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WHAT SHOULD BE THE SCOPE OF THE CWC? A WORKSHOP REPORT

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With the OPCW now so preoccupied with immediate internal affairs, member states and secretariat alike, longer term issues do not look important, and a workshop on the scope of the CWC held last year in England, which is what this article reports, may seem entirely peripheral. Yet the first special session of the Conference of the States Parties to review the operation of the CWC is barely a year away and needs long and heavy preparatory work if it is to succeed. The special session will provide occasion for looking beyond short-term concerns towards those longer term challenges that are the *raison d'être* of the Organization. One such challenge was the subject of a workshop convened at the University of Sussex on 12 October 2001 by the Harvard Sussex Program in consultation with the UK CWC National Authority Advisory Committee.

Context of the Sussex workshop

The OPCW Executive Council has initiated open-ended consultations on how the review is to be conducted. The CWC itself makes only two stipulations. Article VII.22 states that the review "shall take into account any relevant scientific and technological developments". Here, the OPCW Scientific Advisory Board and the International Union of Pure and Applied Chemistry (IUPAC), which is an NGO, are already working together. The second stipulation is that the provisions of Part IX of the Verification Annex

shall be re-examined in the light of a comprehensive review of the overall verification regime for the chemical industry ... on the basis of the experience gained.

Paragraph IX.26 of the Verification Annex, which is where this requirement is set out, goes on to say that the Conference shall then make recommendations so as to improve the effectiveness of the verification regime.

Here, the current crisis is presumably making preparations difficult, and little can yet be seen of them. No clear view, for example, has yet emerged on the practical meaning of that peculiarly opaque and ambivalent concept, "effectiveness of the verification regime".

These two CWC-mandated tasks are important, especially in the context of those other longer-term

challenges that face the Organization. Finishing the job of getting rid of chemical weapons and production facilities is one such challenge. Extending take-up of the CWC regime into regions still haunted by chemical-warfare armament is a further challenge. A third is the task of suppressing any subsequent emergence of armament outlawed by the CWC, which is to say weapons exploiting the toxic properties of chemicals. This last challenge is arguably the most important of all, for an organization that came to devote itself, however inadvertently, to the past without also paying due attention to the future would be an organization of only transient value.

Moreover, it is an uncomfortable circumstance that the changing character of warfare may be increasing the attractions of chemical weapons in some conflicts, making resort to them, whether by states or by sub-state entities, more likely than during the period when the CWC was negotiated. Not many people then were contemplating the terrorist utility of toxic chemicals, for example, or anti-terrorist roles for chemical weapons.

Post-disarmament emergence of new chemical weapons might happen through two main mechanisms. The first might involve the dual-use attributes of industrial chemistry, including plant, chemicals and intangible technology: industry as a source of what might be called "opportunistic chemical weapons", not necessarily anything like the ones reflected in Schedules 2 and 3 of the Annex on Chemicals. It is not impossible to imagine events tempting a state to desperate or abrupt contravention of treaty obligations in which it turns to its chemical industry for crash acquisition of weaponizable toxic chemicals, whether through adaptation of existing production plant, or through the firing-up of surplus production capacity camouflaged within

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the industry for just such an eventuality, or through the diversion of toxic chemicals already present in the industry. Other variants of this dual-use mechanism can be envisaged, including ones involving the importation of dual technology.

The second mechanism, which also has historical precedent, turns on the technological change that can be rooted in advancing science. As our understanding of the processes of life continues to accelerate, we become more able to manipulate them at the molecular level. The fact that chemicals can kill unprotected people on a large scale is of diminishing interest to many modern armed forces, who have other such weapons at their disposal and therefore suffer no great disadvantage from forgoing chemical weapons in accordance with the CWC. But chemicals designed, not to kill, but to impose harm on processes of, say, locomotion or cognition, metabolism or immunity, or even development or inheritance, may be seen to present altogether more valuable means of force. That the CWC should define a “toxic chemical” as broadly as it does —

Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals

— is some safeguard against the dreadful, albeit non-lethal, possibilities that may thus be opening up. It is not at all difficult to imagine a state deciding to violate the CWC in order to acquire, even use, such weapons.

The challenge of precluding post-disarmament emergence or re-emergence of chemical weapons – or, as some would say, the challenge of ensuring non-proliferation — can thus be seen primarily in terms of *controlling dualities*: the dual technologies present in industry and the dual applicability, for war or peace, of some scientific research. There is a third pertinent duality also, one that has long displayed itself in technology-development activities that can feed the design of weapons as well as protection against them. For all three dualities, the problem in implementing the CWC is the same. The impermissible or maleficent side of each duality must be blocked, but there must be no constraint on the permissible or beneficent side. The means provided by the CWC for controlling these dualities are set out in the language defining the scope of the treaty. The interpretation of that language, and its proper reduction to practice, was the subject of the Sussex workshop.

The duality controls of the CWC

For as central a feature of the CWC regime as duality control, the negotiators were careful to make due provision. It is to be found in two places in the treaty: Article II.1(a) and Article VI.2. The first is the language enunciating the scope of the CWC’s ‘negative obligations’ – the obligations upon states parties to refrain from activities such as developing, producing, stockpiling, transferring, or using chemical weapons. Here, the Convention defines the chemical weapons, not in concrete terms (such as physical construction or chemical composition) that could become out of date as technology advances, but in terms of intent. So toxic chemicals and their precursors become banned weapons if they fail to meet the criterion of being

intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes.

A definition of “purposes not prohibited under this Convention” appears in Art II.9, which details four broad categories of purpose to which dual-use chemicals may properly be applied, namely:

- (a) Industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;
- (b) Protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons;
- (c) Military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare;
- (d) Law enforcement including domestic riot control purposes.

The other place is where the CWC sets out the most important of its ‘positive obligations’ – the ones that require states parties to undertake certain actions. The opening sentence of Article VI.2, which became known during its negotiation as the ‘Molander chapeau’, uses that same criterion of purpose in regard to duality controls in industry:

Each State Party shall adopt the necessary measures to ensure that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred, or used within its territory or in any other place under its jurisdiction or control for purposes not prohibited under this Convention.

The treaty is thus quite clear in general terms on how dualities are to be controlled, but, even so, there is great variation in how the controls are being applied. For example, the legislation that some states parties have adopted to implement the CWC seems to assume, incorrectly, that the scope of the CWC is set by its schedules of chemicals, not by the criterion of purpose it uses to define its scope. The national legislation of some other countries is not nearly so narrow, however, meaning that there are major differences of practice among states parties. Some CWC National Authorities are empowered to control dualities. Others are not. So some countries will, for example, be more able than others to contribute actively to non-proliferation. In some countries the dualities may be so out of control as to be readily exploitable by proliferators, whether they be states, non-state entities or individuals.

The explanation for this disharmony does not lie in disregard by the implementers of the CWC for what the negotiators had in mind, though this maybe contributed. The disharmony stems, rather, from the practicalities of applying the criterion of purpose. In relation to the *negative obligations* there is no great difficulty, for here its function is rather like that of a catch-all control, of a kind that administration in different countries has long found helpful. Such a control exists, for example, in EU law on dual-use goods. In contrast, when the criterion is used to define the scope of a *positive obligation*, as in the Molander chapeau, it is more difficult to apply, for the action it demands becomes essentially open-ended: what boundaries can there be to measures that are required, in effect, to prove a negative? Must those in charge of CWC implementation at the national level really go out and ascertain that each and

every development, production, other acquisition, retention, transfer or use of a toxic chemical, or of any of its possible precursors, throughout their jurisdiction is for a purpose not prohibited under the Convention? Surely not.

Questions before the Sussex workshop

The Sussex workshop was convened in order to explore this question and related matters arising from that 'general purpose criterion' (GPC). Participating were HSP staff, members of the National Authority Advisory Committee (NAAC), an officer of IUPAC, and a mix of past and present UK government officials concerned with arms control matters. The problem before the workshop was stated as follows. The GPC works best as a catch-all if, in implementing the negative obligations, no bounds are placed upon its interpretation; but positive obligations may sometimes prove impossible to implement *unless the meaning of the GPC is narrowed*. But the chemical weapons of the positive obligations would then become different from the chemical weapons of the negative obligations. In this ambivalence, could there not be threat to the stability and long-term robustness of the treaty regime? If so, how should that threat best be reduced?

There are certain places where the Convention itself seems to be narrowing, or actually does narrow, the scope of the GPC in the interests of easier implementation of positive obligations. One such place is in the regime for old chemical weapons set out in Part IV(B) of the Verification Annex, where circumstances are specified in which chemicals that would otherwise fail to satisfy the GPC may nevertheless be regarded, not as chemical weapons, but as "toxic waste". Another such place is in Article VI.2, beneath the Molander chapeau: the subsequent provisions that differentiate the "toxic chemicals and their precursors" into four groups – those that are listed in the three schedules contained in the Annex on Chemicals, which are to be subject to verification measures, with the fourth group comprising those that are not so listed. Article VI.2 makes no further provision for the unscheduled chemicals beyond what is stated in the chapeau, thereby implying that, for implementation purposes, the GPC set out in the chapeau applies only to the scheduled chemicals; a drastic narrowing indeed.

Limiting the GPC to scheduled chemicals would remove the protection that the negative obligations of the Convention afford states parties against novel or secret chemical weapons. It would become a defence against charges of violating the Convention to say, yes, we are indeed weaponizing novichoks (say, or atranes or benzomorphans or neurotoxic peptides or bioregulators or RNAi), but, although they are toxic chemicals, they are not scheduled chemicals.

The situation with regard to the positive obligations is less clear-cut. The Background Note before the workshop proposed that a narrowing of the GPC might usefully be considered as a problem of cost-benefit assessment. The benefits of restricting implementation of Article VI.2 solely to the scheduled chemicals hardly need stating. They would be most evident in economy of administration and in harmony of relations between implementers, industry and academia. The costs, however, are less obvious. The

Background Note identified several categories of cost to British interests, which the workshop duly considered.

Workshop results

The main points that emerged from the workshop were these:

1. Participants agreed that the scope of the GPC, and its central role in the CWC regime (protecting beneficial dual-use chemistry, and bringing new science and technology into the purview of the CWC), are as described in the Background Note. The Note observes that the expression of the GPC in the Molander chapeau of CWC Article VI.2 creates an open-ended obligation whose implementation is therefore difficult to administer. The workshop heard that the opinion of the Department of Trade & Industry (DTI) and the Foreign & Commonwealth Office (FCO) was that GPC implementation was broadly a policy not a legal matter.
2. NAAC members who were present were satisfied that the Schedules-related provisions of the CWC are being implemented effectively in the UK and will be seeking the views of other members and other interested parties on whether the same can be said for the GPC-related provisions. For example, do the "necessary measures" currently in place pay sufficient regard to such anti-terrorist weapons that may be based on toxic chemicals, whether for UK forces or for the export market? Again, are the various costs to the UK of the "necessary measures" adequately offset by the benefits that GPC implementation could confer, for example as regards intelligence collection or outreach to those who are, or should be, affected by the CWC? A main purpose of the workshop was to enable NAAC members to explore different aspects of GPC implementation.
3. Participants agreed that the "necessary measures to ensure" requirement of Article VI.2 was satisfiable through the penal provisions of the CWC-implementing legislation required under Article VII plus the normal national means for enforcing such law, provided the GPC was properly incorporated into the legislation. Beyond that basic minimum, more pro-active measures could be contemplated. The workshop discussed several of these.
4. Without question, the UK, through the Chemical Weapons Act 1996 and the work of the DTI that the Act empowers, has satisfied the basic minimum standard. But only a small minority of other CWC states parties have also done so. It was thought that many other states parties take the same view as the UK. The workshop learnt that the national-legislation issue is to be discussed at the next meeting of the OPCW Executive Council. Participants spoke of the need to promote reaffirmation of the GPC by the first CWC review conference, in 2003. Some also deplored the opportunities that continued to be missed for publicizing the GPC, notably in the latest OPCW Annual Report, in successive OPCW Secretariat obligation-checklists, in *OPCW Synthesis* and even in the latest annual report by DTI on the operation of the Chemical Weapons Act.
5. Participants recognised that enlargement of the CWC Schedules, insofar as the prescribed international proce-

- dures for doing so could be activated successfully, provided an alternative route to fuller implementation of the GPC. In this connection, a new schedule on, say, peptides and toxins, might perhaps be worth considering.
6. The workshop considered whether the role of the CWC and its institutions might have changed since the events of 11 September and whether any such change might affect GPC implementation. There was some support for the view that the CWC/OPCW could enhance its relevance if it could demonstrate clearly its anti-terrorism potential. That potential is already there – in the requirement for national implementing legislation that would make acts of chemical armament a crime, in the Article X.8 assistance provisions, and in the network of experts available through OPCW institutions. Perhaps with some restructuring of the OPCW programme of work or else with additional funding, the CWC could become a cost-effective way of addressing chemical terrorism. The workshop also heard, however, that in many of the chemical-terrorism scenarios on which UK preparedness is based, the chemicals involved are frequently ones not on the CWC schedules. Nor is there any particular reason to expect terrorists to use only scheduled chemicals. This makes the GPC relevant to any CWC anti-terrorism function. The OPCW Secretariat has just begun to advertise its anti-terrorist potential, but it does not yet seem to have made the connection between that potential and the GPC.
 7. From this last discussion emerged an important workshop finding: countries that do not implement the GPC properly by having the necessary penal legislation in place may be providing safe haven, where individuals or groups can produce terrorizing chemicals with impunity.
 8. Here, then, is one area where pro-active GPC implementation measures that go beyond the bare minimum noted in paragraph 3 above could bring important benefit. The need would be for additional effort in the monitoring of the country's science and technology (S&T) base in order to identify sources of supply of dual-use substances or facilities abusable for terrorist purposes. A priority area may be in the field of toxins.
 9. Several other roles for additional S&T monitoring in support of GPC implementation came up in discussion. As regards the monitoring of new S&T developments, the basic question was whether the old network of cognoscenti could continue to be relied upon for bringing news of novel agents and suchlike, or whether some more formal and more wide-ranging and therefore more conspicuous monitoring scheme now needed to be put in place. S&T was advancing more rapidly than it used to; biotechnology was opening access to a great range of hitherto inaccessible toxic chemicals; and, with the collapse of the BWC Protocol negotiation, the anticipated safety-net of BWC/CWC overlap would no longer be available. There did indeed seem to be a case for more extensive monitoring of new S&T.
 10. One way to expand GPC-related S&T monitoring might be to piggy-back on such EU monitoring schemes as NONS, EINECS and REACH, and also to push for inclusion of CWC/GPC considerations in the EU Strategy for a Future Chemicals Policy. Several problems with this were noted, and participants observed that the chemicals industry should not be exposed to any additional reporting burdens unless the end results would clearly be beneficial. A rather precise idea of what the extra monitoring might yield, and on what exactly it should focus, needed to be formed first. This in turn demanded clear appreciation of why, apart from anti-terrorism, the extra monitoring was needed at all. Was it to protect UK companies from unwittingly selling CW-related goods abroad? Was it to increase the chances of success in prosecutions under the Chemical Weapons Act? Was it to guard against violation of the CWC by state agencies? Or what?
 11. Another way to enhance S&T monitoring might be through "joined up government", in which relevant data banks maintained by different government agencies, such as the Health & Safety Executive (HSE), might be shared with the UK CWC National Authority (UKNA).
 12. Yet another way might be to alert the Research Councils and other research-funding bodies to the perils of supporting dual-use research, including possible contravention of the Chemical Weapons Act. Arrangements might be feasible in which new lines of research were brought to the notice of UKNA in return for guidance on dual-use dangers and hence on the propriety of funding the research.
 13. Or, chemical manufacturers and chemicals-using firms might themselves volunteer new S&T information. An added advantage of establishing a mechanism for this was that a new route might thereby be brought into existence for reporting suspicious transactions and the like. Provided most firms joined in, such S&T monitoring could become an intelligence asset.
 14. Since these several additional approaches would provide different foci, on manufacturing stages or on research and development activities, it may be necessary for officials to prioritise the operational contexts.
 15. The workshop also paid much attention to how the various modalities of additional S&T monitoring might also serve an outreach function and keep the requirements of the CWC within the awareness of companies and laboratories. Given the rapidity of personnel turnover, such outreach is a continuing necessity. DTI may need help. For example, its CWC-related outreach into the academic world is, so the workshop was told, largely limited to users of Schedule 1 chemicals, with no mention of GPC considerations.
 16. There seemed to be general interest in the idea of a follow-on workshop, both for discussing further the form and content of the GPC message and for engaging a wider range of CWC stakeholders in problems of GPC implementation. It was suggested that participation should be drawn from, for example, the Medicines Control Agency, the HSE, further industry organizations, HM Customs and Excise, the Research Councils and other research-funding bodies such as The Wellcome Trust.
- HSP, which is actively seeking ways of supporting the CWC review process, is currently planning to convene the follow-on workshop.