This the nineteenth of the current Pugwash workshop series on chemical and biological warfare (CBW) was the tenth to be held in the Netherlands. The workshop was hosted by the Netherlands Pugwash Group, with support from the Netherlands government and from the German corporation Blücher GmbH, and was jointly convened by the Harvard Sussex Program on CBW Armament and Arms Limitation (HSP) and the international Pugwash Study Group on Implementation of the Chemical and Biological Weapons Conventions. Forty-six people attended the workshop, by invitation and in their personal capacities, from 20 countries: Australia, Belgium, Canada, Czech Republic, France, Georgia, Germany, India, Iran, Israel, Italy, the Netherlands, New Zealand, Poland, Republic of Korea, Russia, South Africa, Switzerland, the United Kingdom (UK), and the United States of America (US). This report of the workshop is the sole responsibility of its author, who was asked by the meeting to prepare a report in consultation with the Steering Committee. It does not necessarily reflect a consensus of the workshop as a whole, or of the Study Group.

The meeting opened with a welcome from the Netherlands Pugwash Group and the observation that this workshop had attracted the largest number of papers yet (27, by the end of the weekend) for the workshop to consider. It was observed that, ten years after the Study Group had started meeting in the Netherlands, the work of the Group continues to be highly relevant - its focus is on the implementation of the CBW Conventions, and as such is open-ended, with a continuing need for the attention and interest of the Study Group.

This was the third time that the First Chemical Weapons Convention Review Conference (the Review Conference) had been the main item on an agenda for the Study Group, with the Review
Conference due to open in The Hague on Monday 28 April, the day following the closing of the workshop. Under the main heading of *The First CWC Review Conference and Beyond*, the workshop received a report on recent developments at the OPCW and a short update on international criminalization, with the group unfortunately not able because of the unexpected absence of a participant to receive a report on the aftermath of the Fifth BWC Review Conference. In reviewing the first five years of the Chemical Weapons Convention (the CWC), the main items for discussion at the workshop were emergent threats to the CWC, including unscheduled chemicals, 'non-lethal warfare' and allegations of non-compliance, as well as key basic elements of the CWC and their implementation, namely the general purpose criterion (GPC) and domestic penal legislation. In looking at the way ahead for the CWC, the workshop discussed topics relating to industry and trade, states not yet parties and the problem of 'law enforcement'.

**CWC: Recent developments in the OPCW, including the First CWC Review**

Given the proximity of the Review Conference, the primary matter on which the workshop was updated in relation to the OPCW was the status of preparations for the Review Conference and the work that had been carried out at the OPCW by the Open-Ended Working Group for the Preparations for the Review Conference (the Working Group). Other items touched upon included: the impact of the new Director-General of the OPCW; the tenure policy of the OPCW; the status of chemical weapons destruction; the role of the OPCW in combating chemical terrorism; the work of the Scientific Advisory Board (SAB); and the new fifth possessor state party.

In respect of preparations for the Review Conference, the Open-Ended Working Group established in September 2001 initially addressed organisational issues, including: whether the review of the CWC should take an article-by-article or thematic/cluster approach; the identity of the officers of the Review Conference; and the need for a drafting committee. Only in late October 2002 did the Working Group address substantive issues, using a cluster approach. The meetings resulted in the drafting of two Chairman's texts, beginning in January 2003, intended to be the base for discussions and drafting of Final Documents at the Review Conference. The first text was a draft Political Declaration, a short statement of commitment and purpose aimed at a non-specialist audience. The second 'Consolidated Text' was a longer paper reflecting on five years of experience and containing general, rather than specific, recommendations.
The workshop heard an outline of the major issues that arose in relation to items on the Provisional Agenda for the Review Conference and the Chairman's Consolidated Text. Those issues included: how to address the non-membership of certain countries of the OPCW; the need for universality and effective national implementation of the CWC; the comprehensiveness of the CWC prohibitions and the role of the Schedules to the CWC; optimization of verification activities; the timelines for destruction of chemical weapons and the need for support of destruction programmes; proposals for 'nil declarations'; the need for the OPCW to be prepared for a challenge inspection and concerns regarding 'abuse' of the challenge inspection mechanism; the need for a clear understanding of the concept of Assistance and Protection; under Article XI, the Australia Group's impact on trade and the role, size, budget and evaluation of international co-operation and assistance programmes; the submission of declarations in electronic format; and the functioning of the policy-making organs of the OPCW, as well as the interaction with subsidiary bodies such as the SAB.

The fact that the Provisional Agenda was not adopted by the Executive Council until only a month before the Review Conference, and that the Director-General's reports were issued only shortly before the Review Conference, was deplored. This impacted negatively on the ability of NGOs and academics to contribute to the Review Conference, in the absence of such information. The Provisional Agenda had effectively been ready and available to states parties in December 2002, but agreement within the Executive Council was not forthcoming on the issues of the drafting committee and identity of the officers. While 2002 was preoccupied with issues surrounding the replacement of the first Director-General and the 2003 budget, states parties had not truly engaged in substantive preparation for the Review Conference until January 2003, with only approximately 25 states parties actively being involved in the work of the Working Group. Less than 20 states parties were expected to be represented at the Review Conference at the level of Deputy Minister or higher. In essence, there seemed to be agreement amongst the workshop that there had not been sufficient substantive preparation for the Review Conference. One participant labelled the Review Conference a 'missed opportunity' already. On the other hand, others viewed the Review Conference as having received comparatively little attention because, in contrast to the BWC for example, the CWC was seen as operating relatively well. A variation on this was the comment that arms control regimes in general were under considerable strain
today (for example, the NPT and BWC), and that by contrast, what the CWC Review Conference could hope to achieve was not inconsequential.

On other matters relating to the OPCW, in the ten months since the last workshop in the Netherlands, a new Director-General of the OPCW, Rogelio Pfirter of Argentina, had been appointed (see the reports of the 17th and 18th workshops of this Study Group). His priority task has been to heal political wounds in relation to the manner of the Secretariat's interaction with member states.

The OPCW has seen an improvement in its financial situation for 2003, with the Organisation able to carry out its programme of work in full this year. However, it was estimated that at least a seven per cent increase would be needed in next year's budget to keep pace with costs. Such an increase may not be viable, and it was considered that it may be necessary to address the staffing structure of the OPCW.

At the last session of the Conference of the States Parties, a more constructive debate on Russian deadlines for destruction of chemical weapons was possible, as a result of evident progress in Russian destruction. At the Executive Council session in March this year, a new deadline of 31 May was set (the Conference having accepted extension in principle) for one per cent destruction. It was reported that this objective had already been met at Russia's Gorny destruction facility. Another recent development in Russia is the replacement of Zinovy Pak by General Kholstov, Head of the Radiation, Chemical and Biological Defence Troops, as head of the Russian Munitions Agency.

On other issues related to possession of chemical weapons, with the recent addition of Albania to the list, there are now five declared chemical weapons possessor states. Discussions are, apparently, continuing regarding what, of the relatively small quantities of chemical weapons found by Albania, will need to be declared.

In respect of the role of the OPCW in combating chemical terrorism, while little occurred during most of 2002, a shift was reported to have occurred towards the end of the year. Recognising the need for international organisations dealing with weapons of mass destruction to play a role, the OPCW was invited to attend the first session of the United Nations (UN) Counter-Terrorism Committee in New York this year. A special meeting, devoted to discussions with the OPCW, IAEA, WCO, Interpol and others, was planned for mid-May. Internally, the OPCW's Open-Ended Working Group on Terrorism, established in December 2001, has been reactivated. In
addition, in September 2002 the first OPCW exercise on the delivery of assistance (ASSISTEX I) took place in Croatia, based on a hypothetical terrorist chemical attack on an airport. In addition to the more general reports on the OPCW, the workshop also received a paper on the SAB’s report to the Review Conference, which had very recently been issued to States Parties. The report analyses relevant developments in the fields of science and technology and provides advice to the Review Conference, with the aim of improving the operation of the CWC. In addition to some new ideas, the SAB report also includes earlier observations and recommendations by the SAB on scheduled chemicals, production of chemical compounds, on-site analysis, and destruction, amongst other things. It was observed that the strict dividing line between chemistry and biology had already disappeared, with the developments, for example, in biotechnology and changes in the chemical industry. Concerns were raised amongst the workshop regarding the presentation of SAB reports via notes from the Director-General - it was considered that this might at least create an impression that the SAB was subordinated to the Director-General, rather than an independent body. However, it was emphasised that the SAB was independent and carried out its work in good faith.

One of the areas of interest to the workshop was the advancement in technology relevant to verification of destruction, given the high percentage of OPCW funding absorbed by the verification programme. This is an issue currently under discussion, with a consultant having been hired by the Director-General to visit possessor states parties and formulate proposals in this area. The consensus seemed to be that, as will likely also be the case in relation to most other issues, the Review Conference would not take a specific substantive decision on this point but will instead highlight the issue and reiterate the need for resolution. Members of the workshop expressed the hope that the Review Conference might formulate a programme of work to look at various issues in coming years.

The implementation of the OPCW's tenure policy was an issue provoking much discussion amongst workshop participants. In late March the Executive Council finally took a decision in respect of the effective starting date for the OPCW’s seven year maximum length of service tenure policy, some four years after the Conference delegated authority to the Council to set a date. The starting date set by the Council is 2 July 1999, the date of the Conference decision. The majority of the Secretariat staff's contracts started in May or June of 1997. A number of workshop participants expressed concern at the implementation of the tenure policy, which is
due to take effect this calendar year. Amongst the concerns raised were: the ability to recruit experienced inspectors for what will be relatively short-term positions; a possible reduction in the independence of staff from their previous jobs or governments; the loss of institutional knowledge and inspector experience; a reduction in operational effectiveness; and the impact on morale at the Secretariat. The observation was made that, originally, bilateral inspection agreements had been contemplated for Article IV and V inspections, with the majority of inspectors having been expected to carry out Article VI inspections. Some members concluded from the tenure decisions taken that an effort would be made to gradually lower the number of approved posts within the Secretariat.

The CWC: The first five years

Emergent Threats to the Convention

A provocative presentation was given to the workshop, taking the point of view of a terrorist or agent of a rogue state and asking where that person would perceive weaknesses and opportunities for obtaining chemical agents. The hypothesis was that small, new and inexperienced chemical companies in financial difficulties, with a large amount of spare capacity, would be targeted. The likelihood of detecting the production of Schedule 1 chemicals - assuming that Schedule 1 chemicals were being sought -- by random inspection amongst thousands of DOC plants was doubted, and industry inspections were stated to be of mild deterrent effect. To increase confidence amongst states parties, the presentation concluded that it is necessary to increase confidence in the CWC, which should be achieved by ensuring that implementing legislation is complete, and that declarations are full and accurate. What should be considered is how to make challenge inspections more politically acceptable and useful tools. The possibility of having some form of 'non-accusatory' challenge inspection was considered, but is not ripe for discussion at a diplomatic level. The observation was made that the CWC was designed primarily for state versus state scenarios, whereas what is now being sought is to utilise the provisions of the CWC to help in the efforts to prevent terrorism.

Looking at other emergent threats to the Convention, the workshop received a presentation considering the comprehensiveness of the General Purpose criterion (GPC) and asking whether there were any inconsistencies in the Convention, the position of Riot Control Agents (RCA) being highlighted as a potential problem. One issue raised was the misunderstanding of the phrase 'toxic chemical', with differing meanings ascribed to this phrase in the CWC and within
the scientific community. The issue of new toxic compounds as a result of scientific and
technological development was also highlighted, with three principle lines of search identified as
having been used in the past: for more efficient analogues and homologues of already known
toxic chemicals; more efficient toxic chemicals with different structures but similar kinds of
toxic effects; and new toxic chemicals with quite new effects. The same lines of search are
applicable today. The possibility of adding some toxic chemicals to the Schedules, or even
amending the Convention in the future, was raised, with the caveat that states parties may be
politically unwilling to do so, particularly given the threat of chemical terrorism.
A paper was also presented on scientific and industrial developments since 1992, when
negotiation of the CWC was concluded, highlighting the great changes in industrial
infrastructure since that time. The trends in the chemical industry were considered to pose major
challenges to the implementation of the CWC, with a resulting need for flexibility within the
OPCW and obvious implications for inspector training.

'Non-lethal warfare'
The topic which absorbed the workshop for much of its time was 'non-lethal' warfare, an issue
which, together with the question of 'law enforcement' under the Convention (a topic also
addressed separately by the workshop - see below), has become more controversial and high
profile since the last meeting of the workshop in Geneva in November 2002, where it was also
discussed. A large number of the papers received by the workshop addressed these issues, as
well as the related issue of RCA, and the Moscow hostage crisis.
The workshop addressed the issue of 'new weapons' and methods of warfare, highlighting the
legal scrutiny required of new weapons by Article 36 of Additional Protocol I to the Geneva
Conventions. It was reiterated that, as shown by the Moscow hostage crisis, the effect of a
calmative or incapacitant agent depends on the means of delivery and the environment in which
it is delivered, and to achieve military effectiveness, the dose required inevitably results in a
proportion of the people exposed receiving a dangerous if not lethal dose. The use of a
hypothetical 'perfect' non-lethal weapon (NLW) on a battlefield was then explored, with
concerns raised regarding the ability of soldiers to recognise and respond appropriately to the
enemy's incapacitation, resulting in a potentially increased mortality due to increased
vulnerability. The position was taken that consideration in terms of international humanitarian
law should be given to the deployment of new weapons and methods of warfare. Included in that
is consideration of the effects on the victims, and the prohibition at customary international law of attack against civilians. On the other hand, discussion amongst the workshop also reflected that in a world with increasing terrorist threats, new risks may require new responses, and that doctrinal approaches may not always be helpful.

Another presentation delivered to the workshop highlighted that the number of fatalities (approximately 15 per cent) incurred during the Moscow hostage crisis was to be expected. The presentation concluded that it is incorrect to categorically distinguish between lethal and 'non-lethal' weapons. While there is disagreement as to whether there might be a truly NLW in the future (i.e., less than 0.5 per cent fatality rate), the presenter concluded that they might eventually be discovered. As touched on by many participants at the workshop, there are real concerns about the implications for the CWC regime of the increasing governmental interest in NLW for 'law enforcement'. With particular reference to the US research into NLW, although not considered to be in violation of the CWC, it was thought to be close to the line. To the knowledge of the workshop, there are no defensive NLW projects underway in the US. The reasons for this are that the US is not yet at the development phase of NLW and that the chemicals being examined are established pharmaceuticals with known antidotes.

The divide between the US position on RCA as not being toxic chemicals falling within the GPC, and that of the majority of other states which view RCA as falling within the scope of the GPC, was highlighted. The US Navy Judge Advocate General opinion differentiated between the definition in Article II of 'toxic chemical' and 'RCA'. One workshop participant stated that riot control was a use for chemicals, and referred back to the GPC, stressing that RCA were still toxic chemicals. This, however, is not the position taken by the US, which views the different wording of the two concepts as deliberate and meaningful.

One proposal raised within the workshop was to allow the use of NLW in certain UN-mandated operations, based on rules of engagement that would be drawn up by the UN. Those criteria would include: that the effects would be truly temporary; that the safety ratio would be equal or better to that of CS; that the effects would be recognisable; that there would be prior announcement of the possible use; and that there would be known countermeasures. There are concerns, however, associated with any UN use of RCA, especially given that such agents would have to be stockpiled by a state party as the UN does not maintain an active force or weapons stockpile. In addition, the threat of force with conventional weapons (i.e., firing into the air) may
be just as effective as the use of RCA - it should not be automatically assumed that there is a gap in the force continuum that needs to be filled by NLW.

The workshop also considered the position regarding potential use of RCA in Iraq, where there is a situation of effective control by US and UK forces. The workshop generally accepted that 'law enforcement' does not mean or include enforcement of international law. While it would not include military use, it could however include maintaining law and order in a peacekeeping context in an area under occupation. The opinion was expressed that RCA could be used should it be necessary to control a riot involving prisoners of war. On the other hand, it was noted that if RCA had been used by the US during military operations, and given that Iraq is not a state party to the CWC, Iraq might have viewed such use as justifying a response with any CW agent.

As a side issue, the question was raised whether a state party could argue that unfilled munitions were intended to be filled and used for law enforcement purposes, thus evading what might otherwise be a violation of the Convention. However, there was no consensus that Article II, paragraph 1 of the CWC requires a judgement as to whether the 'types and quantities' are consistent with the purposes not prohibited - under the definition of 'chemical weapons' this applies to munitions and devices, as well as toxic chemicals.

*Allegations of non-compliance*

Six years after the CWC entered into force, there has still not been a challenge inspection. One of the explanations for this is the perception that, if a challenge inspection is carried out, something must be found, if not a 'smoking gun'. It was reported that the United Kingdom (UK) is attempting to demystify the challenge inspection mechanism in order to show that they can be used (sparingly) without jeopardising industrial or government secrets. One of the purposes of challenge inspections, and the verification regime, is to reduce the corrosive effect of unfounded suspicions. However, as was pointed out to the workshop, challenge inspections have to exist in a climate where currently several states parties allege there are large stocks of chemical weapons in a certain state party but ongoing OPCW inspections have found nothing. Nevertheless, there is at least a prima facie inconsistency, and corrosive impact on the regime, between public statements alleging possession of chemical weapons and an absence of action to redress this through the mechanisms in the CWC. (This situation was subsequently highlighted at the Review Conference by the US statement on the first morning, which 'named names'.)
In addition to the challenge inspection mechanism, there is also provision under Article IX of the CWC for consultation between states parties to clarify and resolve ambiguous situations or concerns about possible non-compliance. A number of states parties do request information from others, primarily on a confidential and non-accusatory basis, which avoids unnecessarily elevating the issue. There is a question whether the Executive Council should be informed of bilateral discussions on such matters.

Compliance concerns also exist outside of the Article IX context. For example, a number of states parties have failed to meet their Article VII obligations to implement penal legislation, have legislation targeting only scheduled chemicals instead of incorporating the GPC, and fail to submit declarations.

**Key basic elements of the CWC and their implementation**

*The General Purpose Criterion (GPC)*

The workshop received two presentations on the GPC, outlining its origins during negotiations, drawing on the BWC purpose-based definition, and stressing the importance of its implementation. The GPC is clearly expressed in Article II, paragraph 1(a) and Article VI, paragraph 2 of the CWC. Some of the benefits of the GPC are its ability to anticipate technological change and to control dual use agents.

The first presentation highlighted three concerns expressed in recent years in relation to the CWC and GPC. The first is the belief that there are gaps in the range of weapons outlawed by the CWC. Second is the increased interest by states parties in so-called NLW. Third is the increasing attraction to terrorists of using toxic chemicals for hostile purposes. All of these concerns can be allayed and remedied by proper implementation (and understanding) of the GPC. Such implementation is a positive and open-ended obligation by the CWC, in particular by the requirement in the 'Molander chapeau' in Article VI, paragraph 2 that states parties adopt the 'necessary measures'. The presentation concluded with suggestions that the Review Conference should formally reaffirm the central importance of the GPC, and the definition in Article II, paragraph 2 of 'toxic chemical', as well as calling on all states parties to fulfil their Article VII undertakings.

Building on this, the workshop then examined implementation of the GPC. The challenge to the CWC from unscheduled agents, such as some of the novichoks, mid-spectrum materials such as bio-regulators, and calmatives was highlighted, although it was also stressed that such agents are
indeed covered by the GPC. A number of international initiatives have been launched addressing potential risks to the environment and public health from chemicals, many of which originated with the United Nations Environment Programme. In implementing the GPC, National Authorities in states parties should take note of the national and international programmes addressing the safe management of chemicals, particularly as these programmes focus on those chemicals which pose the greatest threat to health and the environment. Again, the Review Conference was considered to be an occasion on which the importance of the GPC should be reaffirmed.

In discussion, the view was expressed that the GPC is still not fully understood by all those involved with the CWC. To increase understanding, it was proposed that the GPC should be on the agenda of every Conference of the States Parties, to ensure co-operation to foster understanding. However, it was noted that so far, there had been no mention of the phrase 'GPC' in the preparations for the Review Conference and it was assumed that no such mention was likely in the final documents emerging from the Review Conference. Instead, the phrase 'comprehensive nature' of the CWC was used. Suggestions for the reasons lying behind this reluctance to officially use the term 'GPC' include that it is not used in the CWC, that some states parties do not accept the term, and that it is hard to translate into different languages. The very ambiguity of the term 'General Purpose Criterion' in English is quite useful. By comparison, reference to the 'comprehensive nature of the Convention obligations' was thought by some participants to be an inadequate equivalent to, or expression of, the GPC, which could be used by some states parties to avoid their obligations.

The method of implementation of the CWC, and GPC, is left up to each state party, with National Authorities primarily involved in a co-ordinating role. National legislation to incorporate the GPC (a topic which was touched upon later in the workshop in more depth) is clearly essential. In terms of verification activities, these are based on the Schedules, rather than the GPC - this is a topic which may require revisiting in future years.

The question of secrecy also exercised the workshop, particularly in relation to unscheduled chemicals and novel agents. Undue secrecy was thought to be counter-productive, as knowledge of novel agents may be useful in keeping industry aware and up to date. The value of secrecy surrounding novel agents existed in the past, when there was a possibility of states using chemical weapons or retaliating with such agents. Given that there is no strictly limited number
of toxic agents that could be used by terrorists, there is no need to ensure the absolute secrecy of formulae today. The opinion was expressed that, instead, an aggressive policy of openness might be more advantageous. In particular, if the nature of the agent used in the Moscow hostage crisis had been known earlier, treatment might have improved. On the other hand, one participant noted that some people considered that some dangerous novel compounds escaped oversight under the current verification system, which was good reason for maintaining secrecy around such compounds.

In relation to new agents, the usefulness of international humanitarian law, and Article 36 of Additional Protocol I, should not be ignored - it is yet another body of law creating obligations on states parties, which could be used to draw attention to the issue. While this may not influence rogue states or terrorists, the CWC should not be viewed as the only possible solution to the problems.

On a divergent issue, the legality of a deliberate attack against a chemical plant in a state party, thus releasing toxic chemicals (which had been stored or produced there for purposes not prohibited) into the environment, was discussed. During negotiations, while deliberate attacks against chemical facilities were discussed, there was no consensus and nothing was included in the CWC on this topic. Under Article X, paragraph 8 of the CWC, a state party can request assistance and protection if it considers that chemical weapons or RCA (as a method of warfare) have been used against it - there is no need for the actor to have been a state. However, the other limb of Article X, paragraph 8, is if ‘it is threatened by actions or activities of any State that are prohibited for states parties…’. Thus, under this limb, which is the most applicable to the scenario of an attack against a chemical plant, it seems the actor must have been a state, not a terrorist acting alone. Nevertheless, there are always possibilities for consultation and cooperation, and for bilateral assistance.

**Domestic penal legislation**

The workshop received two presentations on the need for, and current disappointing lack of, domestic penal legislation under Article VII of the CWC. Not only have almost half of states parties failed to report implementing legislation to the OPCW, only 28 per cent of states parties have adequate (‘all key areas’) reported legislation.

The first paper on the topic of national implementing legislation argued that there are three areas in which the quality of national penal legislation can be less than comprehensive: in relation to
chemicals; people; and activities. On the topic of chemicals, the primary question is whether the legislation covers the GPC, and not simply the scheduled chemicals, as discussed above. With regard to people, it was noted that the UK legislation covers government officials, including defence scientists and members of the armed forces. Finally, the activities covered should be as co-extensive as the prohibitions in the CWC and, where possible, should use the language of the CWC.

Despite the present low rate of adequate legislation, the second presentation stated that there were positive developments in this area, with the perception of a new mobilisation by states parties to address the issue of national implementation. For example, the topic of implementing legislation is addressed in one way or another by many of the national papers for the Review Conference and it was expected that the Review Conference would result in a number of proposals for action in this field. The events of September 11 have increased the interest of states parties in an enforceable chemical weapons instrument. By contrast to the position at the time of entry into force, no longer is national implementation viewed simply as an internal matter for states parties. Within the OPCW a matrix of requests for OPCW implementation support and responses is now being created, which gives a global overview of the state of development of implementing legislation in each country, the assistance needs of states parties and information on assistance programmes being delivered. In addition, an expanded network of legal experts (building on that created in Latin America and the Caribbean) is being created, with a first meeting to take place in November 2003. OPCW participation in the work of the UN Counter-Terrorism Committee may also result in increased political awareness about aspects of implementation and the need for assistance.

The workshop also discussed some aspects of individual states parties' implementing legislation, including that of South Africa, which has omnibus legislation, and the UK and Belgium. Attention was drawn to the availability of model implementing legislation on the OPCW website, with some concerns being expressed about the legislation of some states parties which contain derogations in respect of challenge inspections - it was thought that if this was used as a model by other states parties, it might result in the 'ratcheting down' of implementing legislation.

The CWC: The way ahead

*Industry and Trade: maximizing the benefits*
The Australia Group was the subject of some discussion by the workshop, which received a presentation outlining its role and impact as a non-proliferation regime, emphasising in particular the US experience. Having outlined the objectives, method of operation and criteria for membership of the Australia Group, some of its perceived limitations and challenges to it were also explored. One of those was stated to be the requirement of consensus when adopting decisions, though others within the workshop saw consensus as the only way to keep the Australia Group together. The presenter stated that, while it was necessary for intelligence to be shared on a classified level, the Australia Group was not 'secretive'. The Australia Group was also stated to be interested in outreach, with specific reference made to working with China, India and Russia to try and ensure the implementation of export controls for technology mirroring those of the Australia Group. In subsequent discussion, it was noted that the Australia Group constraints had close parallels to those for drug precursors for illicit drug production. Questions were raised amongst the workshop participants as to the consistency of the Australia Group with Article XI of the CWC.

Under the heading of industry and trade, the workshop also discussed inspections of DOC/PSF plants under the Convention, with the conclusion made by one presenter that after some 450 Article VI inspections, the OPCW now had sufficient experience to warrant a review of the process of such inspections as indeed the First Review Conference is required to do under the CWC, and a redistribution of them to increase DOC/PSF inspections. In a second presentation, issues relating to the verification of OCPFs and the specificity of SITC codes, different types of access to the overall facility, and plant/plant site delineation were outlined.

In a discussion paper that was provided to the Review Conference, the International Council of Chemical Associations identified relevant key trends in technology and the market. A number of key positions were also elaborated. Amongst those were the distinct nature of routine and challenge inspections, with the need for a useable challenge inspection mechanism expressed, national implementing legislation, and concentration on core Treaty obligations. Other topics addressed included: the nature of the future Schedule 3 regime and, in particular, opposition to automatic translation of the Schedule 2 ban on exports to states parties to Schedule 3 chemicals; technical and logistical challenges to sampling and analysis; safeguarding of confidential business information; and the impact of terrorist threats. The topic of a Schedule 3 export ban was one which provoked some debate, with some participants taking the view that a ban might
become the only way in which to induce non states parties to join the CWC by making it much 'warmer' to be inside the CWC regime than outside it. Both incentives to join, and disincentives to be outside the regime, are needed. Given the increasing number of states parties, the amount of trade affected by a Schedule 3 ban would be much reduced, and a ban would be simpler to implement than to require, for example, undertakings. The counter-argument is that if Schedule 3 chemicals became unavailable, a non state party might decide to build a facility to produce them. In addition, non states parties of particular concern, such as Syria and North Korea, were stated not to generally purchase Schedule 3 chemicals from states parties, thus meaning that a Schedule 3 export ban would not have much of an impact on them. The impact of such a ban on Taiwan was also raised.

**States not yet parties**

The workshop received an in-depth paper on chemical weapons in relation to the Middle East, focussing in particular on the deadlocked positions of Syria, Egypt and Israel towards the CWC. Due to the Arab 'linkage' approach between chemical and nuclear disarmament, and Israel's reliance on its (officially undeclared) nuclear arsenal as the ultimate guarantor of its survival, to date efforts to induce these three states to become states parties to the CWC have failed. Working on the assumption that Israel possesses chemical weapons, the presentation analysed the political, economic and strategic setting in relation to the three states. It was stressed that there were three misperceptions by the Arab states regarding Israel's CW capacity, the value of CW to Israel and the likelihood of Israel foregoing its nuclear option within the perceivable future. The paper concluded that regional adherence to the CWC would not destabilize the Israeli-Arab balance and might even be a positive step towards a common security regime in the Middle East.

In subsequent discussion, the strategic uselessness of chemical weapons in the Middle East, given the current international environment, was discussed, and the domestic propaganda value extracted from this issue highlighted. The international political gains that Israel might make from taking a first step in this arena were thought to outweigh any perceived increase in vulnerability.

**Law Enforcement**

The workshop addressed the problem of 'law enforcement including domestic riot control purposes' under the CWC - although a separate agenda item, this issue had also come up during
the workshop when discussing NLW. It was observed that the note from the Director-General to
the Review Conference flagged the issue but merely stated that states parties might wish to
address these issues.

One presentation to the workshop set out the differences between the approach taken by the US
and the UK to 'law enforcement'; in its simplest form, the US views domestic riot control as a
subset of 'law enforcement', while the UK, emphasising interpretation in light of the 'object and
purpose' of the CWC in accordance with Article 31 of the 1969 Vienna Convention on the Law
of Treaties (the 'Vienna Convention'), views law enforcement as a subset of domestic riot
control. To understand the background to the current ambiguity in the language of the CWC, it is
necessary to review the relevant negotiating history, the prohibition on RCA as a method of
warfare, the declaration requirements in Article III, paragraph 1(e) which are limited only to
RCA, and state practice since negotiation of the CWC, particularly with respect to the Moscow
theatre events and increasing interest in NLW. The presentation concluded that there are
increasing pressures to ignore constraining interpretations of the CWC in regard to disabling
chemicals, a situation which required serious attention. To address this, amendment of the
Convention was suggested, to require declarations of the identity of all chemicals held for law
enforcement purposes, not simply RCA. It was recognised that it might be premature to address
law enforcement at the forthcoming Review Conference, but some multilateral interim measures
were suggested, including affirmation that only chemicals meeting the definition of RCA be used
for law enforcement purposes, affirmation of the understanding of 'law enforcement' as covering
action taken within the scope of a state party's jurisdiction to enforce its laws, and tasking the
SAB to report on the meaning of the word 'toxic'.

The second presentation to the workshop also focussed on the documentary history relating to
the law enforcement controversy, and the Vienna Convention, to inform current interpretation.
The context (both within the CWC and in regard to the Geneva Protocol), ordinary meaning, and
the official language versions of the provisions were also stressed. The conclusion reached was
that 'law enforcement' in Article II, paragraph 9(d) could not be interpreted to exempt from
prohibition any agent that is not an RCA as defined in Article II, paragraph 7. A number of
suggestions for further action were made, including the reaffirmation that the prohibitions of the
CWC cover all chemicals regardless of origin or method of production.
The workshop also received information outlining the attractions of NLW for a range of groups, including ordinary criminals, despots, terrorists and the military. The 'non-lethal' nature of such weapons, both now and in the future when more truly non-lethal agents might be developed, was also explored, as was the fact that NLW are often used as an adjunct to, rather than replacement for, lethal force. Pursuit of chemical incapacitants was seen as the likely first step towards the exploitation of pharmacology and biotechnology for hostile purposes, a step unlikely to be restricted simply to domestic law enforcement. To prevent a new chemical arms race, the possibility of a new international treaty to prohibit the hostile manipulation of human physiology was explored. Despite the length of time negotiation would take and the political challenges, rather than trying to make existing treaty regimes adapt to new challenges, perhaps a new solution is required. On the other hand, there is a danger that a new Convention might detract from the existing treaty regimes.

There was extensive discussion on this topic amongst the participants of the workshop. One point raised was that the overall objective of the CWC is to save multitudes (see the preamble to the CWC - 'for the sake of all mankind'), not simply several hundred people, a goal best achieved by total prohibition. Furthermore, to let violations of the comprehensive prohibition contained within the CWC appear to be legitimate would cause existing international law, built up over many years by state practice and opinio juris, to suffer. The danger of linking the law enforcement issue to that of NLW, as 'law enforcement' relates to toxic chemicals, both of the 'lethal' and 'non-lethal' kind, was also stressed. The role that the death penalty played in the negotiating history was emphasised, given the established practice in a number of states of lethal injections to carry out capital punishment (portrayed in some countries as 'law enforcement'), with concerns expressed by some participants as to how far this issue has been extrapolated. The topic of international criminalization, although on the agenda, was only briefly discussed, with a short outline provided on universal jurisdiction (for a fuller account, see the report of the 18th workshop of the Study Group).

**Future work**

The workshop closed on the Sunday evening with a sense that discussion on a number of the topics touched on over the weekend was far from exhausted. The next workshop of the Study Group, concentrating on BWC issues, is likely to be held in Geneva, in November 2003.
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