Chemical Weapons Convention*, 19 pp. SIPRI policy brief presented at the Organisation for the Prohibition of Chemical Weapons, The Hague, Netherlands, 8 Oct. 2002.

⁶ The EC continued to meet during the Seventh CSP, held on 7-11 October 2002, for example, as it was unable to agree on a budget proposal for the CSP's consideration.

⁷ US Under Secretary of State for Arms Control and International Security.

⁸ Since late 2002, the US delegation to the OPCW has been headed by Ambassador Eric M. Javits. Previously, the delegation had been headed by lower-level officials.

‘The provisions of the Convention shall be implemented in a manner which avoids hampering the economic or technological development of States Parties, and international cooperation in the field of chemical activities for purposes not prohibited under this Convention including the international exchange of scientific and technical information and chemicals and equipment for the production, processing or use of chemicals for purposes not prohibited under this Convention’;⁹ and

‘Subject to the provisions of this Convention and without prejudice to the principles and applicable rules of international law, the States Parties shall:

(a) Have the right, individually or collectively, to conduct research with, to develop, produce, acquire, retain, transfer, and use chemicals;

(b) Undertake to facilitate, and have the right to participate in, the fullest possible exchange of chemicals, equipment and scientific and technical information relating to the development and application of chemistry for purposes not prohibited under this Convention;

(c) Not maintain among themselves any restrictions, including those in any international agreements, incompatible with the obligations undertaken under this Convention, which would restrict or impede trade and the development and promotion of scientific and technological knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;

(d) Not use this Convention as grounds for applying any measures other than those provided for, or permitted, under this Convention nor use any other international agreement for pursuing an objective inconsistent with this Convention;

(e) Undertake to review their existing national regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of this Convention’.¹⁰

III OPCW economic and technological development activities

The OPCW’s International Cooperation & Assistance Division (ICA) is responsible for implementing Article X provisions on assistance and protection against chemical weapons and Article XI provisions on economic and technological development. The OPCW’s 2003 Programme and Budget for ICA programmes is 4.16 million euros,¹¹ an approximately 12.4 per cent increase over the 2002 level.¹² The importance of ICA programmes was a consistent theme in most statements made from the floor of the Seventh Conference of the States Parties held on 7-11 October 2002.

While some ICA activities do not fall strictly under Article XI, they nevertheless contribute to the economic and technological development of participating states. ICA activities and programmes include: the Associate Programme, the Conference Support Programme, the

⁹ CWC, Article XI, para. 1.

¹⁰ CWC, Article XI, para. 2.

¹¹ The Director-General is authorized to transfer up to 336 000 euros over this amount.

¹² ‘Seventh Session of the Conference of the States Parties to the Chemical Weapons Convention concludes’, OPCW press release 65/2002, 15 Oct. 2002.

Equipment Transfer Programme, the Internship Support Programme, the Laboratory Assistance Programme, and various research projects.

Associate Programme

The Associate Programme is designed to contribute to the development of chemistry and chemical engineering by, *inter alia*, providing the opportunity for scientists and engineers from developing countries to participate in a training course at a university in a developed country after which the participants are attached to a modern chemical industry facility for three weeks. Over the past three years 36 people have participated in the programme. Twenty-four individuals will be selected to participate in the next programme scheduled to be held in July-September 2003.

Conference Support Programme

The Conference Support Programme is designed to provide financial support for meetings on CWC-related topics in cases where such meetings will assist individuals, institutions and scientific organizations in developing countries.

Equipment Transfer Programme

The Equipment Transfer Programme facilitates the voluntary transfer of spare laboratory equipment from developed member states to less developed member states. The programme also provides training support to recipients on the use and maintenance of the equipment.

Internship Support Programme

The Internship Support Programme is designed to assist scientists and engineers from developing countries to gain practical experience in advanced research laboratories and other facilities in developed countries.

Laboratory Assistance Programme

Laboratories that wish to become designated OPCW laboratories obtain information and assistance to do so through the Laboratory Assistance Programme. The programme, which includes staff training, seminars, and internships, is partly designed to improve the technical capabilities of the interested institution.

Research projects

The OPCW supports a variety of research projects designed to promote scientific and technical knowledge for peaceful purposes.

IV. Australia Group

The AG is an informal export control arrangement that was established in 1985 in response to the use of chemical weapons during the Iran-Iraq War.¹³ The AG, which currently has 34 participants,¹⁴ cooperates in developing and coordinating member states' national export controls to hinder or prevent the use of equipment or materials in offensive biological or chemical weapons programmes. There are two main types of activities that AG participating states engage in: the harmonization of national export controls among participating states and the sharing of information, including intelligence information. Participating states have agreed to adopt common control lists which include licensing requirements for 54 chemical weapon precursors, all of which also have peaceful applications, as well as certain dual-use chemical and biological manufacturing equipment, technology, and biological agents and pathogens. Recent trends in the AG include: the adoption of additional transparency measures, including through the use of the arrangement's website, to describe AG activities and requirements; the introduction and refinement of guidelines for transferring dual-use materials, equipment and technology; modification of control lists; and the implementation of measures to enhance exchange of information, including that derived from intelligence and law enforcement.

V. Relationship between the AG and CWC

Philosophical and political differences

A number of countries believe that the AG and other export control mechanisms should be abolished in favour of the import/export restrictions and related commitments contained in multilateral agreements such as the CWC. The nature and purpose of the AG goes to the heart of a broader international political debate on how national export controls could or should be reconciled with commitments undertaken within multilateral arms control and disarmament treaty regimes. While it is unlikely that the broader philosophical and political differences will disappear, it is possible, in principle, to consider some of the operational-level matters -- both to clarify the nature of the differences and, perhaps, to resolve specific difficulties.

Operational-level considerations

AG participants reportedly consider approximately 2-3 million requests for transfers per year. Typically less than one-half of one per cent are denied. Almost every denial involves one of four or five states: Iran, Iraq, Libya, North Korea and Syria. It is unknown to what extent the existence of AG guidelines discourages requests that would otherwise be made.

The AG is not a formal 'group' with a formal organizational mandate. Partly for this reason, participants do not refer to themselves as 'members', but as 'participants'. There is

¹³ See URL <<http://www.australiagroup.net/>>.

¹⁴ Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Republic of Cyprus, Denmark, European Commission, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom and the United States.

little, if any, disagreement over a country's right to adopt and implement export controls. The right of governments to communicate regularly with one another on specific areas of concern is also not questioned as a matter of principle. When and how informal communication on cooperative measures becomes objectionable to some in practice is unclear.

The prevention of chemical warfare is a fundamental objective of both the AG and CWC. The disagreement arises in how this goal is best achieved. There are significant differences between AG control lists and CWC requirements, both in terms of how they are structured and how they are implemented, which could be addressed to facilitate broader agreement. The CWC contains reporting requirements on the transfer of Schedule 1, 2 and 3 chemicals. Parties may not transfer Schedule 1 and 2 chemicals to non-parties. Schedule 3 chemicals may be transferred to non-parties if the chemical is not retransferred and if an end user certificate assuring that there will be no further transfers are provided. Unlike the AG control lists, the CWC does not deal with transfers of equipment. The AG control lists cover fewer chemicals than are listed in the CWC's Annex on Chemicals. The AG chemical control list includes only precursors, most, but not all, of which appear on CWC Schedules.

Implementation of some CWC declaration requirements has been uneven, including differences in the methodologies used to collect and report Aggregate National Data (AND), low concentration thresholds for the declaration of Schedule 2 and 3 chemicals and a number of practical difficulties that make it difficult to reliably track the world's chemical trade. The CWC requires that parties provide AND to the Secretariat on (a) the production, processing, consumption, import and export of Schedule 2 chemicals and (b) the production, import and export of Schedule 3 chemicals. However, as until recently, there has been no agreed format for doing this. Parties reported the transfers using different formats. In addition, Schedule 2 and 3 chemicals appearing in mixtures at low concentration need not be declared and as final agreement has not yet been reached on these thresholds parties are again applying different thresholds and methodologies. Some, for example, determine the threshold by weight, some by volume and some by a combination of both. The existence of free trade zones and free ports has further complicated the reporting and tracking of scheduled chemicals. It should be remembered that the implementation of any agreement, however, entails operational-level difficulties. This does not necessarily mean the agreement is ineffective. It is also important to note that the process of reconciling the various problems is beneficial in itself as it allows the organizations and individuals to communicate with one another and thereby achieve a better understanding of the practical steps that may be undertaken to improve treaty implementation.

VI Conclusion

The RevCon will almost certainly consider the current and future implementation of the CWC's economic and technological development provisions. The broader political disagreement between countries that support ad hoc export control arrangements and those countries which feel that such arrangements are incompatible with the CWC giving countries the unrestricted right to peaceful economic and technological development will continue. In principle, it may be possible to resolve specific, operational-level matters even while the broader political disagreement remains.

Annex 1

Possible discussion topics

Derivation and use of information from national technical means, including intelligence.

How lists of countries suspected or accused of having chemical or biological weapon programmes are developed. Who develops them. Standard of evidence or proof. Protection of intelligence sources and methods. Role of political considerations. Differences in interpretation and analyses by various countries. Analysis of intent. Role of political considerations in such an analysis.

Distinguishing between offensive and defensive programmes. Distinction between 'research' and 'development'. When does basic research become applied development?

Implementation of Article IX provisions on consultations, cooperation and fact-finding.

Use of non-official information by the OPCW's three constituent organs -- the CSP, the EC and TS -- under non-challenge inspections, challenge inspections and informal consultation, clarification and fact-finding procedures.

Non-challenge inspections under the CWC are based information contained in national declarations. Ie, official information rather than other information derived from non-official sources. Relationship to the General Purpose Criterion.

Under what conditions does a national right to develop and implement export controls become incompatible with technological cooperation and assistance provisions contained in multilateral arms control and disarmament agreements?

Assuming the AG were abolished (ie, the name no longer existed) to what extent would communications among like-minded countries be ascertained or restricted?

Meaning of 'verification' and 'compliance' in actual treaty implementation.

IAEA's strengthened integrated safeguards system, including country-wide analysis, use of other information (eg, commercial satellite imagery, intelligence information. Experience of UNMOVIC (eg, meaning of compliance, verification, role of UN Security Council)

Practical difficulties:

- The CWC covers chemicals only. Not equipment.
- CWC implementation is focused on scheduled chemicals
- AND collection and reporting methodologies
- low concentration thresholds and reporting methodologies

How can the RevCon act to address some of the practical implementation difficulties (eg, unevenness in national implementing legislation both in terms of content and application)

Will changes in industry and business eventually render ad hoc export control and/or national export control arrangements irrelevant? If not, why not? If so, when and what policy options would countries that currently participate in such arrangements undertake?

Issues the RevCon should not consider?