



## **Chemical disarmament: advent and performance of the OPCW**

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FOLLOWING THE EXTENSIVE USE of chemical weapons (cw) in the First World War, there were preliminary discussions at the League of Nations in the early 1920s on the feasibility of negotiating a chemical disarmament treaty. On the issue of verification of ‘non-production’ of cw by the chemical industry, however, it was concluded that, ‘it would be useless to seek to restrict the use of gases in wartime by prohibiting or limiting their manufacture in peacetime’.<sup>1</sup> So diplomats settled for the easier option of prohibiting the use of cw based on the principles of international humanitarian law—as specified in the 1925 Geneva Protocol—which lacked any verification mechanism.<sup>2</sup> But the use of cw since 1925, most notably in the 1980–88 Iran–Iraq War, demonstrated the limited effectiveness of the Geneva Protocol and the need for a chemical disarmament treaty.

Negotiation of the Chemical Weapons Convention (cwc)<sup>3</sup> commenced in the Geneva-based Conference on Disarmament in 1969 and was finally concluded in 1992.<sup>4</sup> Although this 23-year process was slow and tortuous, it was ultimately rewarding. Unlike the Geneva Protocol, the cwc requires the complete elimination of cw and introduces a verification regime that has been designed to provide assurance of compliance by states parties, while not hindering the development of the peaceful chemical industry. The cwc was justifiably heralded as a major breakthrough in multilateral arms control. It was the first comprehensively verifiable multilateral treaty that completely banned an entire class of weapons and firmly limited activities that might contribute to the production of such weapons. It went further than any previous treaty in terms of the depth, extent and intrusiveness of its verification provisions.

Verification under the cwc includes compulsory national declarations of relevant industrial and military activities, and routine inspections of declared industrial

and military facilities. An additional feature is provision for a 'challenge inspection', whereby a state party can request an inspection of any site in another state party at short notice. The international community's concern at the extensive use of CW by Iraq against Iranian soldiers, civilians and Kurds in the mid-to-late 1980s, as well as the improvement in international relations after the end of the Cold War, were key factors enabling the conclusion of CWC negotiations in 1992.

The Organization for the Prohibition of Chemical Weapons (OPCW) was established in The Hague, Netherlands, to administer the CWC. Eighty-seven states were party to the Convention on its entry into force on 29 April 1997. By the end of that year, there were 105 states parties, including: Russia and the US, the two largest possessors of chemical weapons; the major chemical producing and exporting states of Europe and Asia; and many of the major developing nations with chemical production capabilities. Since the end of 1997, a further 23 countries have either ratified or acceded to the Convention, bringing the total number of states parties to 128.<sup>5</sup> At the end of 1999, there were still 41 signatory states that had not ratified the agreement, and 22 non-signatory states.

This chapter examines the early operational phase of the CWC. In particular, it looks at the creation of the OPCW and the early experience of CWC implementation between entry into force and the end of 1999.

### **Preparations for entry into force: establishment of the OPCW**

One month after the CWC signing ceremony in Paris in January 1993, the Preparatory Commission (PrepCom) of the OPCW was set up in The Hague. Under the terms of the Paris Resolution,<sup>6</sup> it was assigned a number of tasks, including:

- establishing the new international Organization;<sup>7</sup>
- developing detailed regulations and verification procedures;
- resolving many detailed provisions for the operation of the CWC; and
- assisting signatory states in their preparations to ratify the Convention.

To accomplish its assigned tasks, the PrepCom, with the support of the Provisional Technical Secretariat (PTS), created a number of subsidiary bodies, like committees, expert groups and task forces. Given that it took longer than expected to achieve 65 ratifications, the PrepCom gained some 'extra time' over the two years that were originally earmarked for its preparations.<sup>8</sup> This time was well spent on establishing the Organization (completing tasks that had suffered unanticipated delays,

such as construction of the OPCW building and laboratory) and outreach programmes to signatory states (including various workshops and regional seminars). With regard to the development of verification provisions by the expert groups, though, the delay gave signatory states more time to attempt to renegotiate CWC provisions, rather than developing practical implementation procedures that accurately reflected the agreed text. A minority of states appeared to be concerned mostly with minimising the cost and intrusiveness of the OPCW and maximising the protection of confidential information, as opposed to achieving effective verification. As a result, there were many unresolved issues that were referred to the First Conference of the States Parties (First CSP) for further consideration.

### **The organs of the OPCW**

The OPCW consists of the following organs: the Conference of the States Parties (CSP); the Executive Council (EXCO); and the Technical Secretariat (TS).

#### ***The Conference of the States Parties***

The First CSP on 6–24 May 1997 elected a Director-General, Ambassador José Mauricio Bustani of Brazil, and members of the EXCO. It also adopted the recommendations of the PrepCom, including: declaration formats and detailed procedures for verification and the conduct of inspections; draft OPCW policies on confidentiality, health and safety, media and public affairs; and visa procedures for OPCW inspectors.<sup>9</sup> The First CSP endorsed other PrepCom recommendations, such as those on the voluntary fund for assistance to victims of a CW attack, and the data bank on protection against CW use. Issues that related to the OPCW budget provoked the most intensive and controversial negotiations. These included staff levels in the TS, an acceptable formula for determining the costs that CW possessors should pay for verification activities associated with the destruction of CW and Chemical Weapons Production Facilities (CWPFS),<sup>10</sup> and the budget for technical co-operation and assistance. Many issues were agreed on an interim basis on the understanding that decisions taken for the 1997 OPCW budget would not prejudice those pertaining to subsequent budgets. Furthermore, the First CSP adopted a number of administrative arrangements, like OPCW staff rules and regulations, the transfer of property (from the PrepCom to the OPCW), and the Headquarters Agreement with the host country. These are examples of the many time-consuming arrangements that were necessary to create a new international organisation and to achieve an operational convention.

Subsequent CSPs have followed the same pattern as the First. At the Second (1–6 December 1997), Third (16–20 November 1998) and Fourth (28 June–2 July 1999), the major issue was approval of the draft OPCW budget, prepared by the EXCO. Each CSP has also provided the opportunity for states parties to express concerns about the status of implementation.

### ***Executive Council***

Between the First CSP and the Second CSP, the EXCO held regular sessions for approximately one week each month. More recently, the pattern of meetings has changed, with a regular session of the EXCO every couple of months and short ‘special meetings’ to address a particular issue when necessary. The EXCO’s most time consuming and difficult task has been consideration and development of the draft OPCW budget for the following year. At each session, it has reviewed the status of CWC implementation and considered many administrative and technical issues, including several draft Facility Agreements.<sup>11</sup> Finally, the EXCO has dealt with requests for conversion of CWPFS for purposes not prohibited under the CWC and matters associated with the handling and protection of confidential information, as well as with the confidentiality audit on the OPCW’s electronic document management system (EDMS).

Unfortunately, the EXCO has been characterised—even more than one might have anticipated—by considerable politicisation, inertia and conservatism. As a result, there have been difficulties in reaching decisions, even on relatively straightforward matters. But usually there have been underlying political factors. A welcome trend has been the active role taken by interested observer states parties in the deliberations of the EXCO.

### ***Technical Secretariat***

The First CSP approved 405 positions (including 140 inspectors) for the TS in 1997. It was also agreed that an additional 71 inspectors would join the OPCW the following year to cope with the extra workload anticipated in 1998, resulting from new ratifications—in particular that of Russia, which has the largest stocks of chemical weapons. At the Second CSP, the staffing level within the TS was also a major issue, especially the need to have reasonable representation by states that had become parties after entry into force. Eventually, 15 new positions were created, bringing the total number of posts approved in the 1998 budget to 491. The 2000 budget increased this number to 507.

The creation of the TS, commencing with the embryonic PTS in 1993, is arguably the most successful aspect of the OPCW's early years. The TS, including the Inspectorate, is also earning the respect of states parties and the international community through the highly professional way that it has conducted its activities.<sup>12</sup> Following the decision of the Fourth CSP that the maximum tenure of TS staff should be seven years—based on agreement among states parties that the OPCW should not offer 'career positions'—concerns have been expressed about the possible adverse implications for the smooth operation of the Organization as a whole, in view of the highly specialised nature of many of the positions in the Inspectorate and in the Verification Division.

### **Roles and functions of OPCW organs**

Uncertainties have been experienced in the roles and functions of the CSP, the EXCO and the TS. For example, concerns have been raised that the EXCO is attempting to 'micro-manage' the TS. By the end of 1999, though, there were signs that the EXCO was beginning to work more effectively. In particular, the various organs appeared to be settling into their respective roles, with: the EXCO managing current issues; the TS having more flexibility to conduct its activities, benefiting from experience gained since entry into force; and the CSP acting as a forum to approve formally EXCO recommendations, to settle the OPCW budget, and to provide an annual review of OPCW operations.

While a small minority of states parties still appear inclined to stick to long-held positions, a more constructive atmosphere is evolving within the OPCW that is more conducive to reaching agreements. This is occurring between states parties and the TS, and between states parties from different regional groups. Despite their differences of view, the more active states have recognised that all parties to the Convention share core interests. And they appear more willing to see various issues and problems from the perspective of other states parties. This sense of co-operation among the majority has not yet been reflected in decision-making—which is usually by consensus—but it does augur well for the OPCW's future.

### **Status of current activities**

#### *Declarations*

After the CWC's entry into force, its parties were required to meet several important deadlines so that an effective verification regime could be established as soon as

possible. Each state party, for example, has to submit to the OPCW within 30 days of entry into force declarations identifying chemical weapon stockpiles, production and destruction facilities (under Article III, IV and V), and facilities involved in the production, processing and consumption of relevant chemicals (Article VI).<sup>13</sup>

Of most interest to many states parties were the declarations related to chemical weapon activities. Four states parties (India, Russia, the US and 'another state party') have declared possession of chemical weapons. Seven states parties (Belgium, China, France, Germany, Italy, Japan and the UK) have declared old and/or abandoned chemical weapons on their territory. Nine states parties (China, France, India, Iran, Japan, Russia, the UK, the US and 'another state party') have declared possession of existing or former CWPFS.<sup>14</sup> A clearer picture has already emerged, therefore, about past and present CW endeavour based on the declarations received so far. This is one of the major early benefits of the operational CWC.

But the overall rate of initial declaration submissions has been a major disappointment. Only 36 % of initial declarations, for instance, were filed within the specified timeframe in 1997, and, by the end of 1999, 26% of the states parties still had not submitted their initial declarations. In addition, it has become clear that a considerable number of initial declarations is incomplete. Several of the states parties yet to submit a declaration are very small countries with either extremely modest or no chemical industries, and they are not considered to pose a serious CW-proliferation risk. At least some of these states, however, have Discrete Organic Chemical (DOC) production facilities, which would be suitable for CW purposes.

Concerns have been expressed in EXCO meetings and during CSPs about the serious implications of 'technical non-compliance' for the successful implementation of the Convention, including the application of Article VI (chemical industry) verification in a fair and balanced manner. It has been recognised that the establishment of a legal framework for national implementation of the CWC and the declaration requirements for states parties are complex. And some states have experienced difficulty in compiling the required information because of the technicalities involved. The TS, in co-operation with a number of interested states parties, has offered to assist those nations that have had problems in completing their declaration requirements.

Given that the TS has had to handle the majority of declaration-related documentation in hard-copy format, as opposed to storing and processing declarations and associated documentation electronically using an EDMS, the processing of

materials has been made considerably more difficult and labour intensive than originally planned. This was a result of the greater than anticipated time necessary to establish the system and to confirm its security status. It is expected that the EDMS will become available for processing declarations in 2000.

### ***Routine inspections***

The first OPCW inspection commenced on 1 June 1997 (just over one month after entry into force) at an American facility that was already in the process of destroying CW from the US stockpile. By the end of December 1999, the TS had carried out 617 inspections at 312 sites in 35 states parties. The breakdown of inspections is as follows:

- 14 to abandoned CW sites;
- 135 inspections at CW destruction facilities;
- 150 to CW production facilities;
- 91 to CW storage facilities;
- 25 to 'old CW' sites;
- 54 to Schedule 1 facilities;
- 110 to Schedule 2 facilities; and
- 38 to Schedule 3 facilities.

During this period, the OPCW inspectors spent a total of 39,211 days on missions. By the end of 1999, they had monitored the destruction of approximately 3,500 tonnes of chemical agents and almost one million munitions. The Inspectorate managed to meet the CWC-imposed timelines for the conduct of initial inspections of CW-related and Schedule 1 facilities.<sup>15</sup> But some of the verification-related timelines, such as the conclusion of Facility Agreements, have proved problematic.

To date, a large majority of industry inspections have been conducted at Schedule 2 facilities, which are located in a limited number of states parties. In 1998, for example, 79% of total industry inspections took place in only eight countries, and 101 of the (then) 121 states parties did not receive any industry inspections. This situation improved slightly in 1999 (27 states parties received at least one industry inspection), with the carrying out of a larger number of Schedule 3 inspections, and also with the development of a selection methodology aimed at achieving greater 'equitable geographic distribution'.<sup>16</sup>

Things should improve further in 2000 with the commencement of DOC inspections in May, the decision of the Fourth CSP that 'unused' Schedule 2 inspection

resources<sup>17</sup> can be used for Schedule 3 and DOC inspections, and the submission of outstanding initial declarations by states parties (a number of these are likely to have DOC facilities).

Overall, the OPCW, states parties and facility personnel are highly satisfied with the way that the industry inspections have been conducted. Although minor problems have occasionally arisen, inspections have, for the most part, been carried out smoothly and with the full co-operation of the inspected state party. Interestingly, most of the concerns expressed by industry representatives during the CWC negotiations and in the PrepCom have not eventuated. Indeed, the major problem has been with a small number of states parties which contend that they are receiving 'more than their fair share' of Schedule 2 inspections due to the US not having submitted its initial industry declarations.<sup>18</sup> At the same time, a number of smaller states parties yet to receive an industry inspection have petitioned the TS about the possibility of receiving inspections.

### ***Consultations, co-operation and fact-finding***

So far, only the US has reported that it has used Article IX procedures to consult and seek clarifications from several states parties on the information provided in their declarations. In a number of cases, the US has stated that it has achieved satisfactory resolution of outstanding issues through such consultations.

No Challenge Inspections had been requested or conducted by the end of 1999. But several Practice Challenge Inspections (PCIs) had taken place, including some in collaboration with OPCW inspectors. In an October 1999 PCI, the exercise simulated the entire challenge inspection process from the submission of the request and the convening of a special EXCO session to consider it, through to the conduct of the inspection and the preparation of a final report. These PCIs are viewed as valuable experience for the EXCO, the TS and states parties, in preparing for the possibility of a real challenge inspection.

No Investigations of Alleged Use (IAU) had been requested or carried out by the end of 1999. Preparations have been made, though, for the possibility of an IAU. In October 1999, for example, a combined exercise focussing on IAU and the delivery of assistance was conducted in the Czech Republic. The 'investigation team' comprised 23 OPCW inspectors; observers from 10 states parties were also present. The exercise, which focussed on the necessary field operations for an IAU, underscored the importance of human factors, such as interviewing techniques and the collection of evidence, as well as the need for appropriate equipment.



### ***Protection assistance***

By the end of 1999, only 58 states parties had provided information on the assistance they are able to provide (pursuant to Article x: assistance and protection against chemical weapons) to help another state party in the event of a cw attack, although notification of this is required within 180 days of entry into force. Nevertheless, the ts and a number of states parties are becoming active in this area. The OPCW 'Protection Network' (composed of experts from states parties) held its first meeting in October 1999, with the objective of developing a Protection Database to assist in the provision of relevant data on chemical defence to states parties.

### ***International co-operation***

Since entry into force there have been a number of developments in the International Cooperation and Assistance Division, which is tasked with initiating a range of programmes aimed at promoting technical co-operation and assistance between states parties. This has included a programme to facilitate participation in international meetings in the fields of chemistry and chemical technology, and an experimental information service, which has begun to receive attention, especially from the chemical industry in developing states parties. The ts also released some initial funds for the first in a series of programmes to support the improvement of technical competence at national chemical analytical laboratories.

There was less progress on other aspects of Article xi, though, such as national export licensing measures. There still appears to be misunderstanding in some quarters about the valuable role of these measures in enabling states parties to avoid providing (even inadvertent) assistance to cw proliferation programmes, as required under Article 1 of the cwc. Another issue related to Article xi and export licensing is whether all items of OPCW inspection equipment should be commercially available to all states parties.

## **Future challenges**

### ***Adherence to CWC timelines***

One of the most immediate challenges facing the new Organization is the adherence of all states parties to cwc timelines. In addition to fears about sticking to cwc declaration-related schedules, concerns have also been expressed about whether all cw possessor states parties can meet cw destruction timeframes. (Under the provisions of the cwc, each state party possessing chemical weapons is required to

destroy them within 10 years—with a possible five-year extension—of entry into force.) So far, the US has destroyed a significant portion of its chemical weapons, and is expected to meet the CWC 10-year deadline, as are India and ‘another state party’, which commenced destruction of their CW stockpiles by the end of 1999.

Russia, however, is having difficulty commencing the destruction of its chemical weapons. In late 1999, the country submitted a request to the EXCO that it be granted an extension to the first intermediate destruction deadline.<sup>19</sup> Russia is currently receiving technical and financial assistance from several states parties, including the US and some members of the European Union, to help it meet its CWC obligations in this area.

### *Management of unresolved issues*

The First CSP considered how to deal with issues that had not been resolved by the PrepCom. It decided that they would be addressed via a flexible, informal and transparent consultation process through the ‘Committee of the Whole’ (COW), enabling all interested states parties to be fully involved (not just those on the EXCO). In addition, arrangements were made for the views of signatory states to be taken into account (at that stage, a number of key states, including Iran, Pakistan and Russia, had yet to ratify the CWC). Particular attention was given to matters requiring resolution by a deadline stipulated in the Convention, and to other issues identified by states parties or by the Director-General as demanding urgent resolution.<sup>20</sup> Facilitators from among interested party delegates were made responsible for conducting consultations on particular unresolved subjects.

By the time of the Fourth CSP, many of the issues that could not be fully resolved in the PrepCom had been agreed or had been overtaken by events during the Convention’s early operational phase. It was also recognised that it would be more efficient to address the remaining unresolved issues through the EXCO, rather than via the COW. So the Fourth CSP decided to end the role of the COW with respect to unresolved issues and to establish a working group under the EXCO. The latter body subsequently set up two working groups:

- one to focus on the resolution of outstanding PrepCom issues, particularly those requiring urgent resolution for an effective Convention, such as guidelines on ‘old CW’<sup>21</sup> and industry declaration-related issues, like ‘low concentrations’; and
- another to address matters that had arisen since entry into force (‘pending issues’), like methodology for selection of Schedule 3 and DOC facilities for inspection.

### *Technical challenges*

Being a dynamic organisation, the OPCW will face new and sometimes unexpected challenges and will need to be evolutionary. To ensure that the Convention remains effective it will be necessary to review scientific developments, changing technology and industry practices and current verification procedures. Many verification-related decisions have been adopted on an interim basis, for example, on the understanding that the issues would be further considered and refined as the OPCW gains experience. There will need to be regular review of verification procedures—based on the early experiences of the OPCW Inspectorate, including matters related to access to records, sampling and analysis, and the welfare of inspectors when following OPCW health-and-safety regulations during inspections. In addition, there will be special conferences to review comprehensively the operation of the verification regime.

Special consideration will need to be given to various issues associated with chemical analysis requirements, such as:

- the ability of ‘blinded analytical instruments’ to provide unambiguous results;<sup>22</sup>
- the scope of the OPCW analytical database;<sup>23</sup> and
- the roles of designated laboratories in ‘off-site’ analysis.

By the end of 1999, 12 laboratories had satisfied the requirements and had been designated by the OPCW for examination of authentic samples. Unfortunately, the issue of off-site analysis was brought into question because of a condition attached to US ratification of the CWC. This specified that samples taken during inspections at American facilities must not be taken to a laboratory outside of the country.<sup>24</sup> Clearly, issues related to off-site analysis will need to be addressed to ensure that an accurate and reliable assessment of samples is possible in situations where analysis using on-site equipment does not generate unambiguous results.

It will also be important to review advances in science and technology that may have an impact on the CWC. There have recently been interesting developments in chemistry, for example, including the production of toxic chemicals through biologically mediated processes. It will be important that the schedules of chemicals are kept up to date, based on scientific progress and in light of the OPCW’s early experiences. Another interesting area over the past decade has been the creation of miniaturised sensors and portable chemical analysis equipment. Such items may reduce the current ‘inspector presence’ deemed necessary at CWC-related facilities, and allow the development of rapid screening methodologies using portable

analytical equipment to support verification. There will be roles for the Scientific Advisory Board (SAB) and for states parties' scientific advisors in ensuring that the CWC keeps abreast with, and makes maximum use of, scientific advancements.

It will also be necessary to review and adjust, as appropriate, the relative proportion of inspection effort for Article VI verification activities. During the first few years there has been an obvious focus on initial inspections of Schedule 1 and 2 facilities to meet specific Convention timelines. Once these initial inspections have been completed, however, there will be a need to reassess the relative risks posed to the Convention by, *inter alia*, Schedule 3 and DOC facilities, which many experts regard as most relevant with respect to recent CW proliferation programmes.

### ***Balance between transparency and protection of sensitive information***

One of the difficult issues addressed by the EXCO has been the need to find an acceptable balance between transparency in the OPCW's operations, and the protection of sensitive information. This has been perhaps most pronounced in the attempts to develop an acceptable format for the Status of Implementation Report (SIR). Currently the SIR is issued in two parts: part one deals with declaration and inspection information, issued as an OPCW highly protected document; part two is concerned with implementation of Articles X and XI, and is issued as an unclassified document. The Director-General has noted the importance of establishing a culture of openness as an essential step in building the OPCW's credibility and keeping the international community informed about its activities.

### ***Adherence to general obligations***

There has been an understandable tendency during the CWC's early operational phase to focus exclusively on specific obligations. But there is also a need to recognise and adhere to more general obligations, such as those in Article I of the Convention. Considerable attention has been directed, for example, towards transfers of Schedule 1 chemicals, even in sub-nanogram quantities (in some cases, in amounts that are too low to incapacitate a single person), with little, if any, consideration of transfers of 'unscheduled' CW precursors, which were acquired and used by CW proliferators in the 1980s. It will be important that, as CWC parties and the OPCW gain experience, states parties develop a broader perspective on what constitutes 'CWC-relevant chemicals', which clearly go beyond those listed in the three Schedules.

## Conclusion

The CWC is attempting to achieve objectives, including monitoring the chemical industry for 'non-production' of CW, which were not deemed possible in the early 1920s. The Convention is complex and ambitious in its aims, and the OPCW is on a steep learning curve. Significant progress had been made by the end of 1997 on the creation of the CWC regime. In 1998 and 1999, there was further advancement as the CSP, the EXCO, the TS and the states parties worked (for the most part reasonably co-operatively) to come to terms with their various roles, obligations and responsibilities. At the end of 1999, the OPCW was gradually taking shape and heading, rather slowly, in the right direction, as opposed to being 'rudderless', as had been suggested.<sup>25</sup> Certainly progress has not been as rapid as anticipated in the euphoric climate following the signing ceremony. But it has been a lot better than one might have expected in the 'dark ages' of the latter part of the PrepCom. And this is happening regardless of the generally pessimistic international attitude towards arms control at the turn of the century.

Despite the difficulties experienced so far, it appears that the basic balances and compromises of the CWC have been sufficiently retained to allow the verification regime to function as intended. In particular, the regime should provide the necessary confidence that parties are complying with their obligations and be an effective deterrent to states that may be considering violating its provisions. Most noteworthy in this respect is how rapidly the Organization's Inspectorate has developed into a credible and professional body, and how well industry inspections have been accepted by the large majority of affected facilities.

The OPCW still faces serious challenges, though, and the next few years will be critical to its long-term prospects. These challenges include:

- securing the full adherence of all states parties to CWC declaration requirements;
- problems associated with the destruction of Russia's chemical weapons;
- achieving a broader geographic distribution of industry inspections;
- better appreciation of export licensing issues; and
- increasing membership levels, including states in the Middle East.

Consequently, it will still take a few years at least until the CWC can be regarded as a fully effective multilateral treaty. This is not surprising in light of the example of the 1968 Nuclear Non-proliferation Treaty, which, after initial teething troubles, was subsequently regarded as a major arms control success.

Finally, the potential positive impact of the CWC on other arms control and disarmament issues should be recognised. Its implementation is an experiment being watched carefully by those involved in current negotiations—especially on a protocol to the 1972 Biological Weapons Convention. In addition to helping realise a world free of chemical weapons, an effective CWC should be seen as a precursor to more effective verification measures being accepted in other arms control and disarmament treaties.

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## Endnotes

<sup>1</sup> Stockholm International Peace Research Institute, *The Problem of Chemical and Biological Warfare*, vol. IV, 'CB Disarmament Negotiations, 1920–1970', 1974, p. 44.

<sup>2</sup> Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases and of Bacteriological Methods of Warfare (Geneva Protocol), 17 June 1925.

<sup>3</sup> Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, which opened for signature on 13 January 1993, and entered into force on 29 April 1997.

<sup>4</sup> Martine Letts, Robert J. Mathews, Timothy L.H. McCormack, and Chris Moraitis, 'The Conclusion of the Chemical Weapons Convention: An Australian Perspective', *Arms Control Today*, vol. 14, number 3, December 1993, pp. 311–332.

<sup>5</sup> In addition, San Marino ratified on 10 December 1999, becoming a state party on 9 January 2000.

<sup>6</sup> 'The Resolution Establishing the Preparatory Commission for the Organization for the Prohibition of Chemical Weapons', agreed at the CWC signing ceremony (henceforth known as the 'Paris Resolution'). See UN document CD/II/73, Appendix 1, pp. 177–182, Geneva, 3 September 1992.

<sup>7</sup> It was clear from the CWC text that to meet the Convention's tight timelines for submission of declarations and the conduct of initial inspections, the OPCW would need to be fully functional within days of entry into force. Furthermore, based on initial estimates of the numbers of facilities that would be declared, a TS with approximately 400 personnel would be required.

<sup>8</sup> Robert J. Mathews and Timothy L.H. McCormack, 'Verification of the Chemical Weapons Convention: National Requirements', in *Verification 1995*, VERTIC, London, 1995, pp. 180–192.

<sup>9</sup> As recorded in PrepCom document PC-XVI/37, 15 April 1997, sections 2 and 3.

<sup>10</sup> There was general agreement on the application of the 'possessor pays' principle, but agreement could not be reached on how the reimbursements of verification costs should be calculated.

<sup>11</sup> These are agreements or arrangements for the conduct of verification activities by the TS at specific facilities, including CW-related and some chemical industry facilities. They are negotiated agreements or arrangements between the state party concerned and the TS, subject to the approval of the EXCO.

<sup>12</sup> Indeed, the credibility of the new Organization was demonstrated in 1999, following a request from the UN Secretary-General to assist in the clean-up of the UN Special Commission (UNSCOM) laboratory in Baghdad.

<sup>13</sup> For the purposes of routine verification, the CWC specifies three Schedules of chemicals. Schedule 1 chemicals pose a *high risk* to the purposes of the Convention and include nerve and blister CW agents; Schedule 2 chemicals pose a *significant risk* and include key precursor chemicals to nerve and blister agents; and Schedule 3 chemicals pose a *risk* and include toxic chemicals and precursor chemicals, which are very widely used in industry. There is also a fourth category, 'Discrete Organic Chemicals' (DOCs). Facilities that produce Scheduled and DOC chemicals above specified thresholds are required to make declarations and subject to routine inspections.

<sup>14</sup> The 'another state party' that made declarations under Articles IV and V has chosen to keep its declared information 'OPCW Protected'. This means that the data is not available for general release. There have been press reports that this state party is the Republic of Korea. See *CBW Conventions Bulletin*, News Chronology, 17 August 1997.

<sup>15</sup> In fact, the initial assumption by the PrepCom was that there would be a Russia–US bilateral agreement in place. In the absence of such an agreement, greater TS resources were required for initial inspections of CW-related facilities. It was, therefore, fortuitous from the inspection planning viewpoint that Russia ratified several months after the US.

<sup>16</sup> Australia and the Republic of Korea, 'Methodology for selecting Schedule 3 and Discrete Organic Chemical (DOC) Plant Sites for Inspection', EC-XVI/NAT.5, 16 September 1999.

<sup>17</sup> In the 2000 budget, resources were allocated to conduct 36 initial inspections at Schedule 2 facilities in the US. It was agreed that, if US industry declarations are further delayed and that less than 36 initial Schedule 2 inspections can be carried out in the US in 2000, then these 'unused' resources could be used for Schedule 3 and DOC inspections.

<sup>18</sup> The tension associated with this issue should gradually disappear after April 2000, when the US is expected to submit its initial industry declarations.

<sup>19</sup> In accordance with cwc Verification Annex Part IV (A), paragraph 17, states parties are required to destroy not less than one percent of their 'Category 1 stockpile' (which includes chemical weapons based on nerve and blister agents) no later than three years after entry into force (that is, by 29 April 2000).

<sup>20</sup> In addition to various unresolved PrepCom issues and other matters specified in the Convention (such as the terms of reference for the SAB), several new issues have also been considered, including development of a proposed 'technical change' to the cwc to overcome an unintended consequence regarding transfer of Saxitoxin (a chemical listed in Schedule 1) for medical/diagnostic use.

<sup>21</sup> 'Old CW' (that is, cw produced between 1925 and 1946) requires agreement on guidelines on their 'usability' and a verification regime. Resolution of these issues would allow the TS to close the files on more than 20 inspection reports.

<sup>22</sup> Blinded analytical equipment uses special 'blinded software' and a restricted database to provide only 'presence/absence' information of cwc-related chemicals.

<sup>23</sup> The lack of analytical data for the majority of members of the various families of scheduled chemicals is regarded as a serious gap, which should be addressed as a priority. In the interest of effective verification, it is also hoped that spectra of other relevant chemicals will be promptly added to the OPCW analytical database.

<sup>24</sup> US Senate, *Congressional Record*, 24 April 1997, p. 53656.

<sup>25</sup> See Amy Smithson, 'Rudderless: The Chemical Weapons Convention at 11/2', *The Henry L. Stimson Center Report*, no. 25, September 1998. While it would be difficult to argue with one of the major premises of that article (that the US has not played an active leadership role in the early life of the cwc) a more accurate assessment would have to be that the cwc is still heading in the right direction, despite developments in Washington.